In January a camp for twenty men was established at Tahuna. Employed on a co-operative-contract basis, these men ring-barked the willows on the Piako River between the junction of the Waitoa River and the Tahuna Bridge, a distance of 7 miles 25 chains. The camp was then moved to Springdale and the willows on the Waitoa River ring-barked for a distance of 6 miles 40 chains upstream from the Piako Junction, and a smaller working-party of ten men accommodated on house-boats ring-barked the willows on the Piako River 2 miles 55 chains down-stream from the Waitoa River Junction, and cleared the channel of fallen willows for a distance of 3 miles 25 chains (19 miles 15 chains to 22 miles 40 chains).

## SURVEYS AND OFFICE WORK.

Engineering surveys carried out during the year comprised 1,767 chains of traverse and 1,189 chains of levelling. Land surveys of fourteen rural sections, five township sections, and two roads were also carried out. River-stage records and discharge-measurements were obtained as required for flood-control investigations. Plans of the pumping-station were prepared in the Kercpeehi office. A considerable amount of routine work is involved in the periodical measurement of the work carried out by the dredges and contractors, the fortnightly wages and contract payments to 150 to 200 men scattered over a large area, the monthly payments to standard workers and contractors, and the management of the camp mess accounts.

## SUMMARY.

The total length of subsidiary drains constructed in connection with the Hauraki Plains works to date is 767 miles 64 chains. The principal works carried out during the year are shown in the following tabular statement:—

snown in the following tabular statement.—			Length.	Excav	
Draing alasmed by manual labour			M. ch. 85 57	Cub.	
Drains eleaned by manual labour Drains widened and deepened by manual lab	our		13 34	19,3	342
Drains, new construction, by manual labour			10 2	17,9	
Stop-banks raised by manual labour			$\frac{1}{1} 25$		100
Channel enlarged and stop-banks raised, ma			0.50	14,9	
Total excavation by manual labour				60,6	322
River-channels and canals deepened with dre	dges		2 12	52,5	517
				Meta	al.
Roads reformed and metalled			1 47	1,1	184
Roads reformed and metalled, base-course or			3 15		596
Metalled roads resurfaced			3 19		553
Total metal spread				4,4	133
				Balla	
New roads formed			0 60	Dana.	
New roads formed Clay ballast delivered on peat road by light	railway		• • • • • • • • • • • • • • • • • • • •	11,0	
3-ftgauge tramway laid		• •	0 20		
Willows ring-barked on river-channel			$16 \ 40$		
River-channel cleared of fallen willows			$\frac{1}{3} \frac{1}{25}$		
Fences erected			$2\overline{43}$		
renees created				Α	cres.
Area sown in grass					200
Area cleared of blackberry and gorse					80
					nber.
Fascines used for road-construction	• •				600
Sleepers used for road-construction	• •	• •	• •	3,1	159

## WORKS EXPENDITURE.

Expenditure totalled £20,615 6s. 6d. Drainage rates struck totalled £1,534 12s. 7d., and £1,340 9s. 9d. was collected.

I have, &c.,

R. G. MACMORRAN, Chief Drainage Engineer.

The Under-Secretary for Lands, Wellington.