

MINISTER'S STATEMENT

THIS year's report indicates marked developments in avenues of research appropriate to the immediate post-war needs of the Dominion. Reviews of wartime activities have revealed a number of ways in which new knowledge gained in the interest of defence has potential application in helping our peacetime requirements, particularly in the field of manufacturing industries. The Department has kept abreast of the momentous scientific developments which have occurred in so many fields of scientific endeavour overseas in the later years of the war, and is exploring the peacetime possibilities of these developments in New Zealand. In this connection, as examples of a number of developments which are receiving close attention, mention need only be made here of the use of radar to assist coastal navigation round our shores, and of antibiotics to assist in the control of plant and animal diseases.

This rapid development of scientific research overseas, and its importance to industrial development in New Zealand, necessitate the maintenance of close personal contact with laboratories and research stations in other countries. A policy has been followed, therefore, of sending young scientists abroad for varying periods so that they might gain valuable experience and, as a result, provide a reserve of trained personnel to meet the increasing demand for scientific services in all aspects of research and its practical application.

As a practical expression of the Government's desire to extend every assistance to local production, the Manufacturers' Research Committee has done valuable work in directing scientific services to many industries, and in encouraging the development of research by means of research associations.

The Ceramics Research Association came into being during the year, and its activities should ensure improvements in the manufacture of pottery and greater economic development of the Dominion's clay resources.

Realizing that closer association between scientific effort and the manufacturing industries was desirable, the Manufacturers' Research Committee promoted the establishment of co-ordinating bodies in the four metropolitan towns to facilitate fuller use being made of the services available from the Department's chemical, physical, and engineering laboratories. It has become evident that these laboratories can provide a wide range of manufacturers with really fundamental assistance such as is not at present available in New Zealand, for the volume of requests for services has been such as to necessitate overtime being worked in some branches. It is not the policy to undertake any work which can be done by existing firms, while every effort is made to encourage firms to develop facilities for servicing industry in spheres where such service cannot at present be secured. The Department's Industrial Psychology Division, functioning in close association with the Manufacturers' Research Committee, has provided assistance in personnel problems to a number of different types of factories and offices in the main centres.

The permanent services of the Department have been very actively concerned with all the outstanding problems connected with the immediate requirements of our national welfare. The Geological Survey and the Dominion Laboratory have maintained the search for and the quality examinations of our coal resources. Direct assistance through geological and geophysical investigations has been provided wherever hydro-electric power developments have been in progress. Numerous problems relating to materials required for building purposes have been referred to the Geological Survey and Dominion Laboratory during the year. The Chemical Engineering Section of the Dominion Laboratory designed and tested a new type of tobacco-curing kiln which appears to have distinct promise in efficiency of operation. This indicates a further example of the use to which the fund of information, which has been built up by the staff over a period of years while investigating various dehydration problems, can be put.