

Artesian wells sunk .. .. .	46 (number).
Flood-gates built .. .. .	23 „
Concrete culverts built .. .. .	6 „
Concrete conduits built .. .. .	1 „
Creek diversions .. .. .	8 „
Pile bridges .. .. .	12 „
Sill bridges .. .. .	34 „
Fascines for roads .. .. .	19,104 bundles.
Metal for roads .. .. .	21,604 cubic yards.
Spoil dredged .. .. .	858,860 „
Clay-excavation .. .. .	10,000 „
Rock-excavation .. .. .	6,550 „

*Office.*—The total expenditure passing through the books during the year was £341,438 19s. 5d., which includes the sum of £98,543 12s. 10d. spent on the new dredging-machinery purchased in America. The amount of £95,506 10s. 2d. for wages, &c., was paid out of Thames and Whakatane imprests. Payments through the local Treasury amounted to £107,138 13s. 11d. Some 525 piece-work contracts were let during the year. The number of vouchers passed was 3,824. The amount of £1,073 2s. 5d. was received during the year for various small services, the principal item being Patetonga tram freights, £533 5s. 3d. Inward correspondence numbered 8,210; outward, 11,400.

The draughting staff has been kept busy during the year. The great amount of field surveying completed in the period has necessitated the supply of much survey information, planwork, and general searching. In addition to this, a considerable amount of work was done in the way of drawing plans for Proclamation purposes, and the drawing-up of the necessary agreements and other small matters incidental to the Proclamation of land transactions under the different statutes. On the drainage side, new schemes of drainage have been prepared, whilst the designing of bridges, culverts, flood-gates, drains, &c., has engaged the attention of the staff for a good percentage of the year. The lithograph maps of the drainage districts have been kept well up to date, and, where necessary, new ones prepared. Much blue-print work has been done, and it is hoped that in the incoming year large use will be made of the photostat, which is admirably suited to taking facsimile copies of plans and documents.

*Collection of Rates.*—The total amount received during the year was £17,875 5s. 8d., credited as follows: Hauraki Plains, £7,113 17s. 7d.; Rangitaiki Swamp, £10,761 8s. 1d. A reclassification of the Hauraki Plains area will be undertaken early in the incoming year.

#### APPENDIX IV.—SAND-DUNE RECLAMATION.

(R. P. GREVILLE, F.R.G.S., Commissioner of Crown Lands, North Auckland.)

Work has been carried on during the year on the west coast south of Kaipara Heads, in the vicinity of Woodhill; on the east coast between Marsden Point and the Waipu River; on the west coast near Te Kopuru, in the Northern Wairoa district; and a little preliminary work has been done on the west coast north of Kaitaia, near Waiharara.

An interesting report on the progress of the various works, by the overseer, Mr. Samuel Stafford, is appended hereto. The total expenditure on the various works is given below. Owing to the necessity for economy in public expenditure, the work was curtailed towards the end of the financial year.

It is pleasing to record that good work has been done, and the results achieved are very encouraging. There is no doubt of the wisdom of spending money in reclaiming these sand-dune areas, and as funds become available the various works should be pushed on vigorously.

*Expenditure on Sand-dune Reclamation Work up to 31st March, 1922.*—South Kaipara, £2,033 8s. 6d.; east coast near Waipu, £1,642 19s. 6d.; west coast, Northern Wairoa, £268 6s. 6d.; west coast north of Kaitaia, £50 7s. 9d.

##### THE RECLAMATION OF THE SAND-DUNE AREAS, NORTH AUCKLAND.

Operations were commenced in the various localities at the following dates: Waipu, 11th August, 1919; Ruakaka, 21st June, 1920; Kaipara, 10th March, 1920; Northern Wairoa, 2nd May, 1921. The areas were inspected and reported as follows: Waiuku (south of Auckland), 7th November to 9th November, 1921; Ocean Beach, Whangarei Heads, 15th November, 1921; Waipapakauri, Waiharara, and Hohoura, 15th March to 22nd March, 1922.

##### *Waipu Sand-dune Reclamation.*

Areas (approximate) of marram-grass established: 11th August, 1919, to 31st March, 1920, 10 acres; 1st April, 1920, to 31st March, 1921, 46 acres; 1st April, 1921, to 31st March, 1922, 49 acres: Ruakaka dunes (Owen's).—21st June to 31st August, 1920, 25 acres: Total, 130 acres.

California tree-lupin (*Lupinus arboreus*) harvested and sown, and lupin plants transplanted: 11th August, 1919, to 31st March, 1920, 300 plants transplanted, 40 lb. sown; 1st April, 1920, to 31st March, 1921 (Waipu and Ruakaka dunes), 291 seeds up to seed in pod, 600 plants transplanted;