

fense appliances, including gas-filling plants and proving grounds utilized in connection therewith.

5. All unexpended funds of appropriations heretofore made for the Medical Department or Ordnance Department and already allotted for use in connection with the operation and maintenance of plants now engaged in, or under construction for the purpose of engaging in, the investigation, manufacture or production of toxic gases or gas defense appliances, including gas-shell filling plants, are hereby transferred to, and placed under the jurisdiction of the director of the Chemical Warfare Service for the purpose of meeting the obligations and expenditures authorized; and, in so far as such funds have not been already specifically allotted by the Medical Department and the Ordnance Department for the purposes specified herein, they shall now be allotted by the Secretary of War, in such proportions as shall to him seem best intended to meet the requirements of the situation and the intentions of Congress when making said appropriations, and the funds so allotted by the Secretary of War to meet the activities of the Chemical Warfare Service, as heretofore defined herein, are hereby transferred to, and placed under the jurisdiction of, the director of the Chemical Warfare Service for the purpose of meeting the authorized obligations and expenditures of the Chemical Warfare Service.

6. This order shall be and remain in full force and effect during the continuation of the present war and for six months after the determination thereof by proclamation of the treaty of peace, or until theretofore amended, modified or rescinded.

II. By direction of the President, Major General William L. Sibert, United States Army, is relieved from duty as director of the Gas Service, and is detailed as director of the Chemical Warfare Service, National Army.

TRAINING OF COLLEGE STUDENTS FOR MEDICAL CORPS OFFICERS¹

THE Medical Department of the Army, through the National Research Council, will shortly issue an appeal to American colleges and universities urging them to alter their curriculum so that third and fourth year students may receive special training which will enable them to qualify as officers and for other work in the Medical Department.

The appeal will be sent to all the principal colleges and universities in the country, but as

¹ Publication authorized by the War Department from the office of the Surgeon General.

it is realized that important institutions may not for various reasons receive the appeal, the request is made that all directing heads of such institutions write to either Dr. Richard M. Pearce, of the National Research Council, Washington, or to the Division of Laboratories, Office of the Surgeon-General, Washington, for details of the proposed plan.

These colleges will render valuable assistance to the government by offering these special course to their students who will enter the Army when they become of age or in the event that they volunteer before that time. The students desired are those who are taking the various scientific courses. The course proposed by the Medical Department should appeal to men who are specializing in biology, zoology, plant pathology, and in industrial and agricultural bacteriology.

In a number of institutions the necessary courses can be arranged by a simple modification of the already existing course in bacteriology with added emphasis on special subjects of value to the Army.

After completing such courses arrangements for enlistment can be made through the Surgeon-General's Office if the applicant is under draft age, and if of draft age he can be inducted into the service and assigned where his special training will be of value.

This plan has already been tested in two colleges and the success attained has led the Medical Department to apply it to as many colleges as possible. From one such institution every man taking the modified course was admitted directly into the Army and went to one of the training schools, where a portion of them will later qualify for commissions in the Sanitary Corps. Others have qualified for positions at field or mobile laboratory units and as assistants in base and evacuation hospitals.

SCIENTIFIC NOTES AND NEWS

DR. JAMES F. NORRIS, who has been with the Bureau of Mines Experiment Station, has been commissioned a lieutenant-colonel in the Chemical Service Section of the National Army and is to be stationed in London as the

representative of the Army, in chemical warfare, in England. The following men, all in the Chemical Service Section, are to be with him to help in the work: Captain A. B. Ray, Captain G. M. Rollason, Lieutenant H. A. F. Eaton, and First Sergeants E. O. Hobbs, L. C. Benedict, C. E. Wood and J. A. Bowers.

CAPTAIN LAURENCE MARTIN, of the geological department of the University of Wisconsin, was commissioned as a major on July 23, and has been detailed for duty with the Federal Staff Corps.

PROFESSOR V. H. WELLS, of the department of mathematics, of the University of Pittsburgh, has been commissioned a lieutenant in the science and research division of the signal corps.

DR. S. A. MITCHELL, director of the Leander McCormick Observatory of the University of Virginia, is at present in Jersey City engaged as instructor in navigation for the U. S. Shipping Board.

MR. WILLIAM J. HAMMER, consulting physicist and electrical engineer, of New York, has been commissioned a major in the National Army, and is assigned to duty in Washington with the newly organized Inventions Section of the General Staff.

PROFESSOR T. D. BECKWITH, head bacteriologist of the Oregon Agricultural College, has been commissioned captain in the Sanitary Corps and is ordered to report at the Rockefeller Institute for Medical Research at New York.

PROFESSOR F. B. SANBORN, a member of the Tufts College faculty since 1899 and head of the department of civil engineering since 1901, has resigned to enter business in Boston. His firm is now engaged in important manufacturing work for the government.

MR. NEIL M. JUDD, assistant curator of anthropology in the National Museum, has recently returned from explorations of the House Rock valley and the Pahreah and Wahalla plateaus, on the north rim of the Grand Canyon in northern Arizona. Several cliff dwellings and ruins were discovered. Since his return to Washington, Mr. Judd has en-

listed in the aviation section of the Signal Corps.

MR. F. T. SUN, director of a fisheries school at Tientsin, China, established and maintained by the Province of Chihli, is in the United States in order to gather information and material for his school, which is devoted principally to the preparation and utilization of fishery products.

DR. HANS MOORE, director, and Albert Scheret, professor, in the agricultural college near Lucerne, Switzerland, are studying methods of agriculture in the United States.

PROFESSOR JOSEPH S. AMES, director of the physical laboratory in the Johns Hopkins University, recently gave the annual address at the University of Virginia before the Phi Beta Kappa Society. The title of the address was "The Value of the Scientific Man in War."

MISS STEPHENSON has offered £2,500 to endow a studentship in the faculty of arts at Armstrong College, Newcastle, in memory of her father, the late Sir William Haswell Stephenson.

THE name of the Memorial Institute for Infectious Diseases, founded in the memory of John Rockefeller McCormick, has been changed to The John McCormick Institute for Infectious Diseases.

HENRY SHALER WILLIAMS, emeritus professor of geology at Cornell University, died of pleurisy, on July 31, at Havana, aged seventy-one years. He was born in Ithaca in 1847, graduated from Yale in 1868 and held the professorship of natural science in the University of Kentucky from 1871 to 1872. He was professor of geology in the same university from 1880 to 1892 and Silliman professor at Yale University from 1892 to 1904. His research work in Cuba resulted in the development of oil fields in the island.

DR. JOHN DUER IRVING, professor of economic geology at Yale University, known for his work in ore deposits, has died of pneumonia in France, aged forty-four years. Professor Irving was one of the first from the Yale

faculty to volunteer for service at the outbreak of the war, joining the New York Engineer Corps.

PROFESSOR A. L. DANIELS, Williams professor of mathematics in the University of Vermont, died on July 18, aged sixty-nine years. He was made professor emeritus, on the Carnegie Foundation, in 1914, after a service of twenty-nine years.

DR. E. W. SANFORD, of the Johns Hopkins University faculty, has died in Centerville, Conn., from blood poisoning produced by accidental inoculation while engaged in research work for the government.

DR. LUDWIG EDINGER, director of the Neurologic Institute of Frankfort-on-Main, known for his work in the comparative anatomy of the nervous system, has died at the age of sixty-three years.

THE death is announced of Dr. Régis, professor of mental diseases at Bordeaux.

DR. MIGUEL SANCHEZ-TOLEDO, professor of physiology at the University of Havana, died on July 13.

GIFTS to the Brooklyn Institute of Arts and Sciences amounting to \$70,000 were reported at the June meeting of the board of trustees. Of this amount \$60,000 was given by Mr. Samuel P. Avery for the endowment of the Institute's department of education, and \$10,000 by two unnamed donors for the endowment of the Brooklyn Botanic Garden, a division of the institute. The terms of the Botanic Garden gift stipulate that it shall be known permanently as the "Benjamin Stuart Gager Fund," in memory of Director Gager's little son who died last spring.

THE Bureau of Oil Conservation, Oil Division, U. S. Fuel Administration, is desirous of securing a combustion engineer for each of the following districts, who will act as an inspector visiting all plants within his district using fuel oil and natural gas: Boston, Providence, New York City, Philadelphia, Pittsburgh, Buffalo, Detroit, Chicago, Minneapolis, Tulsa, New Orleans and San Francisco. It is desirable that these men should act as

volunteers where possible, but the Administration is prepared to pay a reasonable compensation for men who can not afford to give their services to the government. Only men who have had experience in fuel oil and natural gas combustion would be of value.

AN editorial note in *Nature* asks: "Is the Carnegie Trust for the Universities of Scotland doing its duty in strengthening and developing scientific study and research? That is the question suggested by the report of a special committee published in the December number of the Journal of the British Science Guild. The question was first raised in an incisive manner by Professor Soddy in an article communicated to *Science Progress* (January, 1917), and further inquiry seems to show that his contention is well founded. There may be some difference of opinion as to the exact interpretation of Clause A of the Trust Constitution; but there can be no doubt that the main object of the trust is to foster science, pure and applied, in all its branches, and to strengthen that side of university education which is of direct technical or commercial value. In the light of that general principle the following facts are well worthy of careful consideration: (1) Only 14 per cent. of the available funds have been expended on scientific research; (2) by endowment out of Carnegie Funds of certain scientific departments, money formerly spent in their maintenance has been diverted into other channels, so that the university on its scientific side has not really been strengthened; (3) among the twenty-two members of the board of trustees, there have never been more, and have usually been fewer, than four who could be regarded as representing science, the majority being practically ignorant of the methods, and even the meaning, of research."

UNIVERSITY AND EDUCATIONAL NEWS

THE University of London has received a bequest of £2,000 for the engineering faculty of King's College under the will of Lieutenant R. C. Hodson, a former student in the engineering department of the college, who was