will be held at the Scripps Institution for Biological Research at La Jolla, near San Diego, from June 26 to August 5. The Marine Biological Station of the University of Southern California at Venice and the Laguna Beach Marine Laboratory of Pomona College will also be open throughout the summer. At Pacific Grove on Monterey Bay the Marine Laboratory of Stanford University will be open during the greater part of the summer, and will offer a summer session which will begin May 22, continuing for six weeks.

The general plans for the San Diego meeting are in the hands of the officers and executive committee of the division, which are as follows:

President, W. W. Campbell, Lick Observatory, Mount Hamilton, California.

Vice-president, D. T. MacDougal, Desert Botanical Laboratory, Tucson, Arizona.

Secretary-Treasurer, Albert L. Barrows, University of California, Berkeley.

Executive Committee: D. T. MacDougal, chairman, Desert Botanical Laboratory, Tucson, Arizona; W. W. Campbell, ex-officio, Lick Observatory, Mount Hamilton, California; Edward C. Franklin, Stanford University, California; Theodore C. Frye, University of Washington, Seattle; C. E. Grunsky, San Francisco, California; George E. Hale, Mount Wilson Solar Observatory, Pasadena, California; Vernon L. Kellogg, Stanford University, California; A. C. Lawson, University of California, Berkeley; E. P. Lewis, University of California, Berkeley.

Plans for meetings in special branches of science are in charge of the societies representing these several branches and the arrangements at San Diego are to be made for the meeting by a local committee of which Dr. Fred Baker, of Point Loma, is the chairman. Railroad and steamer rates for attendance at this meeting will be announced later.

SCIENTIFIC NOTES AND NEWS

Dr. John A. Brashear, president of the American Society for Mechanical Engineers, was given the doctorate of laws at the Charter Day exercises of the University of Pittsburgh on March 20. On the evening of that day, a dinner was held in honor of the late Samuel

P. Langley, secretary of the Smithsonian Institution and previously director of the Allegheny Observatory. The speakers included Dr. John A. Brashear and Dr. J. W. Holland.

We learn from Nature that a committee representative of British geologists and friends of Sir Archibald Geikie has presented to the Museum of Practical Geology a marble bust. On March 14, a number of Sir Archibald Geikie's friends assembled in the museum to witness the presentation. Dr. A. Strahan, director of the Geological Survey and Museum, briefly recapitulated the history of the movement. Sir William Garforth unveiled the bust and spoke of Sir Archibald's contributions to science and literature, and then, on behalf of the subscribers, presented the bust to the museum. The Right Hon. J. Herbert Lewis accepted the gift on behalf of the Board of Education; he remarked that it was a source of gratification to the board that the artist commissioned to execute the bust happened to be another of its distinguished servants, Professor E. Lanteri, who had done so much to uphold the standards of the Royal Collge of Art. The Right Hon. Lord Rayleigh then, on behalf of the subscribers, presented to Sir A. Geikie a marble replica of the bust. In acknowledging his appreciation of the gift, Sir Archibald spoke of the powerful effect the Museum of Practical Geology had had upon him in his early student days, and of the great educational value of its collections.

The Royal Society of Edinburgh has elected fellows as follows: Dr. R. J. T. Bell, Dr. F. E. Bradley, Mr. H. Briggs, Mr. C. T. Clough, Dr. E. J. Crombie, Mr. E. H. Cunningham Craig, Dr. A. W. Gibb, the Hon. Lord Guthrie, Professor P. T. Herring, Sir Duncan A. Johnston, Mr. H. Levy, Dr. J. E. Mackenzie, Dr. W. F. P. M'Lintock, Professor R. Muir, Dr. J. Ritchie, Mr. D. Ronald, the Hon. Lord E. T. Salvesen, Mr. D. R. Steuart, Mr. J. Martin White.

Professor Ludwig Becker, a native of Germany, at the desire of the secretary for Scotland, has withdrawn from the chair of astronomy in the University of Glasgow.

DR. WILLIAM E. FAULKNER, of Harvard Medical School, has left for France where he will take charge of the second Harvard medical unit.

AT its meeting held March 8, 1916, the Rumford Committee of the American Academy of Arts and Sciences made the following appropriations: Two hundred and fifty dollars to Louis V. King, of McGill University, in aid of his research on the determination of the molecular constants of gases over the range of temperatures from 25° K. to 1273° K. One hundred and seventy-five dollars in addition to a previous appropriation for the purchase of a comparator to be loaned to Raymond T. Birge, of Syracuse University.

Dr. Th. Hesselberg has become director of the Norwegian Bureau of Meteorology.

HARRY S. SWARTH, formerly of the Field Museum of Chicago, has been appointed curator of birds in the California Museum of Vertebrate Zoology, supported by gift of Miss Annie M. Alexander to the University of California, the budget for this year being \$12,000.

Dr. Stanley H. Osborn has been appointed district health officer by the Massachusetts State Department of Health.

The board of health of Tuscaloosa, Ala., has appointed A. F. Allen as assistant health officer. Since his graduation from Harvard-Technology School for Health Officers, Mr. Allen has been connected with the health work of Waltham, Mass., and with the epidemiological work in Fitchburg, Mass.

ALFRED W. Bosworth, S.B., associate chemist at the New York Agricultural Experiment Station, has been appointed biological chemist for the Boston Floating Hospital.

AT a meeting of the board of government of The National Association of Cotton Manufacturers, held on March 24, Mr. Charles H. Fish was elected acting secretary to fill temporarily the vacancy caused by the death of Dr. Charles J. H. Woodbury.

Professor R. M. Strong will conduct the courses and investigations in ornithology at the biological station of the University of Michigan, located at Douglas Lake, Michigan.

Commissioner George D. Pratt, of the New York Conservation Commission, has secured the services of Mr. Francis Harper, of New York City, to make a detailed study of the fishing waters of Oneida County, New York, as a basis for scientific working plans for fish stocking and protection.

According to a cablegram received by the Department of Terrestrial Magnetism the Carnegie, under the command of Mr. J. P. Ault, arrived at Port Lyttelton, New Zealand, on April 1, having successfully completed the circumnavigation of the globe between the parallels 55 degrees south and 60 degrees south. Errors in the existing magnetic charts to the extent of 12 to 16 degrees were found.

The fifteenth Rush Society lecture was given on April 6, at the University of Pennsylvania, by Professor John M. T. Finney, of Johns Hopkins University, his subject being "What Constitutes a Surgeon." This lecture was also the annual address before the Undergraduate Medical Society of the University of Pennsylvania.

Dr. R. G. AITKEN, astronomer of Lick Observatory, gave the regular monthly lecture before the Stanford University Faculty Science Association on March 22, 1916, on the subject of "Binary Stars."

Mr. George K. Cherrie lectured at the American Museum of Natural History on March 17, to the adult blind of Greater New York on "With Colonel Roosevelt on the River of Doubt." Mr. Cherrie was the naturalist detailed by the American Museum to accompany Colonel Roosevelt on the South American trip which resulted in the discovery of the River "Duvida," now named River Roosevelt.

At the meeting of the Royal Microscopical Society on March 15, Professor J. Arthur Thomson spoke on original factors in evolution, and Sir E. Ray Lankester on the supposed exhibition of purpose and intelligence by the foraminifera.

At a meeting of the board of government of The National Association of Cotton Manufacturers, held on March 24, the following resolution was unanimously adopted:

The Board of Government desires to express its profound sorrow at the death of the secretary of the association, Dr. Charles J. H. Woodbury.

This association, and the cotton industry in general, owes to Dr. Woodbury a debt which is unmeasurable. Devoting himself in early life to the problems of mill construction and fire protection, he has, during all his official connection with the association, of upwards of twenty-five years, been the leader in all movements tending to improve the processes and methods of textile mills. Under the guidance of his trained, scientific mind, the *Transactions* of the association have recorded in the fullest degree the development of the cotton industry in its technical, historical and social aspects; and they stand as a worthy monument to his memory.

Theodore Pergande, the oldest scientific assistant in point of continued service in the Bureau of Entomology of the U. S. Department of Agriculture, died on March 23, in Washington, at the age of seventy-six. He was born in Germany; came to America at the outbreak of the Civil War; served through the war in the northern army, and later became assistant to the late C. V. Riley when the latter was state entomologist of Missouri, coming with him to the Department of Agriculture at Washington in June, 1878. He was a keen observer of the structure and habits of insects, and was especially noted for his work on the Aphididæ.

PROFESSOR HARRY B. NIXON, who held the chair of mathematics at Gettysburg College, died on March 30.

Léon Labbé, a leading Paris surgeon, member of the French Institute, has died at the age of eighty-four years.

Professor Béla Alexander, director of the radiologic institute at Budapest, died at the age of fifty-seven years on February 10.

Dr. Allan M. Cleghorn, formerly assistant in physiology in the Harvard Medical School, subsequently naturalist for the Algonquin Park in Ontario, and recently captain in the Royal Army Medical Corps, has died in Eng-

land after a brief illness, at the age of fortyfour years.

New York State civil service examinations will be held on May 6, as follows: Physiological chemist, State Department of Health. Salary, \$1,800 to \$2,500. Applicants should have a thorough knowledge of the principles of organic and physiological chemistry. They must have had at least three years' practical experience in physiological or biological chemistry. Chemist, Public Service Commission, First District. \$1,800 to \$2,100. Men only. It is essential that candidates shall have had experience in the analysis of asphalt, coal tar, pitches and mixed paints; experience in the analysis of steel, cast iron, cement, dry pigments, water, etc., will be helpful.

According to a cablegram from London to the daily papers arrangements for the fitting out of a relief ship to go in search of Lieutenant Shackleton's Antarctic expedition were being made, though the fate of Shackleton and other members of his party was in doubt. The New Zealand authorities were urged by cable again to attempt wireless communication with the ship Aurora, which first reported the Shackleton party in peril. The Aurora's wireless message was badly garbled in transmission. Lady Shackleton as well as his explorer friends profess confidence that Lieutenant Shackleton and his men will return They believe Shackleton by this time either has abandoned his attempt to cross the Polar seas from the South American side and is returning to Buenos Ayres, or that he is already safely over the South Pole and will soon join Captain McIntosh and his men at Cape Crozier. Antarctic fowls will supply the party with food if their rations run short, Polar experts declare. Only brief despatches, telling of the disaster to the New Zealand party of the Shackleton expedition, have reached London. According to these despatches, the Aurora broke adrift from her moorings last May during a violent blizzard. Captain McIntosh with eight men was ashore at that time establishing a food depot and engaged in scientific explorations. The Aurora drifted northward in the pack ice for ten months, covering a distance of 1,200 miles. Her rudder was snapped off, but after drifting free of the ice field the crew constructed a temporary steering gear. Unless the damage to the Aurora was too serious, it is thought possible she may be in condition to return to the relief of the McIntosh party. If a relief ship is fitted out at once it may reach Cape Crozier and escape before winter at the South Pole, coming in June and July, closes the ice barrier again. It is most probable, however, that no relief ship will reach the cape until next December unless the Aurora is in shape to return.

THE meetings of the Biochemical Division will be held in connection with the spring meeting of the American Chemical Society at Urbana on Wednesday morning, April 19, and Thursday morning and afternoon, April 20. The sessions on Thursday will be devoted to the presentation and discussion of papers concerning biochemical phases of home economics. This notice is given to correct the erroneous dates published in the earlier announcement.

THE third annual joint meeting of the American Geographical Society and the Association of American Geographers will be held in New York on April 14 and 15. The papers will be delivered at the Hispanic Museum, Broadway and 156th Street, New York City, in the same quadrangle with the American Geographical Society building. The following program has been arranged, to which all interested are invited:

Friday Morning Session (from 10:30 to 12:30)
Leon Dominian, "The Geographic Foundation of Turkey's World Relations."

Mary Verhoeff, "The Kentucky River in Relation to the Kentucky Mountains." Illustrated.

Friday Afternoon Session (from 2:00 to 5:00)

Henry B. Bigelow, "Oceanographic Explorations of the East Coast of the United States." Illustrated.

H. C. Taylor, "Economic Factors Influencing the Geographical Distribution of Crops and Livestock in the United States." Illustrated.

A. Hamilton Rice, "Explorations in the Northwest Amazon Valley." Illustrated.

Saturday Morning Session (from 10:30 to 1:00)

Albert P. Brigham, "Physiographic Provinces of New York."

Harrison W. Smith, "Personal Experiences in the Society Islands and Borneo." Illustrated.

Ernest P. Goodrich, "Some Geographic Problems Incident to the Growth of a Great City—New York." Illustrated.

At the meeting of the New York Section of the American Chemical Society, on April 7, the subject of "University and Industry" will be discussed from the point of view of the industries by William H. Nichols. Discussion will follow by Marston T. Bogert, Columbia University; Eleon H. Hooker, Hooker Electrochemical Company; Phoebus A. Levene, The Rockefeller Institute for Medical Research, and Benjamin L. Murray, Merck & Company.

The meeting of the Astronomical Society of the Pacific was held on March 25, at the Students Observatory, Berkeley, when the following program was presented: "Comet A 1916" (Neujmin), by Miss Jessica M. Young. "The Riefler Clock," by Professor R. T. Crawford. "On the Universality of the Law of Gravitation," by Professor A. O. Leuschner.

The Washington Academy of Sciences announces a series of illustrated lectures on nutrition, open to the public, to be given on Friday afternoons during April, 1916, at 4:45 o'clock, in the auditorium of the New National Museum. The lectures and the subjects of their addresses are as follows:

April 7. Dr. Eugene F. DuBois, medical director Russell Sage Institute of Pathology, New York: "The Basal Food Requirement of Man."

April 14. Dr. Graham Lusk, professor of physiology, Cornell University Medical College: "Nutrition and Food Economics."

April 21. Dr. E. B. Forbes, chief, department of nutrition, Ohio Agricultural Experiment Station: "Investigations on the Mineral Metabolism of Animals."

April 28. Dr. Carl Voegtlin, U. S. Public Health Service, Washington: "The Relation of the Vitamines to Nutrition in Health and Disease."

A COURSE of six lectures on military administration, medicine and surgery is being given at the College of Physicians and Surgeons, Columbia University, on Tuesdays, at 5 P.M., beginning March 28. The lectures, which are

open to the general medical public as well as to students at the college, are as follows: March 28. Organization. Equipment and Training of Armies, by Lieutenant Colonel William S. Terriberry, Medical Corps, N. G. N. Y.; April 4, Organization of the Medical Department, and Its Service in Campaign, by Major Joseph H. Ford, Medical Corps, U. S. A.; April 11, Wounds in War, their Complications and Treatment, by Major Joseph H. Ford, Medical Corps, U. S. A.; April 18, The Personal Hygiene of the Soldier, by Major Sanford H. Wadhams, Medical Corps, U. S. A.: April 25, Camp Sanitation, by Captain Philip W. Huntington, Medical Corps, U. S. A.; May 2, Preventable Diseases in War, by Captain Philip W. Huntington, Corps, U. S. A.

ALL medical classes at the university were omitted on Thursday, April 6. The day, which is known as "U. M. A. Day," and which belongs to the Undergraduate Medical Association, was devoted to the presentation of papers and exhibits of original research work by the undergraduates and to addresses by members of the medical profession. "U. M. A. Day" was founded in the fall of 1907 by Dr. John G. Clark for the purpose of encouraging among undergraduates original research along scientific lines.

At a hearing on the Wheeler bill before the New Lork legislature, Dr. Max G. Schlapp stated according to the Journal of the American Medical Association, that a donor who did not wish his name divulged had offered \$500,000 toward a psychopathic institution provided the Wheeler bill was passed by the legislature. This bill would create a state clearing house for the mentally deficient and would create a commission of seven with an executive manager to supervise the work of examining and diagnosing the cases of the mentally deficient and to investigate the causes of mental deficiency. No one opposed the bill.

The Department of Experimental Breeding at the University of Wisconsin has recently occupied its new barn, constructed for the accommodation of the experimental herd, and fitted out with the most modern barn equip-

ment. An attempt is being made by means of crossbreeding to obtain data on the inheritance of dairy and beef characteristics. The herd at present consists of nearly a dozen crossbred cattle of Jersey-Aberdeen Angus parentage, and one calf of the second generation.

On the petition of Dr. J. Allen McLaughlin, state health commissioner, a bill has been introduced before the Massachusetts General Court which aims to prevent the sale or delivery of milk in any city or town without a permit from the local board of health after inspection of the facilities for producing and handling this food. It provides that the permit may contain reasonable conditions for the protection of the public health and may be revoked for failure to comply therewith. The bill has been referred by the Senate to the committee on agriculture and public health.

UNIVERSITY AND EDUCATIONAL NEWS

HARVARD UNIVERSITY has received a bequest of \$51,500 from the estate of J. Arthur Beebe, and one of \$50,000, came from the estate of Mrs. William F. Matchett, the income of both to be used for general purposes.

Dr. George E. Vincent, president of the University of Minnesota, delivered the Annual Charter Day address in the open-air Greek Theater of the University of California on March 23. That afternoon the cornerstone was laid of the \$730,000 white granite classroom building to be known, in honor of President Wheeler, as Benjamin Ide Wheeler Hall.

Mr. F. W. Bradley, of San Francisco, has given \$5,000 to the University of California for the purchase of additions to the geological and mining-arts collections of the university. A large number of exhibitors at the Panama-Pacific International Exposition have also contributed to the university's collections in these fields, among these donors being Japan, Norway, Sweden, Bolivia, United States Bureau of Mines, United States Geological Survey, the Transvaal Chamber of Mines,