investigation in medicine worthy of the name in New York city at that time. What was true of New York was essentially true of the country at large. Here then was one who combined the practice of medicine with the science of medicine as few men of his generation in this country had done. Failing strength in his later years caused him to relinquish entirely private practice and devote himself to his laboratory as the center of his intellectual activity. It was interesting to note the attitude of an audience when Herter spoke. To many, he was one of them, a practitioner of medicine, and yet to all he was one who had carried medical science to a higher plane, had enveloped medical doctrines with new authority, and the clear, incisive words as they flowed from his lips were followed by his listeners with attentive and almost reverent regard.

Dr. Herter found the study of the nervous system so abounding in confusions that he soon turned his attention to chemical problems, especially those connected with pathological conditions. Among those intimately associated with him in this work have been E. E. Smith, A. J. Wakeman and of late H. D. Dakin. Dr. Herter's work included researches concerning uric acid, autointoxication, the toxic properties of indol, uremic intoxications, the production of serous atrophy of fat, nitrifying bacteria, acidosis, adrenalin glycosuria, gall-stones, bacterial infections of the digestive tract, intestinal infantilism, the influence of dietary alterations on the types of intestinal flora, and the action of sodium benzoate on the human body. The last-named piece of work was part of an investigation conducted by a commission appointed by President Roosevelt, and conclusively demonstrated, so far as physiological investigation can demonstrate, that sodium benzoate if given in the quantities in which it is used as a food preservative, is harmless.

Between 1897 and 1902 Dr. Herter was professor of pathological chemistry at the University and Bellevue Hospital Medical College. Although the lectures were optional, the room was always crowded and his hearers carried away with them breaths of real inspiration. The lectures were published in book form and were translated into Italian. In 1903, he was called to the chair of pharmacology and therapeutics at the College of Physicians and Surgeons, a position he held till his death.

He was trustee of the Rockefeller Institute and a moving spirit in the creation of the Rockefeller Hospital. Only in the last days of his life was he permitted to see this wonderful hospital accomplished, the dream of many years realized, and almost daily as his strength permitted he would be taken thither to rejoice in its work and its future.

He founded the *Journal of Biological Chemistry,* the first of its kind in the English language, and his friends have united in the endowment of this journal as the most fitting memorial to his life's work.

Two Herter lectureships, one at the University and Bellevue Hospital Medical College, the other at the Johns Hopkins Medical School, were founded by Dr. and Mrs. Herter, and have served to bring to this country many of the greatest scientists in Europe. This has been the public service of a far-seeing mind.

Herter had a wide-spread acquaintance among the scholars of his time both in Europe and at home, and his work and worth were universally respected and admired. He delighted in the friendship of those who could inform him, he was a true councillor of those who went to him for advice, and he encouraged young men. The blood of the true artist was his. Music and painting contributed to the pleasures of his life. His friends loved him and he loved his friends. GRAHAM LUSK

SCIENTIFIC NOTES AND NEWS

AT its annual meeting on May 10, the American Academy of Arts and Sciences voted to award the Rumford premium to Professor James Mason Crafts "for his investigations in high temperature thermometry and the exact determination of new fixed reference points on the thermometric scale."

THE Academy of Natural Sciences of Philadelphia has elected as correspondents the following: David Starr Jordan, Edmund Beecher Wilson, Jacques Loeb, William Bullock Clark and Thomas Wayland Vaughan.

A COMPLIMENTARY banquet to Professor H. E. Armstrong, F.R.S., took place at the Hotel Cecil on May 13, attended by a number of distinguished chemists and over two hundred of his former students.

AT the annual meeting of the British Iron and Steel Institute the Bessemer gold medal for 1911 was presented to Professor Henri Le Chatelier, of Paris. The Carnegie gold medal was awarded to Mr. Felix Robin, who has conducted researches on the wear of steels and their resistance to crushing. Carnegie research scholarships have been awarded to Messrs. W. M. Guertler, of Berlin; G. Hailstone, of Birmingham; R. M. Keeney, of Colorado, and G. Dietrich Röhl, of Freiberg. Messrs. J. Newton Friend, of Darlington, and T. Swindon, of Sheffield, have had additional grants made to them to enable their researches to be extended and completed.

THE Association of American Physicians, at its meeting in Atlantic City, elected Dr. J. George Adami, Montreal, president and Dr. Lewellys F. Barker, Baltimore, vice-president.

THE annual general meeting of the Society of Chemical Industry is to be held in Sheffield on July 12. Dr. R. Messel has been nominated as president, and Sir William Crookes, F.R.S., Dr. G. G. Henderson and Messrs. H. Hemingway and W. F. Reid have been nominated as vice-presidents.

PROFESSOR CHARLES DERLETH, dean of the College of Civil Engineering of the University of California, has been elected president of the San Francisco Association of the American Society of Civil Engineers.

DR. FRANCIS H. SLACK, of the University of Kansas, Lawrence, formerly director of the Boston Bacteriologic Laboratory, has been offered the secretaryship of the Boston Board of Health.

DR. L. D. SWINGLE, of Nebraska Wesleyan University, has been appointed research parasitologist in the Wyoming Agricultural Experiment Station.

DR. BURT G. WILDER, who last year became emeritus professor of neurology and vertebrate zoology at Cornell University, will hereafter live in Brookline, Mass., where he was born in 1841.

DR. F. P. GULLIVER, of the Geological and Natural History Survey of Connecticut and secretary of the section of geology and geography of the American Association for the Advancement of Science, is recovering from a somewhat severe operation that he underwent on May 17.

PROFESSOT ERNST HAECKEL, of Jena, now in his seventy-seventh year, broke his hip bone recently, while standing on a stool to obtain a book from a library shelf.

DEAN H. C. PRICE and Professor W. R. Lazenby, of the Ohio State University and Agricultural Experiment Station, have been granted leave of absence for next year, the former for study in one of the German universities and the latter for travel and the study of forestry in Europe and South America.

FOR the year 1911–12 the following will be absent on leave from the University of California: R. T. Crawford, associate professor of practical astronomy, and G. P. Adams, assistant professor of philosophy. Leave of absence for the first half-year has been given to A. C. Lawson, professor of geology; R. O. Moody, assistant professor of anatomy; C. A. Noble, associate professor of mathematics, and E. E. Hall, associate professor of physics; for the second half-year, to D. N. Lehmer, associate professor of mathematics.

PROFESSOR J. W. BEEDE, of the University of Indiana, will continue his studies of the Permian problem in Oklahoma the coming summer. The work, which will be under the direction of the Oklahoma Geological Survey, will consist in the endeavor to trace the Pennsylvanian-Permian contact from southern Kansas across Oklahoma as far as the Arbuckle Mountains.

DR. HENRY HEAD, F.R.S., will deliver the Croonian lectures on "Sensory Changes from Lesions of the Brain" before the Royal College of Physicians of London on June 13, 15, 20 and 27.

EIGHT lectures on the Hitchcock Foundation, at the University of California, were delivered by Professor Harry Fielding Reid, of the Johns Hopkins University, on the evenings of March 28, 29, 30 and 31, and of April 3, 4, 5 and 6. The general title of the course of lectures was "The Mechanics of Earthquakes."

THE annual public address before the chapter of Sigma Xi in the University of California was delivered May 11, by Sir John Murray on the subject of "The Floor of the Ocean." The lecture was illustrated with a fine series of lantern slides largely based upon the results of the Atlantic Expedition of the Norwegian fisheries steamer *Michael Sars* in the summer of 1910.

ON the evening of Friday, May 12, Professor G. J. Pierce, professor of botany in Stanford University, lectured before the society of Sigma Xi of Indiana University on "Vegetation and Civilization."

PROFESSOR ROSS C. PURDY, of the ceramics department of the Ohio State University, was recently elected president of the local chapter of the Sigma Xi Society. Professor Charles S. Plumb was elected vice-president and Professor E. F. Coddington, secretary.

PROFESSOR WAYLAND MORGAN CHESTER gave an illustrated lecture before the departments of geology and biology of Colgate University, on May 25. His subject was "The Bermuda Islands and their Life."

A MONUMENT has been erected at the National School of Agriculture, Montpelier, France, in recognition of the work of the late Gustave Foëx, a former president of the school, in improving the culture of grapes.

THE Carnegie Fund Committee of France recently awarded the foundation gold medal to the widow of the French doctor, G. E. Mesny, who died while engaged in treating plague victims at Harbin, China.

MRS. WILLIAMINA PATON FLEMING, curator of astronomical photographs in the Harvard College Observatory, died on May 21, aged fifty-four years.

NATHANIEL WRIGHT LORD, for thirty-one years professor of mineralogy and metallurgy, director of the school of mines and first dean of the college of engineering of the Ohio State University, died at his home on May 23, aged fifty-five years.

THE New York assembly passed on May 22 the bill previously passed by the senate incorporating the Carnegie Corporation of New York. The incorporators mentioned in the bill are Andrew Carnegie, Elihu Root, Henry S. Pritchett, William N. Frew, Robert S. Woodward, Charles L. Taylor, Robert A. Franks and James Bertram. Its purposes are defined as follows: "To promote the advancement and diffusion of knowledge and understanding among the people of the United States, by aiding technical schools, institutions of higher learning, libraries, scientific research, hero funds, useful publications, and by such other agencies and means as shall from time to time be found appropriate therefor.

THE gentlemen's conversazione of the Royal Society was held at Burlington House on May 10. The fellows and guests were received by Sir Archibald Geikie, K.C.B., president of the society. The Hon. R. J. Strutt gave a lecture on the afterglow of the electric discharge and on an active modification of nitrogen, and Mr. Joseph Barcroft lectured on adaptation to high altitudes in relation to mountain sickness. There were as always a large number of interesting exhibits.

ADVANCED students or teachers of zoology or botany desirous of working at the Bermuda Biological Station for Research for a few weeks this summer should communicate at once with Professor E. L. Mark, 109 Irving Street, Cambridge, Mass.

THERE is a vacancy in the Bureau of Soils, United States Department of Agriculture, at Washington, D. C., for the position of soil scientist in the laboratory of physical and chemical investigations. The government is endeavoring to secure the best qualified man available for this work and has no particular individual in view. The position requires a high order of scientific training, equivalent to that required by the leading American universities for a professorship in physical chemistry. As the work will also be largely ad-

ministrative in character, a wide and successful experience in an executive capacity is very essential. A broad field exists for scientific work of a high grade and for original research and investigation which offers rare opportunities for the making of a reputation and for a career in the public service. It is customary to publish the results of investigations in government publications with the name of the scientist making the study or investigation. Those persons who are qualified and who wish to be considered for this position are invited to submit for consideration a statement of their qualifications, references to their published works, and other pertinent material to the United States Civil Service Commission, at Washington, D. C. In general, the methods of procedure in filling this position will be similar to those of an educational institution, whose boards of trustees or governing officers desire to fill professional or technical positions. The qualifications and fitness will be determined by an impartial board of scientists. As the selection for this position will be made about the middle of June of this year, it is suggested that persons interested communicate with the United States Civil Service Commission, at Washington, D. C., at an early date. The entrance salary for this position is $3,000 per annum.

The Health Officers' Association of New Jersey, adopted a constitution and closed its charter membership on May 24, at a dinner and meeting held at Newark. Thirty-three health officers, inspectors and members of local boards of health were present and the association had as its guests two members of the State Board of Health, Col. G. P. Olcott and Dr. R. C. Newton, also Dr. A. C. Hunt, chief of the division of medical inspection; Dr. R. B. Fitz-Randolph, chief of the food and drugs division; Mr. George W. McGuire, chief of the dairy division, and other representatives of the executive staff of the State Board of Health. The objects of the association are the advancement of knowledge relating to the public health, and the promotion of social intercourse among health officials. Five regular meetings in the year are provided for, to be distributed through the winter months. The active membership includes as eligible employees of the state and local boards of health (*i. e.,* health officers and sanitary inspectors), licensed by the State Board of Health, or of the equivalent grade. Members of the state and local boards of health are eligible to associate membership. The officers, elected at a previous meeting, are as follows: *President,* Chester H. Wells, health officer, Montclair, N. J.; *Vice-president,* John O'Brien, Jr., health officer, Plainfield, N. J.; *Secretary-Treasurer,* J. Scott MacNutt, health officer, Orange, N. J.; *Chairman of the Executive Committee,* Dr. Edward Guion, health officer, Atlantic City, N. J.

In 1880 gold was produced in Alaska to the value of $20,000. In 1909 the amount mined was valued at more than $20,000,000. In 1888 silver was first produced in Alaska, to the value of $2,181; in 1909 the value was $76,934. In 1902 copper was first produced, to the value of $41,400; in 1909 its value reached $56,211. These and other statistics of production are shown by Alfred H. Brooks, of the United States Geological Survey, in "Gold, Silver, Copper, Lead and Zinc in the Western States and Territories," published as a separate chapter of the volume "Mineral Resources of the United States in 1909." The Alaska Yukon placer district had in 1909 the most profitable season since mining first began there, a quarter of a century ago. According to the Geological Survey's returns the value of the gold output was $11,580,000, as compared with $10,323,000 in 1908. The production in Seward Peninsula fell off, owing to the facts that many of the richest placers have been mined out and that no preparations have been made for mining the extensive deposits of low-grade gravels. With the construction of large plants an increase may be looked for. The great possibilities of the Alaskan gold-bearing gravels can be recognized when a comparison is made of the recovery from the placer workings of the territory and those of the United States. In 1909 the average recovery for Alaska was $3.66 a cubic yard, while for the United States the recovery was only 12 cents.