NEW ZEALAND LEATHER AND SHOE RESEARCH ASSOCIATION (INC.)

Acting-Director: Mr. F. G. CAUGHLEY

The report covers the first year of the Association as an incorporated body. The year has shown the completion of many investigations, and good progress in others. A Director has now been appointed, and it is expected that he will take up his duties towards the end of 1950. The staff now includes two research chemists. The total membership has reached forty, and subscriptions now exceed the present maximum Government grant, which, based as a pound-to-pound subsidy, it is hoped will be increased.

Plans, subject to Government approval, have been made to open a new laboratory at Lower Hutt, and with new plant, apparatus, and adequate stocks of material, this would allow the work of the Association to be considerably

extended.

Leather-manufacture.—Tanning trials to determine the efficiency of the materials used for vegetable-tanned sole-leather with single unblended extracts have confirmed by actual figures the general comparisons accepted by the industry. Further developments indicate that the procedure with blended extracts may be applied to tannery practice. Many other investigations of special tanning problems were made by analyses, examination, &c.

Hides.—Full-scale trials have been started to investigate the superior leather yield and quality claimed for the brining process of curing hides and calf-skins as compared with the salt-stack method, and reactions in storage and tannage are being studied.

Pelts.—Investigations in the fellmongering of sheep-pelts and lamb-pelts were continued, but through the limitation of staff none of the major projects in these investigations could be started.

Shoe-manufacturers' Problems.—The shoe-manufacturers submitted nearly all of the 114 problems on footwear, and about three-quarters of these arose from complaints by customers after a period of wear. The effects of perspiration and the overheating of wet soles were found to be the cause in nearly half of the customers' complaints of faulty footwear, and tight-fitting shoes or rubber and other impervious soles were often associated with the perspiration-rotting of upper leather. Only in a few cases were weak material, or faulty workmanship, construction, or material, mainly responsible for the complaint. Except in a small group where ordinary hard wear had been responsible, the remaining cases were mostly found to be caused by various chemical agents contacted during wear.

NEW ZEALAND POTTERY AND CERAMIC RESEARCH ASSOCIATION (INC.)

Director: Mr. W. Vose

The laboratory has now been equipped as initially planned, and during the year a steady rate of progress in research projects, consultation with the industry, and general assistance to Government and other bodies, has been maintained.

RESEARCH

Raw Materials.—The results of the earlier work upon the sources of koalin-bearing deposits in New Zealand were reported and investigations extended to include clays from Central Otago, North Auckland, Central Canterbury, and Stewart Island.