

SCIENTIFIC NOTES AND NEWS

CHARLES EDWIN BESSEY, head of the department of botany and head dean of the University of Nebraska, distinguished as a leader in botanical research and education, past president of the American Association for the Advancement of Science, died on February 25, in his seventieth year.

ARTHUR VON AUERS, the eminent German astronomer, has died at the age of seventy-six years.

DIRECTOR W. A. CAMPBELL, of the Lick Observatory, president of the American Association for the Advancement of Science, has been elected a foreign member of the Swedish Royal Academy of Sciences, Stockholm.

THE William H. Nichols medal is to be conferred on March 5 on Dr. Irving Langmuir, of the research laboratory of the General Electric Company, at the meeting of the New York Section of the American Chemical Society. Dr. Langmuir will make an address on "Chemical Research at Low Pressures."

ON the occasion of the inauguration of Dr. R. B. von Klein Smid as president of the University of Arizona, the degree of doctor of laws was conferred on Dr. D. T. MacDougal, director of the department of botanical research of the Carnegie Institution, and on Dr. J. W. Fewkes, of the Bureau of American Ethnology.

DR. JOHN C. MERRIAM, professor of paleontology in the University of California, has been appointed to be chairman of a sub-committee on research work on the Pacific coast established by the committee of one hundred on scientific research of the American Association for the Advancement of Science.

DR. W. H. HADOW, principal of Armstrong College, Newcastle-upon-Tyne, and Sir Henry J. Oram, engineer-in-chief of the British fleet, have been elected members of the Athenæum Club, for distinguished eminence in science and public service.

DR. ADELAIDE BROWN, of San Francisco, has been appointed a member of the California State Board of Health, to succeed Dr. O. Stansbury.

DR. LEWELLYS F. BARKER, professor of medicine at Johns Hopkins University, Baltimore, was the guest of honor at the thirty-third annual banquet of the McGill Medical Society, Montreal.

DR. H. P. ARMSBY, director of the Institute of Animal Nutrition of the Pennsylvania College and Station, has been relieved of all undergraduate instruction and will devote his entire time to research in animal nutrition and to advanced graduate instruction.

THE board of trustees of Stanford University has elected to its membership Dr. Ralph Arnold, of Los Angeles, a graduate of the university, and has reelected Mr. William Babcock, a capitalist of San Francisco, and Mr. Charles P. Eells, a lawyer of San Francisco, whose terms recently expired. Dr. Arnold is the second alumnus on the board at the present time, the other being Mr. Herbert C. Hoover, who is now serving as chairman of the Belgian Relief Commission in London. Dr. Arnold graduated from the department of geology at Stanford in 1899, received his A.M. there in 1900, and his Ph.D. in 1902. For a number of years he was engaged in scientific work for the government, being for a time paleontologist of the Geological Survey and later in charge of the survey's oil investigations in California. For the last half dozen years Dr. Arnold has been engaged in private practise in the oil fields of the United States, Mexico and South America. He has recently been withdrawing from technical work to a considerable degree in order to devote himself more fully to research work in the field of paleontology.

MR. A. F. MEYER, associate professor of hydraulics in the University of Minnesota, visited Toronto in February to confer with Mr. Arthur V. White and appear before the international joint commission in connection with the Lake of the Woods investigation. Mr. Meyer is serving this commission as consulting engineer.

MR. JOHN BLACKSTOCK HAWLEY (Minnesota, '87), consulting engineer of Fort Worth, Texas, has been elected president of the Texas

Association of the Members of the American Society of Civil Engineers. At the recent annual meeting of the society Mr. Hawley was elected director.

DR. T. C. CHAMBERLIN, head of the department of geology in the University of Chicago, and formerly president of the University of Wisconsin, gave a series of lectures in the department of geology of the University of Wisconsin from February 15 to 19, in which he reviewed the Chamberlin-Moulton planetesimal hypothesis of the formation of the solar system, with reference especially to recent work in correlating terrestrial phenomena in the light of this theory. On February 18, Dr. Chamberlin gave a public lecture under the auspices of the Science Club of the University of Wisconsin on "Early Stages of the Earth's History."

DR. FRANCIS H. HERRICK, professor of biology in Western Reserve University, addressed by invitation the legislature of the state of Maine, on February 25, on the subject of "The Preservation and Propagation of the Lobster."

DR. GRAHAM LUSK, professor of physiology in the Cornell Medical School, recently delivered before the Washington University Medical School two lectures entitled "The Basis of Animal Calorimetry" and "Metabolism in Diabetes."

SIR CHARLES AUGUSTUS HARTLEY, the distinguished British engineer, died on February 22, at the age of ninety years. Sir Charles devoted most of his career to hydraulic engineering and the improvement of estuaries and harbors for the purposes of navigation. In 1875 he was one of the committee appointed by the authority of Congress to report on the improvement of the Mississippi. In 1884 the British government nominated him a member of the international technical commission for widening the Suez Canal. He was a member of the congress that sat at Paris to decide on the best route for a ship canal across the Isthmus of Panama. He was engineer-in-chief and consulting engineer to the European commission of the Danube from 1856 to 1907.

As was noted in *SCIENCE* several months ago the California Fish and Game Commission is attempting to build up public sentiment as the most efficient means of conserving game. In pursuance of this policy the commission has begun the publication of a quarterly, *California Fish and Game*, which is designed to bring facts regarding game and game conditions to the people of the state. The motto of the publication is "Conservation of wild life through education." The second number of the periodical has just been issued. It contains articles relating to game in California, with departments for editorials, fishery and hatchery notes, conservation in other states, life histories of game birds and mammals, and the relation of wild life to agriculture. Full reports on the work and the monthly expenditure of the California Fish and Game Commission are also given. Dr. Harold C. Bryant, director of the newly formed bureau of education, publicity and research is editor of the periodical.

It is stated in *Nature* that in answer to a question as to typhoid in the army, asked in the House of Commons on February 8, Mr. Tennant, Under-secretary of State for War, said: "Of the 421 cases of typhoid in the present campaign among British troops 305 cases were in men who were not inoculated within two years. In the 421 cases there have been thirty-five deaths. Of these deaths thirty-four were men who had not been inoculated within two years. Only one death occurred among patients who were inoculated, and that man had been only inoculated once, instead of the proper number of times—namely, twice." Replying to criticisms against inoculation made by Mr. Chancellor in the House of Commons on February 9, Dr. Addison pointed out that in the South African war there were 58,000 cases of typhoid—more than an Army Corps—whereas in the great force now in France and Belgium, and after six months, including three months of atrocious weather, there have only been 421 cases among the troops. The total losses in South Africa were 22,000, of which about 14,000 deaths were from diseases and 8,000 of these were from typhoid.

THE *British Medical Journal* states that the hospitals of Canada have been severely affected by the war, and in Montreal it seemed as though the three principal hospitals might have to close their doors. A campaign among the 800 governors of the General Hospital produced \$150,000 in two days, sufficient to meet expenses for the next two or three years. The appeal for funds for the Notre Dame and Western Hospitals has been equally successful, and they will remain open at least for some time to come. In Vancouver the staff of the General Hospital have voluntarily agreed to a reduction of from 5 to 10 per cent. in their salaries in order to help the board in its financial difficulties.

ON April 3, 1915, an examination will be held to provide an eligible list for the position of food bacteriologist in the Chicago office of the State Food Commission. The salary at present is fixed by law at \$1,800 a year. The limits recommended by the State Civil Service Commission are \$150 to \$175 a month. The examination will be open to non-residents, as well as residents, of Illinois over twenty-five years of age. The duties of the position involve making bacteriological examinations (and interpreting the results of such examinations) of milk, ice cream, eggs, meat, tomato products, etc., in accordance with the dairy, food and sanitary laws. The applicant should be able to state his opinions briefly and accurately as he may be called upon frequently as a court witness. Education equivalent to graduation in science from a college of recognized standing is required, as well as some knowledge of anatomy, histology and pathology, and some training in animal experimentation. The statement is made from the State Food Commissioner's office that the person employed in this position will be given time to take work in the various medical schools or universities of Chicago so that he may acquaint himself with those subjects with which he is not thoroughly familiar.

ANNOUNCEMENT is made of the establishment for the year 1915-16 in Nela Research Laboratory, National Lamp Works of General Electric Company, of two fellowships in phys-

ical research to be known as the "Charles F. Brush Fellowships." These fellowships are offered for the coming year through the generosity of Mr. Brush who desires thereby to stimulate interest in industrial physics and to make it possible for young men to undertake research work in physics in the environment of an industrial plant. The Nela Research Laboratory will provide space and all necessary facilities, and will have general supervision over the investigations, which must be consistent with the normal activities of the laboratory.

FIRE in the national forests of the west in 1914 caused a loss to the government of not quite 340,000,000 board feet of merchantable timber, valued at \$307,303, and of reproduction, or young growth of trees, valued at \$192,408, according to statistics just compiled by the forest service. There were 6,605 fires, of which only 1,545 burned over an area of ten acres or more. About 77 per cent. of all the fires did damage of less than \$100 each. In addition to the losses suffered by the government, timber on state and private lands within the forests, totaling 228,008,000 board feet and valued at \$175,302, was lost. The total area burned over was 690,240 acres, of which 310,583 acres were state and private lands. Notwithstanding that it was an exceptionally favorable year for fires, on account of high temperatures, heavy winds and prolonged drought, the average loss per fire was \$103, as against \$131 in 1911, when there were only about half as many fires. Eighty-five per cent. of the total loss was caused by fires in Idaho, Montana, Oregon and Washington, where more than half the timber in all the national forests stands. Less than one tenth of one per cent. of this timber was affected. Of the 6,605 fires reported, 3,691, or 55.9 per cent., occurred in these states, and of the 99 fires causing losses of more than \$1,000 each, 81 were in this region. Lightning was the chief cause, starting 2,032 fires; campers came next with 1,126, followed closely by railroad locomotives, with 1,110. Incendiaries lighted 470 and the rest were attributed to brush burning, sawmills, etc., or their origin was unknown.