

(12) *Building-stones.*

In order to have information available regarding the properties, extent, and utilization of New Zealand building-stones, Dr. P. Marshall, Government Petrologist, has been engaged to investigate and test all known occurrences of building-stones in the Dominion. An investigation of New Zealand gravels also will be conducted at the same time, and should provide scientific information for all those dealing with road problems, concrete and ferro-concrete manufacture. The information, when available, will be published in book form.

(13) *Research Work for Secondary and Manufacturing Industries.*

The Department has acted in co-operation with the Department of Industries and Commerce, and already a partial survey of the problems concerning the secondary industries has been made. It is proposed to utilize the services of the scientific staff of the Dominion Laboratory to study and investigate the problems of the secondary industries.

(14) *Wool.*

The woollen-mills of the Dominion have also been surveyed, and various manufacturing problems noted for attack by investigation and research. Further action will also be taken to investigate the problem of wool-deterioration, which has been reported frequently during the past few years, and information on that matter is now being secured for the purpose of planning a definite course of research.

(15) *Leather and Allied Products.*

A survey of the processes involved in the manufacture of leather, preparation of hides and pelts for marketing overseas, is being made by the Department's technical chemist, so that scientific guidance will be available for the improvement of the practices adopted in the various sections of the industry. With the aid such scientific knowledge can provide, this important industry should be capable of very considerable development in view of the extensive supplies of raw products available in the Dominion.

(16) *Meat Industry Problems.*

The forthcoming visit of Dr. Franklin Kidd will be availed of for the purpose of considering a number of investigations into the cold storage of meat and the possibility of conducting researches here in co-operation with the Cambridge Low-temperature Research Station. Indications seem to point to the conclusion that much benefit would accrue to the various manufacturing industries of the Dominion through the adoption of co-operative research effort. New Zealand manufacturers are probably unable individually to undertake the considerable expense involved in maintaining research facilities in their own works. In co-operation, however, the expense would be greatly lessened, and similar advantages would be gained.

## RESEARCH SCHOLARSHIPS.

Research Departments in other countries have always felt their activities and usefulness severely limited by the dearth of trained scientific men capable of conducting research work. In order to provide for the requirements of the Dominion in this respect, four research scholarships, of a value of £180 each per annum, plus £25 additional for books and apparatus, have been established. The first awards of these have been made as follows :—

- N. S. Alexander, M.Sc., Auckland University College. Absorption of X rays.
- J. C. Andrews, M.Sc., Auckland University College. Mutarotation of sugars.
- P. W. Aitken, M.Sc., Otago University. Investigation into flax-gum, and chemical treatment of flax-fibre.
- M. N. Rogers, M.Sc., Canterbury College. Helium content of New Zealand natural gases.

## NEW ZEALAND INSTITUTE RESEARCH GRANTS.

These grants have been transferred from the Department of Internal Affairs, and will in future be administered by the Department of Scientific and Industrial Research on lines similar to those of the former Department.

## “JOURNAL OF SCIENCE AND TECHNOLOGY.”

This scientific publication, hitherto issued by the Board of Science and Art, has been transferred to the Department of Scientific and Industrial Research. The nature of the *Journal* will be somewhat altered in order to include in its pages a wider range of industrial articles. Dr. J. A. Thomson, of the Dominion Museum, will continue as editor of the *Journal*.

## CO-OPERATION WITH OVERSEAS RESEARCH ORGANIZATIONS.

The Department has established connections with research institutions in the United Kingdom, the United States of America, Canada, Australia, and other parts of the Empire. Wherever possible—e.g., in fuel research, cold storage, nutrient content of pastures, and noxious-weed investigations—definite co-operation has been arranged, so that the researches are made of Empire-wide significance. The Department has been made the official connecting-link between the Dominion and the Imperial Institute.