Lyell Bridge.—Tenders are advertised for a bridge to be built over the Buller River, near the Lyell Township. The superstructure is to be of iron, with two principal spans of 120ft. and 156ft., and two smaller spans of 41ft. and 20ft. The piers and abutments are to be of masonry and concrete. In consequence of the great force of current and height of flood it is necessary to make the central pier of great strength. The bridge-contract includes 20 chains of heavy road-approach on the northern side, on which occurs a timber bridge 75ft. long.

Waitahu Bridge.—A contract for the erection of a bridge over the Waitahu River was entered into on the 12th June, 1886. The work has been retarded by a delay in getting land and the exceptional hardness of the ground for pile-driving. But these difficulties have now been overcome, and the work is expected to be finished within three months.

Minor Bridge-works.—The Little Grey Bridge has been tarred, and the Inangahua Bridge

tarred and maintained during the year.

### CHRISTCHURCH-HOKITIKA ROAD.

This road was maintained in its usual good order during the year, notwithstanding a number of heavy floods. A breach has, however, just been made by the Teremakau River which will cause some interruption to the traffic. It will probably necessitate a deviation of the road.

The Taipo Bridge was completed on the 29th June, 1886. It has since stood several heavy floods in a satisfactory manner. A bridge that resists the Taipo floods without damage cannot be

other than a substantial one.

#### CANTERBURY DISTRICT.

Kaikoura-Waiau Road.—Five sections of this road have been under construction during the past year. The last of them was taken off the contractors' hands on the 28th instant; and the road

is now open right through from Kaikoura to the Amuri and Canterbury.

\*Upper Waiau Bridge.\*\*—With the exception of being somewhat behind time, this work is progressing satisfactorily. The approach-roads are formed and metalled, and the concrete abutments and piers are finished. The work of fitting and erecting the ironwork of the columns, struts, and girders is well in hand, and the columns and struts on the north side are in position. The ironwork is manufactured not only in the colony, but on the spot. The bridge is expected to be finished in July.

#### OTAGO DISTRICT.

Haast Pass Track.—The improvements on this track unfinished last year were brought to a close in October. Since then nothing has been done beyond some repairs of an urgent character.

Taiaroa Heads Road.—This road has been done beyond some repairs of an digent character.

Lower Taieri Bridge.—Traffic was turned on to this bridge early in January; but the work was not quite finished till the 16th March, 1887. As stated in last year's report, there was some trouble in getting a good foundation for the cylinders, the bottom of the river being very soft to a great depth. The difficulty was eventually overcome in a very satisfactory manner, old rails with plates over them being placed under the cylinders in a bell shape, to increase the bearing. Generally the works on this bridge have not been carried out in the satisfactory manner that the importance of the structure demands. The contractors worked with very indifferent plant, and

otherwise tried to do the work too cheaply.

Beaumont Bridge.—This bridge was finished and opened for traffic on the 4th March, 1887.

Beyond being considerably behind time, the work has been carried out in a very satisfactory This is one of the first four iron bridges manufactured in the colony, and the first of them actually finished. Like the Upper Waiau Bridge, made by the same contractor, all the

ironwork was manufactured on the ground.

Roxburgh Bridge.—This work was delayed through the inability of the original contractor to carry it out. A transfer to a more trustworthy contractor was, however, made on the 23rd July, 1886, and since then the work has progressed favourably. It is expected to be finished in four or five weeks.

## GENERAL.

The officers of the Public Works Department have done a considerable amount of work in connection with roads and bridges not directly under their control-for instance, those in which grants-in-aid have been given, and lands and goldfields roads intrusted to the local bodies. A large number of these have been dealt with all over the colony, but more particularly in Westland and Otago.

# MISCELLANEOUS WORKS.

Auckland.—The surplus labour has been employed sloping the gravel-pit at Mount Eden, and doing some other minor works under this head.

Nelson.—The deepening of a channel leading to the Ferntown Coal-mines, in the Aorere

River is in progress by petty contracts. The work is expected to be finished in May.

Canterbury.—At Christchurch men out of work have been engaged in levelling the sand-hill on the Drainage Board Reserve, to form irrigation-paddocks for the city sewage. A large amount of useful work has been done.

The greater portion of the Small-pox Hospital Reserve has been levelled and soiled by the same means.

In Hagley Park about twenty old men have been employed in general improvements, and a new drain is being cut through the park by another party of thirty men. It is intended to drain and relieve from floods the Addington workshops.

The surplus labour of Christchurch has also formed a new rifle-range, and carried out a few other unimportant works.