

Surveys.—An engineering survey is at present being made for the possible location of a dredge-cut that will drain the Apiriki arm of the swamp. To date all information has been collected for a distance of $4\frac{1}{2}$ miles up the Apiriki Creek—that is, to the south-eastern boundary of Section 10A, Block XIV, Hukerenui Survey District. As soon as the weather breaks for the winter it will be impossible to carry on with investigations in this locality. The engineering surveys necessary for the location of the best outlet for the Hikurangi arm of the swamp will then be undertaken.

Excavating Plant.—Even though the Bucyrus machines encounter at all times a very heavy task, they are standing up to their jobs very well. All necessary repairs, with the exception of those of a large order, to the engines, buckets, skips, &c., are carried out expeditiously and economically in the fitting and repair shops. To cope with renewals that are now required after three years of hard wear, a considerable number of spares for these machines were indented from America during the period.

Rock-drilling Plant.—Drilling operations with the Ingersoll-Rand plant have been carried out on an intense scale during the period, the compressed air for the jack-hammers being supplied by a battery of four compressors. Every endeavour is made to keep this plant at the highest point of efficiency. The operator of the machines keeps an accurate record of time run, fuel, oil, &c., which record shows definitely when any particular machine needs overhauling. Thus it is that each machine is taken down in turn and all wear and slackness adjusted. During the year an exhaustive test was made to arrive at comparative results of the performance of the air-compressors with various motor-spirits as fuel, and it was found that results were practically uniform.

Buildings.—All buildings that have been erected in connection with the works are of a temporary nature. During the year two huts, one 10 ft. by 10 ft., the other 16 ft. by 10 ft., were erected to accommodate the gang building the pontoon for No. 3 Priestman, and two huts, 9 ft. by 9 ft., were mounted on the pontoon as living-quarters for the dredge crew. A small rent charge is made for all huts occupied by workmen, the amount received during the year being £131.

Stores.—A complete system of stores record is kept, and all stores, such as motor-spirit, kerosene, gelignite, &c., are checked and balanced at least once a month. A complete stock-taking of all plant, machinery, tools, and stores is made every year, the total amount on charge being in the vicinity of £37,500.

Works Expenditure.—The total amount expended during the year was £20,696; of this amount the sum of £8,553 was paid in wages.

The local officer in charge is Mr. V. C. Bosselman, B.E.

The following operations were carried out under the authority of the Swamp Drainage Amendment Act, 1922 :—

MANGAWAI DRAINAGE (1,050 ACRES) RODNEY COUNTY.

No work was carried out in this area during the past year, but there is a possibility that more drain-cutting will be necessary in the near future.

HARIHARI SWAMP (952 ACRES), WESTLAND COUNTY.

Construction work on this swamp ceased at the end of August, all work under the scheme of drainage for the area being then completed. During the portion of the year that work was in progress, $40\frac{1}{2}$ chains of small catchwater drains were constructed, and 2 miles $77\frac{1}{2}$ chains of previously constructed drains were enlarged and deepened. All drains are now up to required dimensions, and bedded below the peat. On inspection during October, the drains were all working well, and the area bore a decidedly healthy appearance.

The subdivisional survey preparatory to opening the area for settlement has been left in the hands of the Commissioner of Crown Lands, Hokitika.

The expenditure for the year was £1,173 13s. 11d.

The work was done under the supervision of Mr. J. S. Strawbridge, Land Drainage Engineer.

I have, &c.,

O. N. CAMPBELL,

Chief Drainage Engineer.

The Under-Secretary for Lands, Wellington.