

The National Research Council has interested itself in the fertilizer question. It is felt that the farmer should be taught to use fertilizer. In the past however the fertilizer companies have not always been fair to the farmer. They have sold him constituents which were in many cases superfluous for his land. To remedy this abuse, the National Research Council has, with the concurrence of the Fertilizers' Association, organized a commission of five scientific men who will be paid by the Association. This commission, in co-operation with the individual states, will undertake a survey of lands in the Middle West with a view to determining the specific needs of the soils in different parts of that region.

It might be well to here say something more about the National Research Council, as it is an organization of comparatively recent date which has already abundantly justified its existence and which promises to exercise an immense influence on scientific and industrial research and on the intellectual life of the country in general.

"In April, 1916, immediately after the attack on the *Sussex*, the National Academy of Sciences voted to offer to the President its services in organizing the scientific resources of the country. This offer was accepted, and the Academy was requested to secure the co-operation of all agencies Governmental, Educational and Industrial, in which research facilities are available. The National Research Council, comprising the chiefs of the technical bureaus of the Army and Navy, the heads of Government Bureaus engaged in scientific research, a group of investigators representing educational institutions, and research foundations, and another group including representatives of industrial and engineering research, was accordingly constituted by the Academy with the active co-operation of the leading national scientific and engineering societies. To these were added representatives of the Government designated by the President."

Early in 1917 the National Research Council was requested to act as the Department of Science and Research of the Council of National Defence. On May 11th, 1918, the President of the United States issued an executive order in which he commended the work of the National Research Council and requested the National Academy of Sciences to perpetuate its organization. At the same time he specified its functions as follows:

(1) In general, to stimulate research in the mathematical, physical and biological sciences, and in the application of these sciences to engineering, agriculture, medicine and other useful arts, with the object of increasing knowledge, of strengthening the national defence and of contributing in other ways to the public welfare.

(2) To survey the larger possibilities of science, to formulate comprehensive projects of research, and to develop effective means of utilizing the scientific and technical resources of the country for dealing with these projects.

(3) To promote co-operation in research at home and abroad, in order to secure concentration of effort, minimize duplication, and stimulate progress; but in all co-operative undertakings to give encouragement to individual initiative, as fundamentally important to the advancement of science.

(4) To serve as a means of bringing American and foreign investigators into active co-operation with the scientific and technical services of the war and navy departments and with those of the civil branches of the Government.