

New machines have been designed and constructed for the drying of grass-seed to enable its quality to be maintained during transport overseas, and again to deal with the winnowing of kauri-gum chips in the field.

In the fibre industries the new decorticator for treating phormium has been thoroughly proved in actual practice, the possibility of fibre-production from young seedling plants has been tested and found promising, and new knowledge gained of the swamp conditions under which phormium thrives best and which, applied in practice, will permit considerable savings in the management of planted areas. In the case of linen flax, all the problems connected with the growing of the crop have been solved, and knowledge and experience of harvesting and processing the crop are available, and so sound foundations for the establishment of the industry have been laid.

In the sphere of minerals the completion of quantitative surveys of many deposits represents a distinct advance, while in some cases—*e.g.*, bentonite much new knowledge has been assembled whereby local exploitation of this mineral (for which overseas industry is finding many new uses) may be promoted. In the search for mineral oil in New Zealand the expert services of the Department have been regularly drawn upon by the various prospecting companies. Soil research has indicated to the tobacco industry directions for expansion in areas where planting can be safely undertaken without deterioration in leaf-quality, while plant pathological studies have rendered real assistance in reducing losses due to the leaf-mosaic disease.

These examples of advances made during the year are quoted to indicate that research is rendering to the Dominion steady, consistent results over a very wide range of problems, and that these results are being regularly absorbed into industrial practice and usage.

E. MARSDEN,  
Secretary.

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