Hon. A. Bonar Law, Secretary of State for the Colonies, calling attention to a scheme of scientific and industrial research for the United Kingdom, as embodied in parliamentary paper Cd. 8005,

attached thereto, and a copy of the Order in Council approving the same.

The Minister observes that this scheme, proposed by Mr. Arthur Henderson, contemplated the appointment of a Committee of the Privy Council which should be responsible for the carrying-out of the same, and a small Advisory Council responsible to the Committee, to be composed mainly of scientific men and men actually engaged in industries dependent upon scientific research. By Order in Council, 28th July, 1915, effect was given to this scheme, and the Committee and Council proposed therein were appointed and their respective duties set out. The scheme was to be applied to the United Kingdom as a whole, and was not intended in any way to interfere with the arrangements already made by the War Office and Admiralty in respect to obtaining scientific assistance for the improvement of munitions of war, but was designed to establish a permanent organization for the promotion of scientific and industrial research.

The Minister observes that, after this scheme had gone into operation, suggestions were made from various sources that it should be extended and made applicable to the overseas dominions or even to the Empire as a whole. These suggestions were approved in principle by the Committee of Council, and a memorandum was prepared intimating certain preliminary steps that might be taken to bring about gradually co-operation of effort and co-ordination of research

throughout the Empire.

On the 28th January, 1916, the Minister of Munitions caused to be distributed to educational institutions in the United Kingdom a circular letter inviting co-operation in the improvement and invention of appliances for the prosecution of warfare on land, and copies of the same were sent to certain universities in Canada. As a result, these universities have given full information of the facilities they possess for carrying on research work in respect to the specific purpose of the Minister of Munitions. They express willingness also to co-operate and assist in the work of industrial research, and are of the opinion that some Department of the Government of Canada should undertake to co-ordinate and supervise this work and act as a medium of communication.

The Minister desires to point out the urgent necessity of organizing, mobilizing, and encouraging the existing resources of industrial and scientific research in Canada with the purpose of utilizing waste products, discovering new processes—mechanical, chemical, and metallurgical—and developing into useful adjuncts to industry and commerce the unused natural resources of Canada. At no period has the importance of such united and thorough action been so evident as since the conditions brought about by the war, when the scarcity of certain compounds and processes has caused confusion and paralysis in industries and greatly added to costs of living. Canada has educational and scientific institutions more or less well equipped and conducting this research, which have already done much along their several lines, and are willing and anxious to equip themselves for doing more. There are also private, corporate, and Government laboratories more or less engaged in research work. The manufacturers' associations are alive to the importance and absolute necessity of such work in relation to the industries of the country, and are anxious to co-operate in and support it.

What seems to be immediately urgent is to have some method of co-ordination and direction which shall combine the efforts of all along the lines for which each is best adapted, and which would tend to avoid duplication and promote efficiency of action. To this end the Minister has been more or less in continuous communication and conference with representatives of the universities, the Canadian Manufacturers' Association, and the scientific institutions. The consideration thus given has resulted in a practically unanimous agreement both as to the necessity

of immediate action and as to the lines along which it should be taken.

The Minister therefore recommends the appointment of a Committee of Council, to consist of the Minister of Trade and Commerce, the Minister of the Interior, the Minister of Mines, the Minister of Inland Revenue, the Minister of Labour, and the Minister of Agriculture, which shall be charged with and responsible for the expenditure of any moneys provided by Parliament for scientific and industrial research; and also an Honorary Advisory Committee, responsible to the Committee of Council, to be composed of nine members representative of the scientific and industrial interests of Canada, who shall be charged with the following duties:—

- (a.) To consult with all responsible bodies and persons carrying on scientific and industrial research work in Canada with a view to bringing about united effort and mutual co-operation in solving the various problems of scientific and industrial research which from time to time present themselves.
- (b.) To co-ordinate as far as possible the work so carried on so as to avoid overlapping of effort, and to direct the various problems requiring solution into the hands of those whose equipment and ability are best adapted thereto.
- (c.) To select the most practical and pressing problems indicated by industrial necessities, and present them when approved by the Committee to the research bodies for earliest possible solution.
- (d.) To report from time to time the progress and results of their work to the Minister of Trade and Commerce as Chairman of the Committee of Council.

That a competent secretary be appointed on the nomination of the Committee and paid by the Department of Trade and Commerce.

That the travelling-expenses of the Committee shall be paid by the Department of Trade and Commerce.

The Committee concur in the foregoing, and submit the same for approval.

RODOLPH BOUDREAU, Clerk of the Privy Council.