

above the country outside the stop-bank. All available assistance was required to control the break. It will be appreciated that under these conditions there is a grave risk of the river changing its course, with very serious results. This length of stop-bank was lightly constructed a number of years ago with unemployment relief funds and contributions from the settlers. In the meantime the protected area has been developed, and to avoid the risk of further breaches, which must now be expected, approximately two miles of stop-bank on the left bank above the railway bridge requires rebuilding to a much larger section.

A determined effort has been made to improve the accommodation for workmen. Two dwellings on the river-bank reserve which were privately owned have been purchased and improved. Improvements have also been made to two other dwellings. Thus by the end of the year four more married workmen have been provided with satisfactory housing. The year's work, though improving the standard of housing, has not provided the additional accommodation required for more men to live on the works, thus reducing transport to a minimum. In addition to the erection of further dwellings, certain existing housing of a very low standard will require replacing in the near future.

To provide data for planning efficient drain maintenance and improvement works automatic water-level recorders installed at the various outlets to the sea have been maintained and records kept of maximum and minimum levels at the main key points. The survey staff has also made regular quantity measurements of the work performed by each excavator which has enabled comparative records to be kept of the output of various plant units. In addition to this routine work the survey staff has also been engaged on the topographical and sub-soil survey of the district commenced some years ago.

The following is a summary of the drain cleaning work carried out during the year :—

Drains cleaned by hand on wages	962 chains.
Drains cleaned by hand on contract	6,972 „
Drains cleaned by weed-cutter launch	779 „
Drains cleaned by excavator with tyne drag ..	1,294 „
Drains cleaned and deepened by excavator ..	1,261 „

Other work carried out included the cutting of gorse, blackberry, and other noxious weeds from the river-bank and drain reserves and the removal and re-erection of fences to allow the working of excavators. Where the lower Rangitaiki River bank is protected with willows the trees have been trimmed to keep the growth in its most useful state. The grids at the main flood-gates have had constant cleaning.

The depot and workshop at Thornton has provided maintenance service for excavators, tractors, launches, and transport vehicles. The problem of providing sufficient transport has not yet been overcome.

The field and engineering work associated with this Department's drainage activities will be undertaken by the Ministry of Works as from 1st April, 1949.

EXPENDITURE AND RATES

Expenditure on maintenance for the year amounted to £19,780.

Rates struck : Special, £10,510 ; general, £11,511.

Rates collected, including arrears : Special, £13,583 ; general, £14,842.

The amount shown as expenditure on maintenance may be subject to slight variation on completion of accounts.