

under this instruction a student must be enrolled in an O.T.C. and fulfil after enrolment the conditions of efficiency laid down for medical cadets. (7) Protected students delaying qualification unnecessarily, or otherwise not satisfactorily pursuing their studies, are to be referred to the director of National Service. (8) Protection will be withdrawn from a student who has been requested in writing by the Ministry of National Service to offer himself as a surgeon probationer, R.N., and has not within twenty-one days applied for enrolment as such. The remaining paragraphs of the instruction—which supersedes all previous instructions relating to the protection of medical students now in civil life—deal with formalities to be observed in the matter of certificates and of applications to tribunals in respect of medical students not hitherto called up but now no longer protected.

#### WAR WORK OF THE U. S. COAST AND GEODETIC SURVEY

UNDER the provisions of section 16 of an act approved May 22, 1917, and regulations established in accordance therewith, any of the vessels, equipment, stations or personnel of the survey may be transferred by the President in time of national emergency to the service and jurisdiction of the War Department or the Navy Department, and the same may be retransferred to the service and jurisdiction of the Department of Commerce by the President when the necessity for such service no longer exists.

By executive order dated September 24, 1917, the steamers *Surveyor*, *Isis* and *Bache*, their crews and 38 commissioned officers of the survey were transferred to the Navy Department, and 29 commissioned officers and 10 members of the office force were transferred to the War Department with military rank corresponding to their grade in the survey.

Some changes were made in the assignments of these officers; some were rejected for physical or other reasons and were returned to the survey by executive order and others were afterwards assigned in a similar manner. Some members of the crews of the vessels declined to enroll in the Naval Reserves and their

places were filled by the Navy Department. Some employees of the office force and hands in field parties were drafted and others enlisted voluntarily in the Army or Navy. On March 1, 1918, 65 commissioned officers of the survey, 17 members of the office force, 5 ships' officers, 67 seamen and other employees of vessels and 21 hands from field parties, a total of 175 persons, were serving in the Navy or Army.

In conformity with the wishes of the Navy Department, after the beginning of the war all of the topographic, hydrographic and wire-drag work of the survey was directed so as to meet the most urgent military needs of the Navy Department. The work done comprises wire-drag surveys on the New England coast and coast of Florida; hydrographic surveys on the South Atlantic coast and Gulf of Mexico; the beginning of a survey of the Virgin Islands; the investigation of various special problems for the Navy Department; wire-drag surveys, current observations, and special work on the Pacific coast; and surveys in the Philippine Islands.

The work undertaken for the War Department by the field parties of the Coast and Geodetic Survey was intended to furnish points and elevations for the control of topographic surveys for military purposes. To expedite this work an allotment was made from the appropriation for the War Department to cover the expenses of the field parties employed. The chief of the division of geodesy was authorized to confer with officers of the Corps of Engineers, United States Army, and officials of the Department of the Interior in regard to the proper coordination of the various operations.

Extensive surveys were undertaken, including primary triangulation, primary traverse, precise leveling and determination of differences of longitude, and good progress has been made, and the results of previous surveys have been made available by copies or in published form as promptly as possible. From April, 1917, to January, 1918, 80 per cent. of the time of the office force of the geodetic division was devoted to war work. At the request of the War Department tables were computed for

the construction of maps on the Lambert projection. The Chart Division has done much work in the compilation of maps, furnishing copies of original sheets, and supplying information of various kinds required for military purposes.

#### SCIENTIFIC NOTES AND NEWS

THE University of California has conferred the degree of LL.D on Professor George F. Swain, of the Massachusetts Institute of Technology and Harvard University, who this year delivered the Hitchcock lectures at the University.

OXFORD UNIVERSITY has conferred the degree of D. Sc., on Professor W. C. M<sup>r</sup> Intosh, for many years professor of natural history in the University of St. Andrews.

THE Paris Academy of Sciences has elected M. Flahaut of Montpellier to take the place of the late M. Gosselet. He has been the correspondent of the academy for the section on botany since 1904.

SIR J. J. DOBBIE, British government chemist, has been elected a member of the Athenæum Club for eminence in science.

WE learn from *Nature* that an Entomological Society of Spain has lately been founded, with its center for the present at St. Saviour's College, Saragossa. Dr. Hermenegildo Gorriá, of Barcelona, is the president for 1918, and the Rev. R. P. Longinos Navás, S.J., the secretary.

THE Bureau of Standards has announced the appointment of Samuel S. Wyer, a consulting engineer of Columbus, Ohio, and Mr. Willard F. Hine, chief gas engineer of the Public Service Commission of the First District, New York State, as consulting engineers on its staff.

DR. SAMUEL A. TUCKER, of Columbia University, Dr. H. R. Moody, of the College of the City of New York, and J. M. Moorehead, of Chicago, have been added to the personnel of the chemical section of the War Industries Board.

DR. JOHN LYON RICH, of the department of geology at the University of Illinois, has been

commissioned a captain in the National Army. He is assigned to Washington, D. C., for service in the Intelligence branch of the army as a specialist in geography.

CAPTAIN R. G. HOSKINS, of Northwestern University Medical School, Captain L. A. Congden, Lieutenant F. A. Cajori and Lieutenant A. G. Hogan, have completed a month's study of army nutrition at Camp Zachary Taylor, Louisville, Ky. They comprise a "Nutritional Survey Party" from the office of the Surgeon General of the Army.

DR. W. A. CANNON, of the Department of Botanical Research of the Carnegie Institution, sailed in April to Australia and will be away from the United States about twelve months. He will visit certain of the more arid portions of West and South Australia where he will make field studies of the desert plants with especial reference to root habits.

WE learn from *The Journal of Industrial and Engineering Chemistry* that Dr. Yogoro Kato, professor at the Tokyo College of Technology and director of the Nakamura Chemical Research Institute in Tokyo, is visiting the United States for professional purposes and Mr. T. F. Chin, of Pekin, China, principal technical expert of the Chinese Ministry of War, is in this country with the Chinese mission to make purchases for the outfitting of an extensive chemical laboratory at Pekin for his government.

PROFESSOR T. L. HAECKER, of the University of Minnesota, who has been asked for several successive years to continue his experiments in animal nutrition, despite the fact that he has passed the usual age for retiring from service, will retire at the close of this college year, July 31, 1918, and provision will be made for completing the work upon which he is engaged and for tabulating the results.

DR. EUGENE R. KELLEY, Boston, has been appointed state commissioner of health to succeed Dr. Allan J. McLaughlin, who has been called back into the federal public health service.

DR. BUFORD JENNETTE JOHNSON, Ph.D. (Hopkins '16), has resigned her position as assist-