tributed toward the publication of Biological Abstracts; (14) gave funds for biological or mental research at Yale University, the State University of Iowa and the Marine Biological Station at Pacific Grove, California; (15) provided, directly or indirectly, fellowships for 889 men and women from forty-eight different countries, and paid the traveling expenses of sixty-nine officials or professors making study visits either individually or in commissions; (16) helped the Health Committee of the League of Nations to conduct international study tours or interchanges for 120 health officers from forty-eight countries; (17) continued to aid the League's information service on communicable diseases; (18) made surveys of health conditions, medical education, nursing, biology or anthropology in thirtyone countries; (19) lent staff members as consultants and made minor gifts to many governments and institutions; (20) assisted mental hygiene projects both in the United States and in Canada, demonstrations in dispensary development in New York City, and other undertakings in public health, medical education and allied fields.

SCIENTIFIC NOTES AND NEWS

At a conversazione held by the British Institution of Electrical Engineers, on July 7, at the Natural History Museum, South Kensington, the president presented to Dr. Elihu Thomson, honorary member of the institution, the Faraday medal which had been awarded to him by the council.

At the fifth centenary of the founding of the University of Louvain, on June 29, honorary degrees were conferred on Dr. Simon Flexner, director of the Rockefeller Institute; on Edward Dean Adams, the electrical engineer, and on Alfred Douglas Flinn, secretary of the American Engineering Society, New York.

At the commencement exercises of the University of Porto Rico held in San Juan, Dr. Juan Iturbe, of Caracas, Venezuela, received the honorary degree of doctor of science.

THE president and council of the Royal Society have recommended Mr. Stanley Baldwin, the British prime minister, for election into the society under the special statute which permits the election of persons who, in their opinion, either have rendered conspicuous service to the cause of science or are such that their election would be of signal benefit to the society.

PROFESSOR SIR EDWARD A. SHARPEY-SCHAFER presided over the section of physiology and biochemistry of the British Medical Association meeting in Edinburgh during the latter part of July. Ar the annual election of fellows into the council of the Royal College of Surgeons of England, Sir Berkeley Moynihan presiding, there were nine candidates for three vacancies. The following was the result of the election: Sir Cuthbert Wallace (489 votes) and Mr. William Thelwall Thomas, M.B.E. (475 votes), were reelected, and Mr. Hugh Lett (366 votes) was elected a member of the council.

THE German Society for Cancer Research on July 4 gave a dinner in honor of Dr. Frederick L. Hoffman in the Zoological Garden, following an extended address by Dr. Hoffman on the utility of statistics in cancer investigations. The presiding officer was Dr. Kraus, president of the society. Among those present were Dr. Otto Warburg, Dr. Hamel, president of the Federal Health Department, Dr. Krohne, minister of public welfare, Dr. Blumenthal and others.

DR. EDWARD KREMERS, professor of pharmaceutical chemistry in the University of Wisconsin, has resigned to organize and direct research in colloid chemistry for E. I. du Pont de Nemours and Company, at Wilmington, Delaware.

THEODOR THEODORSON, of the Johns Hopkins University, under the auspices of the Oil Heating Institute, has been placed in charge of research work on the process of combustion in an oil flame. Mr. Leod D. Becker, managing director of the institute, states that this is the first time that a well-coordinated investigation into the air-fuel ratio, shape and size of combustion chamber, possible draft variations and methods of mixing fuel in domestic oil burners has been planned by non-commercial authorities.

HORACE S. ISBELL, who has been working on organic gold compounds for the United States Public Health Service at the University of Maryland, has resigned to accept a position as associate chemist with the Bureau of Standards, Washington, D. C.

DR. ELLA WOODS has resigned her position as assistant professor of home economics in the University of Wisconsin in order to take charge of the research work in home economics under the Purnell Grant at the University of Idaho.

AT the recent meeting of the trustees of the Beit Memorial Fellowships for Medical Research, Dr. H. H. Dale, head of the department of biochemistry and pharmacology of the Medical Research Council, was appointed a member of the advisory board in succession to the late Professor E. H. Starling.

DR. B. T. DICKSON, professor of botany at McGill University, Montreal, has been appointed by the Australian government chief mycologist of the Council of Scientific Industrial Research. DR. C. L. HUSKINS, of the University of Alberta, who has been carrying on his researches on the cytology and genetics of fatuoid oats for the last two years in the botanical department at King's College under Professor R. R. Gates, has been appointed to a research post in the John Innes Horticultural Institution at Merton.

To complete the unfinished work of Dr. Charles D. Walcott, late secretary of the Smithsonian Institution, on the stratigraphy of the Rockies, a motor truck expedition to the mountainous northwest has been dispatched from the institution. The expedition is under the direction of Dr. R. S. Bassler and Dr. Charles E. Resser. Its first destination is Utah, whence it will work up through Montana to British Columbia.

DR. F. G. BANTING has left Toronto for Sydney, Nova Scotia, with the intention of accompanying the Canadian Government's annual Arctic expedition in the steamer *Beothic*, which is sailing for the Polar regions.

PROFESSOR LEO E. MELCHERS, head of the department of botany and plant pathology of the Kansas State Agricultural College, has been appointed by the Egyptian Ministry of Agriculture to do some special work in plant pathology for the Egyptian Government. He sails on September 3 from New York to Italy and then to Alexandria. He will be on a leave of absence for a year.

DR. E. P. CHURCHILL, head of the department of zoology of the University of South Dakota, is in charge of a party making an ecological study of the fishes of South Dakota; the investigations this summer are to be concerned largely with the waters of the eastern half of the state.

DR. LEO WOLMAN, lecturer at the New School for Social Research and economic adviser of the Amalgamated Clothing Workers of America; Dr. Elwood Mead, agricultural expert of the United States Reclamation Service, and Professor Jacob G. Lipman, of Rutgers University, will proceed shortly to Palestine to join the staff of experts there in a survey of the economic possibilities of the country.

WE learn from the *Journal* of the American Medical Association that an expedition under the auspices of the University of Cincinnati has gone to Mexico to study the use, under clinical conditions, of an active vaccine treatment for typhoid, which Dr. William B. Wherry, professor of bacteriology and preventive medicine at the university, has given a preliminary trial on several cases of typhoid in Cincinnati. In addition to Dr. Wherry, there is in the party Mrs. Wherry, who is also a physician; Dr. Thomas J. Le Blanc, associate professor of preventive medicine; Dr. Lee Foshay, assistant professor of internal medicine, and Robert Thomas, a junior medical student. The party sailed from New York on June 30, and will be in Mexico for about three months. Arrangements have been made assuring the cooperation of the Mexican health officials.

DR. ARTHUR M. BANTA has returned to the Station for Experimental Evolution of the Carnegie Institution of Washington after a leave of absence for the spring quarter during which he gave a course of lectures at the University of Minnesota on genetics and eugenics. He also gave some other lectures while at the university, including a short series of conferences before a group of geneticists and others on the "Genetics of Cladocera."

DR. EDWARD J. MENGE, head of the department of zoology at Marquette University, has sailed for South America, where he will make an extensive lecture tour for the next two and a half months. Dr. Menge has been invited to lecture at the three oldest universities on American soil, Lima, Peru; Cordova, Argentina, and Sucre, Bolivia, as well as at other universities. He will speak on modern trends of biological work.

SIR THOMAS OLIVER, the British authority on occupational diseases, will sail for the United States with Dr. Frederick L. Hoffman, from Cherbourg, on August 13. After a few days in Quebec and Montreal, he will leave for Boston and Wellesley Hills, proceeding later on a tour of inspection of industrial plants in Niagara Falls, Chicago, St. Louis, Pittsburgh, Philadelphia, etc. Sir Thomas may possibly deliver several addresses on industrial problems while in the west. He expects to be about four weeks in the country.

DR. HENRY MILLS HURD, emeritus professor of psychiatry at the Johns Hopkins University and until he resigned in 1911 superintendent of the Johns Hopkins Hospital, died on July 20, at the age of eighty-four years. Dr. Hurd had been editor of *The American Journal of Insanity, The Johns Hop*kins Bulletin, The Johns Hopkins Medical Reports and The Modern Hospital.

PROFESSOR CHARLES FULLER BAKER, formerly dean of the Agricultural College of the University of the Philippines, died on July 21, aged fifty-five years. Professor Baker was the brother of Ray Stannard Baker, the author, and Hugh Potter Baker, the forester.

DR. ARTHUR A. HAMERSCHLAG, president of the Research Corporation and previously director of the Carnegie Institute of Technology, died on June 30, in his sixty-fifth year. WILLIAM PAUL GERHARD, consulting civil and sanitary engineer of New York City, died on July 8, aged seventy-two years.

DR. WILLIAM O. KROHN, the alienist of Chicago, died on June 17, aged fifty-nine years.

DR. MAGNUS OLOF MITTAG-LEFFLER, until 1911 professor of mathematics in the University of Stockholm, died at Djursholm, Sweden, on July 11. Professor and Mrs. Mittag-Leffler have bequeathed all their property, including the mathematical library and their estate at Djursholm, to an international mathematical institution, which has already been established and bears the name Makarna Mittag-Lefflers Matematiska Stiftelse.

THE death is announced of Professor De Bruin, one of the foremost pediatricians in the Netherlands. His principal works were studies on infantile scurvy and on cerebrospinal meningitis. He was one of the founders of the Netherlands Pediatric Society.

THE trustees of the Field Museum of Natural History have voted to dedicate the museum's Hall of African Mammals as the "Carl E. Akeley Memorial Hall," in honor of the explorer, sculptor, inventor, taxidermist and founder of museum methods, who died in the Belgian Congo on November 27, 1926.

Some extra copies of the portrait of the late Arthur Bolles Lee, the author of "The Microtomist's Vade-Mecum," which was issued with the last number of the Journal of Pathology and Bacteriology, are available and may be had by any one interested on application to the editor at 17 Loom Lane, Radlett, Herts, England.

THE sixth International Congress of the History of Medicine is being held at the University of Leiden and at Amsterdam from July 18 to 23. In Amsterdam there has been organized for the occasion an important exposition of paintings and books pertaining to anatomy and the art of healing.

NEXT September will be held the triennial congress of the International Institute of Anthropology. The Netherlands National Bureau of Anthropology, of which Dr. Kleiweg de Zwaan is the president, is entrusted with the organization of the congress. At the same time, the International Federation of Eugenic Organizations will convene in Amsterdam. The papers will be divided among the following sections: (1) physical anthropology, (2) ethnography and ethnology, (3) heredity and eugenics, (4) sociology and criminology, (5) the prehistoric period and (6) folklore. Dr. Charles B. Davenport, director of the Carnegie Laboratory for Experimental Evolution and of the Eugenics Record Office at Cold Spring Harbor, will speak on the crossing of races.

THE British Association will meet at Leeds. for the third time, during the period August 31 to September 7. Science Progress writes as follows: "The first meeting took place in 1858, a few weeks after Wallace and Darwin had read their papers on the origin of species, and Sir Richard Owen's presidential address formed the opening note in the long controversy which has raged round that subject. In the twenty-two years which elapsed before the next meeting the Yorkshire College had achieved fame and two of its professors acted as sectional presidents. The meeting this year will be the first since the college has developed into the University of Leeds. It promises to be unusually interesting, and will be notable for the first appearance of a woman as sectional president. Sir Arthur Keith, the president, has taken as the title of his address 'Darwin's Theory of Man's Descent as it stands To-day,' and Professor Whittaker, president of Section A, will deal with 'The Outstanding Problems of Relativity.' The evening discourses will be given by Professor R. A. Millikan (Cosmic Rays) and Dr. F. A. E. Crew (The Germplasm and its Architecture). Among the discussions which have been arranged are those on 'The Structure and Formation of Colloidal Particles' and on the 'Climates of the Past.' There will be the usual receptions, excursions to the Dale country, a garden party at Fox Hill (by the invitation of Colonel C. H. Tetley, pro-chancellor of the university) and special meetings for the discussion of textile problems."

A SERIES of lectures is being given at the Mount Desert Island Biological Laboratory as follows:

July 18, Dr. Harlow C. Shapley, professor of astronomy, Harvard University, on "Concerning World Evolution"; July 25, Dr. Edwin G. Conklin, professor of zoology, Princeton University, on "Some Common Misconceptions regarding Evolution"; August 1, Dr. Herbert S. Jennings, professor of zoology, the Johns Hopkins University, on "Biological Fallacies and Human Affairs"; August 8, Dr. Roy W. Miner, curator of invertebrates, The American Museum of Natural History, on "Exploring a Coral Reef from the Bottom of the Sea"; August 28, Dr. Kirtley M. Mather, professor of physical geography, Harvard University, on "Science and Religion—Friends and Enemies."

APPLICATIONS for associate physical chemist must be on file with the Civil Service Commission at Washington, D. C., not later than August 9. The examination is to fill vacancies in the Bureau of Chemistry and Soils, Department of Agriculture, and in positions requiring similar qualifications. The entrance salary in the departmental service at Washington, D. C., is \$3,000 a year. A probationary period of six months is required; advancement after that depends upon individual efficiency, increased usefulness and the occurrence of vacancies in higher positions. For appointment to the Field Service the salary will be approximately the same. The duties in the Bureau of Chemistry and Soils will be to conduct research studies and technical investigations pertaining to fires in farm products, with special attention to spontaneous combustion and deterioration of hay, grain, cattle feeds and other agricultural products, and the development of methods for their control and prevention. Competitors will not be required to report for examination at any place, but will be rated on their education, training and experience, and a publication or thesis to be filed with the application.

Industrial and Engineering Chemistry reports that representatives from the Museum of the Peaceful Arts of New York City and from the Smithsonian Institution of Washington, D. C., of which the National Museum of Engineering and Industry will be a part, recently attended a luncheon in connection with the annual meeting of the latter organization. The intimation was given that owing to changes which were contemplated in the plans of the Mall in Washington by the Commission of Fine Arts of that city, there possibly would be a change in the location of the site of the museum building on the Smithsonian grounds. At a subsequent meeting of the commission attended by representatives of the Smithsonian Institution and the National Museum, a new site satisfactory to all the parties interested was agreed upon. At the meeting after the luncheon above referred to, officers and trustees for the current year were unanimously elected as follows: President, Thomas Ewing, former commissioner of patents; Secretary, Harrison W. Craver, director, United Engineering Societies Library; Trustees, L. P. Alford, B. C. Batcheller, George M. Bond, Nicholas F. Brady, Ericsson F. Bushnell, Fred H. Colvin, F. A. Halsey, Thomas T. Hoopes, D. C. Jackson, Joseph Keller, Fred R. Low, H. P. Merriam, H. F. J. Porter, Dr. M. I. Pupin, Dr. Elmer A. Sperry, Kirby Thomas and F. A. Waldron.

THE Associated Press reported on July 13 the lake of lava from Kilauea crater, which began an eruption on July 7, was at that time steadily building to new levels on the floor of the eight-mile-wide Halemaumau pit as the lava from the cones spreads in spirals about the hardening surface. The principal cone, as the tube of hardened lava about each center of eruption is called, is about fifty feet high. It is continually capped with a layer of rock which hardens from its molten state, except for the periodic outbreaks when the accumulated pressure from the subterranean forces thrusts itself through and sends out a fiery fountain. The flow of other fountains below the surface of the lake which covers more than 100 acres on the floor of the Halemaumau pit can be plainly seen by the motion of the crust, which occasionally breaks to permit new flows to spread. R. M. Wilson, volcanologist, predicts that the lava lake will gradually rise until the fifty-foot cone is submerged, after which the flow of lava will continue beneath the surface. The flow yesterday was as strong as at any time since the eruption began.

UNIVERSITY AND EDUCATIONAL NOTES

PLANS are in preparation for a laboratory of physics to be built for the Johns Hopkins University at a cost of \$350,000.

THE Sheffield Scientific School of Yale University has received by the will of Chester W. Lyman, formerly president of the International Paper Company, the sum of \$50,000, to be used in teaching hydraulic engineering and allied subjects.

DR. HARRY YANDELL BENEDICT, professor of applied mathematics and dean of the college of arts at the University of Texas, has been elected to succeeed Dr. Walter Splawn as president of the university.

DR. ROLLIN T. WOODYATT, of the University of Chicago, has been made chairman of the department of medicine.

PROFESSOR EDWIN D. STARBUCK has been appointed head of the department of philosophy at the State University of Iowa. Philosophy and psychology, which have existed as a single department, are now separated. Professor Starbuck has also been officially made director of the Institute of Character Research which has hitherto been known as the Research Station in Character Education. The institute has received a special appropriation from the state legislature.

DR. IRVING W. BAILEY, associate professor of forestry at Harvard University, has been appointed professor of plant anatomy.

DISCUSSION AND CORRESPONDENCE THE VARIABLE ECHOES PRODUCED BY THE LINCOLN MEMORIAL

ON the evening of June 11 during a display of fireworks on the executive grounds in Washington, the writer's attention was drawn to the peculiar echoes produced by the scattering of sound waves against the outer and inner walls and the fluted columns of the Lincoln Memorial. In the accompanying diagram the direction of the sound waves, from a source