The report will be sent upon request to the Carnegie Foundation, 576 Fifth Avenue, New York City.

## THE PACIFIC ASSOCIATION OF SCIENTIFIC SOCIETIES

THE third annual meeting of the Pacific Association of Scientific Societies will be held at the University of California, Berkeley, April 10-12. The number of constituent societies has increased to fourteen, representing a membership of 2,167.

The Technical Society of the Pacific Coast,

- The Cordilleran Section of the Geological Society of America,
- The Seismological Society of America,
- Pacific Coast Branch of the American Historical Association (not meeting),
- The Pacific Slope Association of Economic Entomologists,

Pacific Coast Paleontological Society,

The Philological Society of the Pacific Coast,

The Cooper Ornithological Club,

California Academy of Sciences (not meeting), Biological Society of the Pacific Coast,

California Section of the American Chemical Society,

Astronomical Society of the Pacific,

- The Geographical Society of the Pacific (not meeting),
- Puget Sound Section of the American Chemical Society.

The San Francisco Section of the American Mathematical Society will also hold its annual meeting at the University of California on April 12.

The Le Conte Club will hold its annual meeting and dinner at the Faculty Club, Friday evening, April 11.

The General Session of the Pacific Association will be held in California Hall on Saturday evening when an address of welcome will be given by President Benjamin Ide Wheeler, of the University of California. Three papers of general scientific interest will be read by representative members of the constituent societies.

The Southern Pacific, Santa Fe, Western Pacific, Oregon-Washington, Great Northern and Northern Pacific Railroads, have granted the usual convention rates for the states of Nevada, California, Oregon and Washington.

## SCIENTIFIC NOTES AND NEWS

THE spring meeting of the council of the American Association for the Advancement of Science will be held at the Cosmos Club, Washington, D. C., on the afternoon of Tuesday, April 22, 1913, at 4:45 oclock.

THE issue of *Nature* for March 6 contains a portrait of Sir J. J. Thomson, with an appreciation of his contributions to physics by Augusto Righi, professor of experimental physics in the University of Bologna.

To celebrate the seventieth birthday of Dr. Paul Groth, professor of mineralogy in the University of Munich and editor of the Zeitschrift für Crystallographie, it is planned to place a bronze bust in the Mineralogical Institute of the University of Munich. Dr. G. Seligmann, of Coblenz on the Rhine, is treasurer of the committee.

THE senate of the University of Dublin has approved the conferment of the honorary degree of doctor of science upon Professor A. C. Seward, F.R.S., and Professor the Hon. R. J. Strutt, F.R.S.

THE degree of M.A. has been conferred by a decree of convocation of the University of Oxford on Professor W. H. Perkin, F.R.S., fellow of Magdalen College, the recently elected Waynflete professor of chemistry.

MR. A. HARKER has been nominated to represent the University of Cambridge at the twelfth International Geological Congress to be held in Canada in August next.

THE Geological Society of France has awarded its Gaudry medal to Professor Edward Suess, of the University of Vienna.

It is stated in *Nature* that the founder's royal medal of the Royal Geographical Society is not awarded this year, but a casket with a suitable inscription will be presented to Lady Scott, to contain the patron's medal and the special Antarctic medal awarded to her late husband, Captain R. F. Scott, in 1904. The patron's medal has been awarded to the late Dr. E. A. Wilson, of the National Antarctic expedition, and a gold watch to Lieutenant Campbell, who led the northern party of the same expedition. The Victoria medal is awarded to Colonel S. G. Burrard, F.R.S.; the Gill memorial to Miss Lowthian Bell; the Murchison award to Major H. D. Pearson; the Cuthbert Peek grant to Dr. Felix Oswald; and the Back bequest to Mr. W. S. Barclay.

THE position of chief of the Forest Service, now held by Professor Henry S. Graves, who succeeded Mr. Gifford Pinchot, has been placed under the classified civil service. The position will become vacant only on voluntary resignation or on removal for failure to carry out properly the duties of the office.

THE expedition to explore the regions of the Amazon left Philadelphia for the south on the yacht Pennsylvania on March 19. The expedition is being made under the auspices of the University of Pennsylvania Museum, and will extend over a period of three years. The leader of the expedition is Dr. William C. Farrabee, curator of the American section of the museum. The yacht is in command of Dr. J. H. Rowen, a retired officer of the U. S. Navy. The other members of the expedition are: Dr. Franklin B. Church, who will make a special study of tropical diseases, and Mr. Sandy McNabb, a traveler of wide experience.

PROFESSOR W. A. HENRY, emeritus professor of agriculture of the University of Wisconsin and for many years dean of the College of Agriculture, is on his way back from a trip to Panama, Jamaica and Cuba. He will spend some time at his large peach farm near Wallingford, Conn.

THE Cutter lectures on preventive medicine and hygiene will be given at the Harvard Medical School by George C. Whipple, professor of sanitary engineering, Harvard University, on "The Use of Vital Statistics." The dates and subjects are: March 31, "With Truth"; April 2, "With Imagination"; April 5, "With Power."

BEFORE the Geographic Society of Chicago, on March 28, at Fullerton Hall, a lecture was given by Professor Merritt L. Fernald, of Harvard University, the title being "The Mountains and Barrens of Newfoundland and the Gaspé Peninsula."

MR. F. E. MATTHES, of the U. S. Geological Survey, gave a lecture on March 18 before the Appalachian Mountain Club of Boston on "The Glaciers of Mount Rainier." On March 19 he repeated this lecture at Wellesley College. On March 20 he spoke to the classes in civil engineering and mining of the Massachusetts Institute of Technology on "The Sculpture of the Yosemite Valley and the manner in which it is brought out on the Yosemite Map." On March 22 he spoke to the classes in civil engineering, mining and geology of Dartmouth College on the "Delineation of Land Forms as Exemplified by the Map of the Yosemite Valley."

VLADIMIR KARAPETOFF, professor of electrical engineering at Cornell University, will address students at four southern colleges, namely, Clemson College, S. C., on April 2; Georgia School of Technology at Atlanta, on April 4; Alabama Polytechnic Institute in Auburn, on April 7, and University of Tennessee at Knoxville, on April 10. In each of these places he is scheduled for three events: a lecture for electrical students on electrostatic and magnetic circuits, a general address on the development of personality and a lecture-recital on musical expression.

A MEMORIAL window to Ralph Stockman Tarr, late professor of physical geography in Cornell University, who died March 20, 1912, was dedicated in Sage Chapel last week. The window was unveiled by Professor Lawrence Martin, of the University of Wisconsin, formerly an assistant under Professor Tarr. Acting President Crane accepted the memorial on behalf of the university.

DR. IRA VAN GIESON, formerly instructor in pathology in Columbia University, and at one time director of the New York State Pathological Institute, died in New York City on March 24.

DR. PRINCE ALBERT MORROW, the eminent dermatologist of New York City, died on March 17, aged sixty-six years. DR. E. G. RAVENSTEIN, who did much to improve cartographical methods in Great Britain, has died at the age of seventy-nine years.

DR. F. HOWITZ, formerly professor of gynecology in the University of Copenhagen, has died at the age of eighty-four years.

The deaths are also announced of Professor G. Vassale, who held the chair of general pathology at the University of Modena, and of Professor Albanese, who held the chair of pharmacology at Rome.

THE U. S. Civil Service Commission announces examinations towards the end of the month for assistant chemist in the office of public roads at salaries ranging from \$1,800 to \$2,200; for examiner of surveys in the Forest Service, at salaries of from \$1,200 to \$1,500, and of preparator of fossils in the Geological Survey, at a salary of \$900.

By the recent British insurance act it is provided that one penny per insured person, payable out of the moneys provided by parliament, may be retained by the insurance commissioners to be applied for the purposes of research, and the total sum thus available will at present amount to about £57,000 per annum. While the main concern of this part of the act is to combat tuberculosis, the commissioners have been advised that the money may properly be applied to research in connection with any disease which may affect insured persons.

By the will of Carll H. De Silver, of Brooklyn, the Brooklyn Institute of Arts and Sciences receives \$50,000.

THE twentieth semi-annual meeting of the Association of Teachers of Mathematics in the Middle States and Maryland was held at the University of Pittsburgh on March 22.

THE fifth annual meeting of the Illinois Water Supply Association was held at the University of Illinois on March 11 and 12. The membership of the association is made up of waterworks engineers, superintendents, chemists, and others interested in obtaining and conserving an abundant supply of pure water. The papers read at this meeting cov-

ered a wide range of subjects, including the study of deep well drillings in Illinois, sterilization of water by ultra-violet light, filter plants, practical methods of obtaining efficiency in waterworks pumping plants, bacterial examination of water supplies, conditions in small filter plants, appraisal of waterworks properties, fire streams and municipal laboratories. About one hundred and twentyfive members attended the meeting. The officers elected for the next year are: President. C. H. Cobb, superintendent, Kankakee Waterworks; First Vice-president, H. M. Ely, superintendent and manager, Danville Water Company; Second Vice-president, W. J. Spaulding, commissioner of Public Property, Springfield; State Vice-president, V. E. MacDonald, superintendent, Lincoln Water and Light Company, and secretary and treasurer, Professor Edward Bartow, director, State Water Survey.

A ROOM in the Geological Museum of Harvard University has been fitted with cases for twelve relief maps and models which have been recently acquired. One of these is a copy of the model of the Mt. Sentis, on the borders of the Swiss cantons St. Gall and Appenzell. This model was done by Mr. G. C. Curtis, '96, and took first prize at the World's Exposition in Paris in 1900. There is also a relief map of southern New England done by Mr. Edwin E. Howell.

A TOTAL working income of approximately \$35,000,000 was received by 87 state universities and other state-aided institutions of higher education during the past year, as shown by a bulletin just issued by the United States Bureau of Education. Of this amount the United States government contributed about \$5,000,000 and the states \$18,000,000. The year's income passed the two million mark in the case of three state universities. The University of Illinois had an income during 1911-12 of \$2,363,711; the University of Minnesota, \$2,682,499; and the University of Wisconsin, \$2,122,297. Cornell University, which is technically a private institution but receives state and federal aid, reported total ,

receipts of over three million dollars with a net income available for current expenses of about a million and a half. Several other state-aided institutions are in the milliondollar income class. These include the University of Michigan, which had an income of \$1,343,057; Ohio State University, with \$1,-011,571; and the University of California, with \$1,711,393. The latter had an additional half million from private benefactions. The state of Iowa supports several institutions of college and university rank with a combined income of over two million dollars. Some of the states are exceedingly generous to their colleges and universities, and in such cases the national government's contribution is only a small fraction of the total. Illinois meets the government's \$80,000 with nearly two million dollars from state funds, and there are several other states that are similarly liberal. Most of the states give to higher education a greater sum than they receive from the United States government. On the other hand, a few states depend to a considerable extent upon Uncle Sam's bounty. The state of Delaware provided \$22,000 last year for Delaware College, to accompany the \$70,000 received from federal funds; in Maryland the state itself furnished \$36,000 for the Agricultural College, against \$80,000 received from the federal government; New Hampshire's contribution to the State College was \$20,955; and the state of Vermont gave only \$26,000 out of a total income of \$277,815 reported by the state university, while \$80,000 was derived from the United States government and \$60,958 from private benefactions. In some of the larger state-aided universities, tuition fees from students have become an important factor in the annual income; and others that are to a certain extent public institutions have private benefactions that yield a permanent Thus the University of working revenue. Vermont has considerable endowment; Massachusetts Institute of Technology, though aided somewhat by state and national government, depends for the bulk of its income upon the students' fees and private funds; and Cornell University received nearly half a million from

each of three sources, namely, students' fees, productive funds and state appropriations.

## UNIVERSITY AND EDUCATIONAL NEWS

THE legislature of Missouri, at its biennial session, has appropriated for the support and buildings of the University of Missouri during 1913-14 \$1,417,500. Included in this are appropriations of \$200,000 towards a library building; \$100,000 for a biological laboratory, and \$25,000 for a live stock judging pavilion. In addition to the above the Agricultural College, which is a part of the university, receives \$142,000. Of this appropriation \$50,-000 is for hog cholera serum; Agricultural Experiment Station, \$30,000; county farm advisers, \$25,000; soil experiment fields, \$20,-000; state soil survey, \$12,000, and Corn Growers' Association, \$5,000.

MESSRS. ANDREW W. MELLON and Richard B. Mellon, of Pittsburgh, have announced their purpose to erect on the campus of the University of Pittsburgh a laboratory for the department of industrial research to cost not less than \$150,000, to equip the same, and provide a fund of \$40,000 per annum for the coming five years for its maintenance. This department of the university is under the immediate care and oversight of Dr. Robert Kennedy Duncan, the well-known leader in industrial research.

A HOLDING trust has been formed in Massachusetts called the Harvard Mutual Foundation. It will receive gifts from those desiring to leave money to Harvard University, pay 5 per cent. interest to the donor or his immediate heirs during their lives, and at their deaths turn over the principal to the university. The fund starts with \$250,000. The foundation is controlled by the university, in that its trustees will be named by the corporation, and that body will have a certain voice in the management of the trust. The first trustees are the following: Charles Francis Adams, 2d, '88, treasurer of the university; T. N. Perkins, '91; Arthur Lyman, '83; George U. Crocker, '84; John C. Cobb, Jr., '00; Alexander H. Ladd, '97, and C. H. W. Foster, '81.