SECRETARY'S REPORT

THE Hon. D. G. SULLIVAN, Minister in Charge of the Scientific and Industrial Research Department.

I HAVE the honour to submit herewith the annual report of the Department for the year 1944–45.

The Council of Scientific and Industrial Research held five meetings during the year. The personnel of the Council is as follows:—

Sir Theodore Rigg, M.A., M.Sc., F.R.I.C., F.R.S.N.Z., Director, Cawthron Institute, Nelson (Chairman).
J. C. Andrews, Ph.D., M.Sc., Fertilizer-works Manager, Auckland (Vice Chairman).
E. R. Hudson, B.Sc., B.Agr., Dip.C.A.C., Director, Canterbury Agricultural College, Lincoln.
R. O. Page, D.Sc., A.R.I.C., Tannery-works Manager, Christchurch.
J. M. Ranstead, Dip.C.A.C., Bledisloe Medallist, Farmer, Matangi.
W. Riddet, B.Sc. (Agric), N.D.A., N.D.D., Professor of Dairying, Massey Agricultural College, Palmerston North.
D. F. Sandys Wünsch, M.A. (Oxon.), B.Sc. (McGill), M.I.Chem.E., Assoc. Inst.M.M., Factory-manager, Edendale.
E. J. Fawcett, M.A. (Cantab.), Director-General of Agriculture, Department of Agriculture, Wellington.
J. C. Eccles, M.B., B.Sc. (Melb.), M.A., D.Phil. (Oxon.), F.R.A.C.P., F.R.S., Professor of Physiology, University of Otago, Dunedin.
E. Marsden, C.B.E., M.C., D.Sc., F.R.S.N.Z. (Secretary).
F. R. Callaghan, M.A., F.R.E.S. (Deputy Secretary).

The expenditure of the Department during the year was as follows:—

	£	£
Permanent services.		
Head Office: Comprising general expenses of administration	20,786	
Dominion Laboratory (with branches)	39,107	
Dominion Observatory	1,653	
Geological Survey	10,967	
Magnetic Observatory	4,263	
Dominion Physical Laboratory	80,355	
		157,131
Research investigations		142,224
Grants and miscellaneous services, including Information Bureau and Scientific Liaison Services		25,096
		324,451
Recoveries		95,906
		228,545

Grants made to research and allied institutions in Great Britain, £5,784.

During the year consideration has been given to the organization of the Department's work in relation to post-war problems and requirements and a gradual transition of its activities is in progress.

The Department has many and varied functions related to the different fields of scientific work. All these activities are directed to the scientific problems of primary and secondary industries, and Government Departments. It is difficult, therefore, in a short *résumé* to indicate the full impact of the Department's endeavour in all the various fields, but the following short survey covers the main points: chemical work is carried out for Government Departments charged with administering acts and regulations. Engineering and physical research of direct assistance to industry is undertaken, and physical measurements relating to standards. The geological survey of the country's resources is constantly being pressed forward both in general survey and relating to particular minerals and resources. Soil survey, with its particular application to better land utilization, is receiving special attention. Researches in fruit, tobacco, plant diseases, grasslands, agronomy, botany, and entomology are correlated in relation to improving both grasslands and crops. A number of important research associations—dairy, wheat, leather and shoe, wool manufacturing, &c.—are supervised by the Department. Such activities as building research, industrial psychology, and food-preservation investigations are correlated by special departmental committees. Grants are made in aid of research to universities and allied institutions. Industrial contact has been strengthened by the formation of the Manufacturers' Research Committee. Research information, publicity, and liaison overseas have recently been integrated to give better service. Research activities elsewhere in New Zealand in relation to the Department are co-ordinated through the Council of Scientific and Industrial Research.

All these resources have been applied to the war effort, while keeping up local activities of a civil nature as far as possible.

The war experiences have tested out the organization and have, in addition, taught valuable lessons and given emphasis to the following facts:—

(1) The association of research workers in different subjects with urgent practical problems has been a great stimulus to the imagination of workers and has led to novel methods of solution:
(2) There is great value in co-operation and team work between scientists and engineers, and also between scientists working in different fields and in different institutions:
(3) Provided a man has a sound training in fundamentals and the research method, he can, as a rule, do successful work in fields other than that in which he has specialized.