C.-11.

#### DREDGES.

The three dredges have been busily engaged in carrying out the various outfall drains. During the year under review a total of 261,751 cubic yards of spoil has been excavated, at a total cost of £4,764 15s. 5d., or an average cost of 4.36d. per cubic yard. This includes all charges—wages, supplies, repairs, &c.—and must be considered very satisfactory, especially as coal charges, freights, and wages have considerably increased during the last twelve months.

The Hammond dredge has been straightening the Tarawera River, and has put in several cuts; the dredgemaster also supervised the erection of a good many chains of stop-banks necessitated by the subsidence of the old banks. One Priestman dredge was occupied in the Kopeopeo outfall, but owing to the treacherous nature of the country causing slips it was idle for some time. However, during the enforced idleness advantage was taken to overhaul the machinery. A spillway was erected in the Kopeopeo outfall to raise the water-level there, but the foundations of the spillway gave considerable trouble, scouring out to a depth of fully 10 ft. in front, the rotten nature of the country traversed by the dredge, together with heavy freshes, being contributing factors. Nevertheless, I am now pleased to say that everything is all right, and the dredge is making good progress. The other Priestman dredge has been busy towards the latter end of the year taking out the Tarawera cut, and good progress has been made with this work both by dredges and scoops, and shortly after the end of the year I anticipate letting the water through to the new outlet.

## TARAWERA RIVER DREDGING.

The Hammond dredge has during the year excavated a total of 50,727 cubic yards of spoil, having been engaged in straightening different bends of the river. Unfortunately a great deal of pumice is on the move in this river, and has caused silting-up in several places, which has necessitated the raising of stop-banks; but great hopes are entertained that the new Tarawera outlet will cause a considerable scour and so do away with this source of trouble. After widening out one or two cuts near Hallett's flax-mill it is intended to cut off several bends above same. Surveys have been made and cuts laid off on the ground. When these are put through the river will have good straight runs, and river-overflowing should be a thing of the past.

#### KOPEOPEO OUTFALL.

Good progress has been made with this cut, but owing to the difficulty of taking coal to the dredge a new spillway was erected. Unfortunately, the country was of a very treacherous nature, and the foundations were washed out—although driven 10 ft. in the ground—by scouring-out at the bottom. However, after a lot of work the scour has been stopped, and things are going ahead very smoothly, although further trouble may be expected. For a good portion of the cut considerably more material was taken out, to prevent slips crushing dredge and impeding proper working, than would otherwise have been necessary.

### MAIN OUTLET DRAINS.

During the year seven miles of new drains, thirty-two miles of cleaning, widening, and deepening, and three miles and a half of dredging, and also three miles of snagging on the Rangitaiki River, have been carried out. Maintenance will be a considerable item in the future until the works are finally completed.

### ROADS.

Very little formation has been done in connection with the works, the only two being about 60 chains on the Tarawera Cross Road and Gow's Road, but the latter is not quite finished. Nothing has been done so far in connection with proposed main arterial road which is to be constructed adjacent and parallel to the East Coast Railway, owing to the centre-line and station-yards, &c., not having been finally located. This road will be of great benefit to the settlers, and its completion is eagerly looked forward to by them, as several are completely isolated until such time as this road is formed.

# Bridges.

No bridges of any importance have been erected, but several small sill bridges have been constructed.

### FLOATING PLANT.

This consists of two Priestman dredges, one Hammond bucket dredge, two ferry-pontoons, one snagging-barge, three coal-barges, one towing-barge, two oil-launches, and several small boats and punts. All the above are in first-class order, the second ferry-pontoon having been reconstructed for use in connection with the new outlet on the Tarawera River.

### Buildings.

All buildings on the works, including workshops, stores, &c., are in fair order and up to requirements, the total being the same as last year—viz., seventeen.

### SURVEYS.

Most of the engineering surveys necessary for the carrying-out of the works are well up to date, and one or two land surveys have been carried out by the staff.