

maintenance of our position, and to ultimate victory, was for the moment in the hands of our enemies."

During the war the energy and enterprise of manufacturers have enabled them to build up the industry and to supply all the requirements of the country, but having always before them the immediate needs of the country rather than the future of the industry, the position in which they now find themselves is highly unfavorable compared with that of manufacturers in enemy and neutral countries. Since the outbreak of the war the cost of materials has risen threefold and wages have doubled. The cost of experimental work, the payment of excess profits duty and the heavy charges on capital account have made it impossible to accumulate the funds necessary for the proper financing of the industry; and even so far as money has been available, there has been great difficulty in procuring material for the construction of buildings and furnaces suitable in quantity and quality. The labor difficulty and the calling up of all lads of eighteen years of age have seriously hampered the industry.

In view of the importance of the industry, the associations petition the government to prohibit the importation of scientific glassware into the country, subject not only to licenses being granted in the case of articles not manufactured in the country, but also to the control of prices, and later to impose a duty upon imported goods. They also direct attention to the need for financial assistance, and for aid in carrying out those scientific and technical investigations which are essential if the industry is to be established permanently in the country.

THE STUDY OF INDUSTRIAL FATIGUE

WE learn from the *British Medical Journal* that the Industrial Fatigue Research Board has now been completed. The work was begun by the Health of Munition Workers Committee of the Ministry of Munitions, upon which Dr. Leonard Hill and Sir Walter Fletcher served from the time of its appointment in 1915. That committee was dissolved at the

beginning of 1918, and issued its final report last May. But the excellence of its work led to the expression of a wish that arrangements should be made for maintaining on a permanent footing an organization for the systematic investigation of the natural laws of industrial fatigue. Their study, though primarily physiological, offers a field of inquiry in which a knowledge both of medicine and the industrial sciences are necessary for full success. The department of Scientific and Industrial Research, and the Medical Research Committee accordingly determined to establish a permanent organization, and to contribute the necessary financial aid in due proportion. The proposal was warmly approved by the home office, which expressed a desire for the immediate establishment of a research organization of the kind indicated. An Industrial Fatigue Research Board was therefore established a short time ago and has now been completed. It will continue the organizing functions of the two bodies and the investigations already in progress. The Board is instructed "to consider and investigate the relations of hours of labor and of other conditions of employment, including methods of work, to the production of fatigue, having regard both to industrial efficiency and to the preservation of health among the workers." The duty of the board will be to initiate, organize and promote by research, grants, or otherwise, investigations in different industries, with a view to finding the most favorable hours of labor, spells of work, rest pauses, and other conditions applicable to the various processes according to the nature of the work and its demands on the worker. For these investigations the board looks forward to receiving the help of employers and workmen in the industries which are studied, and in appropriate cases representatives of both will be invited to serve as temporary members of the board. The chairman of the board is Dr. C. S. Sherrington, F.R.S., professor of physiology in the University of Oxford, and the members are Dr. E. L. Collis (Director of Welfare and Health, Ministry of Munitions),

Sir Walter Fletcher, M.D., F.R.S. (secretary, Medical Research Committee), Mr. W. L. Hitchens (chairman of Messrs. Cammell, Laird and Co., Ltd.), Mr. Edward Hopkinson, D.Sc. (director of Messrs. Mather and Platt, Manchester), Mr. Kenneth Lee (director of Messrs. Tootal, Broadhurst Lee Co., Ltd.), Dr. T. M. Legge, C.B.E. (H.M. Medical Inspector of Factories), Colonel C. S. Myers, M.D., F.R.S. (director of the Psychological Laboratory, Cambridge), Mr. R. R. Bannatyne (assessor representing the home office). The secretary is Mr. D. R. Wilson, H.M. Inspector of Factories to whom at 15, Great George Street, Westminster, S.W.1, suggestions as to any problems needing investigation should be addressed.

STATE PARKS FOR IOWA

At the last General Assembly of the State of Iowa, a law was passed creating a State Board of Conservation for the purpose of setting aside certain areas in the state for recreation, scientific, historic and forestry purposes. The sum of \$50,000 out of the fund coming from hunters' licenses to be set aside for the purchase of such places. The Conservation Board is to report its findings to the Executive Council of the state. Governor W. L. Harding appointed as such a board, L. H. Pammel, of Ames; Joseph Kelso, of Bellevue, and John Ford, of Fort Dodge. Mr. E. R. Harlan, curator of the State Historical Department, is designated in the law as a member of the board. The board recommended the purchase of a region known as the Devil's Back Bone in Delaware County along the Maquoketa River. The area embraces something over 1,200 acres. Some of the original white pines are still standing, as well as a number of the larger oaks and cedars. The wild animal life also is of interest. It is of interest to geologists because of the rough topography, the limestone and the glacial action in the region. This region is also of particular interest from an ecological standpoint.

The board designated that this park and similar parks be known as memorial state parks. The Executive Council adopted the recommendation of the board with reference to

the purchase of the Devil's Back Bone and made arrangements to purchase the area. The commission also made recommendation for southeastern and southwestern Iowa, particularly with reference to wooded tracts and some Indian mounds, as well as the Missouri loess area in southwestern Iowa. The board believes history and science will best be served by making few improvements in these parks.

THE PLANS OF THE ROCKEFELLER FOUNDATION

EXTENSIVE work in public health and medical education and the completion of its war work will be the program of the Rockefeller Foundation for 1919, according to a statement issued by the president, Dr. George E. Vincent.

The estimated income for 1919 is \$6,750,000. Against this the budget provides \$2,264,130 for public health and \$3,662,504 for medical education. The other items of the budget are \$103,000 for miscellaneous payments on long-term appropriations and \$146,662 for administration. The amount still available for appropriations is \$465,110. Of the income of 1918 \$2,787,406 has been brought forward to meet appropriations for war work made in 1918, but yet to be paid.

The public health activities for the year will be directed chiefly against yellow fever, tuberculosis in France, malaria and the hookworm disease. The Yellow Fever Commission, headed by General William C. Gorgas, in starting a war on the disease which it is hoped will result in its complete elimination. The Commission on Tuberculosis in France will continue its work on an enlarged budget at the request of the French authorities. The campaign against the hookworm will be waged in twelve states here and twenty-one foreign states and countries.

Appropriations have been made for special studies and demonstrations in mental hygiene, for a school of hygiene and public health at Johns Hopkins, and for the development of public health nursing. The chief work in medical education will be the development of training in modern medicine in China through the China Medical Board.