

LANDS-IMPROVEMENTS

This vote is now a very small one, as the items covering river control and flood damage, which originally were provided thereunder, have been transferred to the vote, "Soil Conservation and Rivers Control." The programme during the year has been mainly confined to continuation of the development of the flax industry on the Moutoa Estate and the completion of reclamation and water-supply projects which were in hand the previous year.

Whangarei District.—Kumengamatea Floodgate, Ruawai: This work, which was in hand the previous year, has now been completed and is operating satisfactorily.

Ruawai and Naumai Stopbank: The amount of work done has been small, as the dragline excavator was employed on other works. The contract for the excavation of a new outlet from the floodgate is in hand and 15 chains have been completed.

Dargaville Borough Water-supply: Work has been confined to stream gaugings, rainfall records, and surveys of the area in the vicinity of the reservoir.

Auckland District.—Kaipara Harbour, Mangrove Reclamation at Glorit: Only general maintenance has been carried out.

Kaipara Harbour, Reclamation of Tidal Flats, Kukutango: Only general maintenance has been carried out.

Wellington District.—Moutoa Estate Development: This work has been continued during the year, details being as follows: weeding, 614 acres; cultivation with rotary hoes, 1,071 acres; planting flax, 67 acres; thickening flax areas, 218 acres; excavating new drains, 555 chains; widening existing drains, 430 chains; erecting stopbanks, 95 chains.

Sand-dune Reclamation.—Maintenance and tree-planting on a limited scale have been carried out on the sand-reclamation areas at Helensville and North Waikato Heads to preserve valuable reafforestation areas established before the war.

Land-clearing by Heavy Machinery.—This work was carried on in Southland, Ohakune district, and Taumarunui district as plant was available, thus making a substantial contribution towards primary production.

PLANT AND EQUIPMENT

Owing to war conditions and the inability of the Department to secure replacement plant from overseas, a new system of plant pooling was inaugurated and is operating very satisfactorily under the present restricted conditions, and has overcome, to a large degree, the difficulty of providing equipment to undertake the volume of work that this Department has successfully maintained. Plant-maintenance, complicated by lack of parts from overseas, has been kept at a relatively high stage, although the plant, in most cases, has far exceeded its normal life.

The plant was used extensively on defence works and works of national importance. Plant service to other Departments for primary production and opencast coal-mining has continued to represent a large volume of work.

The design and manufacture of equipment for the Armed Forces has reached a high level, and, amongst other items, barges and launches to a value of £300,000 and equipment for mechanical aids to navigation have been designed during the year.

Provisional arrangements have been made for post-war purchase of replacement equipment from overseas, together with greater facilities for extensive mechanical maintenance-work.

LIGHTHOUSES AND HARBOUR WORKS

LIGHTHOUSES

The buildings at the various lighthouses have been maintained in good order, and routine overhaul of equipment has been carried out.

Cape Maria Van Dieman.—A new battery-operated electric automatic light has been installed.

Cape Wanbrow, Oamaru.—The South Head light has been shifted and an acetylene-gas automatic light has been provided.

An extensive programme of modernization of existing buildings and provision of new dwellings has been undertaken, including the provision of bulk-storage water-tanks and drainage. Fair-weather road access has been provided for the stations at Cape Campbell, Moeraki, and Waipapapa.

DEFENCE WORKS

At the beginning of the year the entire resources of the Department were fully engaged upon the programme of defence works then in hand. As the year advanced, owing both to curtailment of projected work and completion of works in hand, activity in this field gradually diminished, and at the end of the year the amount of defence work in hand was of moderate dimensions. Indications are that the reduction in works of this nature will continue, and next year should see a very much reduced programme compared with that of the year under review and others since the outbreak of war.

STAFF

I have once more to thank the staff for the very loyal and efficient service which they have given during the past year. The urgent rush of defence work has passed, but other problems and difficulties keep arising, and the work of the staff has not been eased very much.

I am pleased to welcome back to the Department a number of the staff who have returned to duty after several years of strenuous and valuable service in the Armed Forces abroad.

I have, &c.,

W. L. NEWNHAM, M.Inst.C.E.,

Engineer-in-Chief.