

trained men to direct and operate the industries which were so urgently required at that time. To correct such a deplorable condition, Great Britain organized the technical and commercial leaders of the country into an Advisory Council for Scientific and Industrial Research. The British Dominions were invited to establish similar organizations to co-operate in the work, and as a result the Canadian Government created a Canadian Council of the same name and general character, ordinarily known as the Research Council of Canada.

After a thorough investigation of Canadian industry, the Research Council recommended that immediate steps be taken to provide for intensive research in such directions as would make for the most rapid development of the natural resources and related industries of the country. For the prosecution of such research it was suggested that there be created by the Government a Research Institute, so equipped and staffed that investigations of all kinds could be carried out there under the direction of the best technical advice in the country. This recommendation was favourably received by the Government, and a Bill was introduced into the House of Commons designed to bring about the establishment of such an institute. The Bill was given the support of all parties in the House of Commons, but was rejected by the Senate, on the ground of economy.

The Government, however, recognizing that the Research Council was doing a useful work, has voted annually the sum of \$120,000 for the prosecution of such aims as could be furthered without the acquisition of land, buildings, apparatus or equipment of any kind. This annual appropriation is at present available for the work of the Research Council, and with these limited facilities at its disposal it has endeavoured to meet the most urgent of the many problems which need investigation, in the hope that Canada will become so alive to the necessity for adequate study and investigation of her natural resources and of the technical problems which confront her industries, that ample means will be provided for this important work.

In July, 1924, a revised Research Council Act (14-15 Geo. V, c. 64) was passed by Parliament, under which the membership of the Council is increased to fifteen persons, who serve without remuneration; the Council is constituted a corporate body and given charge of all matters affecting scientific and industrial research in Canada which may be assigned to it, and is also charged with the duty of advising the Dominion Government on questions of scientific and technological methods affecting the expansion of Canadian industries or the utilization of the natural resources of the country.

The Research Council has also been charged, under the above Act, with the following specific duties:

To undertake to promote the utilization of the natural resources of Canada;

To undertake researches with the object of improving the technical processes and methods used in the industries of Canada, and of discovering processes and methods which may promote the expansion of existing or the development of new industries;

To undertake investigation and determination of standards and methods of measurements, including length, volume, weight, mass, capacity, time, heat, light, electricity, magnetism and other forms of energy; and the determination of physical constants and the fundamental properties of matter;

To undertake the standardization and certification of the scientific and technical apparatus and instruments for the Government service and for use in the industries of Canada; and the determination of the standards of quality of the materials used in the construction of public works and of the supplies used in the various branches of the Government service;