

To date some 189 chains of the canal is dredged, while the stripping ahead of dredging is now 85 chains. The stripping has exposed a heavy layer of timber throughout, and some of this has been "shot" out. Considerably less depth of peat has been found at the end of stripping than the original soundings taken some eight years ago roughly indicated.

WAIKAKA CANAL.

During the year an opportunity was taken while the river was low to deepen with dredger No. 2 the northern end of this canal. All traffic is now carried by this waterway, but some further little improvement will be made later on. The length of completed canal is 65 chains.

PIAKO RIVER IMPROVEMENTS.

The works detailed against "Priestman dredges" practically covers this heading.⁵ A special grant of £2,000 per annum for two years has been obtained for this work, out of which an amount of £465 0s. 9d. has been expended for dredging, covering some four months of the past year, the cost of the remaining eight months' dredging, &c., being a charge against the Hauraki Plains Settlement Account. It is intended to make substantial improvements in addition to the present widening of the river, and some bad bends will be cut through to ease the river in flood-time. The work is very necessary owing to the extra amount of water being discharged into the Piako River through the active operations of the various Drainage Boards up-country.

As mentioned before, some 4½ miles of river has been greatly improved by widening, but it will require some four months' work yet to complete the stretch. The fact of access roads from foothills trending towards the river makes the matter doubly important, as the dangers of navigation to different wharves during winter months will be greatly abated.

STOP-BANKS.

The present total length of stop-banks (or levees) completed to date is 27 miles 42 chains. No new banks were built during the year.

Considering everything, these stop-banks have stood remarkably well, and they are becoming quite consolidated. Where the country is "green" constant attention is paid to stop-banks, and they are maintained and improved from time to time. Close flax-planting at base of banks has proved very effectual in preventing erosion, and grass-seed is sown as required, and both will be continued in the future.

FORMED ROADS.

The total length of formed cart-roads—i.e., drains on both sides of roads, along with formation—is now 50 miles 28 chains, of which amount 5 miles 43 chains was converted from road-bank tracks during the past year, and some 5 miles 49 chains being new construction.

Drays and scoops have been utilized in blinding with sand some 4 miles 29 chains of peaty road formation, this being included in totals. Some 10,000 cubic yards of sand was used for blinding.

The time is rapidly approaching when the question of metalling a considerable length of the clay roads will be urgent.

ROAD-BANKS.

The total length of road-banks—i.e., spoil from road-drains removed about 4 ft. from edge thereof and spread—is 13 miles. These banks are from time to time converted into formed roads, and are necessarily a fluctuating quantity.

DRAINS IN OPERATION.

The total mileage of drains in operation is now 276 miles, and includes stop-bank drains, road-drains, subdivisional drains, service-drains, and outfalls of all descriptions. This is an increase of 18½ miles during the past year.

At Waikaka and Waitakaruru very heavy work was experienced in deepening and widening several miles of old drains in the peat country. These old drains were practically closed up: the length so deepened and widened is given under the heading of "Works performed."

WAITOA AND PIAKO RIVERS: SNAGGING.

The Waitoa River has now been snagged for some 15 miles 75 chains, the length covered during the past year being 6 miles 45 chains. All this has been done with a special plant located on a floating pontoon. This work will shortly stop for the season, and be taken up again per medium of bullock-teams "snigging," as the banks are now too high to economically work the barge.

The total length of Piako River upper reaches now snagged is 8 miles 25 chains, the length covered this year being 1 mile. It will be advantageous to do about 2 miles more on this river.

Both these works have been done out of special grants.

WHARVES.

The total number of wharves now in position is fourteen, three of these being erected during the past year, and one purchased.

Extensions were made to two of the above wharves, and also six low-water stages added to same. Alterations are about to be made to the lately acquired Waikaka jetty, and a breastwork will be built at the south end of the Puhanga spillway.

FLOOD-GATES.

The total number of gates now in position is fifty-seven, some five gates having been erected during the year. The simple type of gate is still being put in. All these gates will require to be renewed from time to time in reinforced concrete as circumstances warrant. At the outlets of flood-gates some twelve flumings have been laid down. Improvements, &c., have been made to flood-gates as required, and all are now in very fair order.