### GREYMOUTH DISTRICT.

Little Wanganui to Karamea.— $11\frac{1}{2}$  miles of re-formation and patch metalling has been carried out, and the road between Te Namu and Kongahu maintained.

Westport-Greymouth Coast Road (Barrytown to Seven-mile).—1 mile 20 chains formation and

60 chains metalling have been completed, all in very difficult country.

Little Wanganui Bridge (South Westland).—This proposed bridge is to consist of six 60 ft. spans. A large quantity of material is being prepared at the site.

## Christehurch District.

Conway River Bridge and Approaches (Waiau-Kaikoura Road).—The formation of 73 chains of approach road on the south side of the Conway River is nearing completion.

Parnassus to Kaikoura.—A considerable amount of widening has been carried out on this line of

road; several groynes have been strengthened, and 6 miles of road maintained.

Mount Pleasant Road.—The formation of 2 miles of road in heavy rocky country has been

completed.

Evans Pass Road.—Much heavy rockwork has been done here—54½ chains have been formed 18 ft. wide, and this length is now partially metalled. Several cement and stonework retaining and parapet walls have been constructed at specially dangerous places.

#### DUNEDIN DISTRICT.

Balclutha Protective Works.—1 mile 43 chains of stone bank has been strengthened and widened. Catlin's Valley Extension and Catlin's Valley to Table Hill.—3 miles re-formation and 1 mile metalling have been completed.

Houipapa to Kahiuka.—2 miles 60 chains widening and 60 chains metalling have been completed.

Green Island - Taieri Mouth.-3 miles metalling has been completed.

#### INVERCARGILL DISTRICT.

Gore Protective Works.—An additional 34 chains of protective stop-bank along left bank of Mataura River up-stream from Gore Town Bridge has been constructed, making a total completed length of 2 miles 76 chains. Traffic-bridge at Gore has been lengthened by the addition of five 40 ft. reinforced-concrete spans.

#### IRRIGATION.

### IDA VALLEY SCHEME.

The syndicate race has been extended a farther 2 miles 76 chains; the completion of the German Hill race is in hand, and the German Hill race extension was started in order to provide relief work late in the year. About forty miles of constructed races were maintained, and about 4,400 acres were irrigated.

GALLOWAY FLAT SCHEME.

All construction work for the main scheme, including the diverting-weir at Dip Creek and the main race, 7½ miles long, was completed except for a few minor details. Eighteen settlers were supplied with water.

OLRIG TERRACE SCHEME.

No further work was done on this scheme, one settler being supplied through an old existing race.

# MANUHERIKIA SCHEME.

All work, with the exception of 4 chains of lining and gravel-trap in connection with the intake tunnel, has been completed, and good progress has been made with the main race. The material for the Chatto Creek siphon, except certain of the hardwood, is now on the ground ready for erecting, which will be commenced immediately the balance of hardwood is received. The distribution races have been commenced, and are progressing satisfactorily. Twenty-five hutments for the accommodation of workmen are in course of erection.

## ARDGOUR SETTLEMENT SCHEME.

This work has just been commenced in order to provide employment; trial surveys of the main race have been completed for 13 miles, and 94 chains of construction has been completed.

## EARNSCLEUGH IRRIGATION SCHEME.

Plans and estimates for a comprehensive scheme to irrigate Earnscleugh Flat with water from the Fraser River have been completed.

# MANGAHAO HYDRO-ELECTRIC SCHEME.

Tunnel No. 1: A contract was let for the 40 chains of this tunnel at the Mangahao end, and the contractors commenced operations at the beginning of April; progress, 443 ft. Tunnelling at the outlet end was commenced by hand drills in April and machine drills in June, under co-operative contract; progress, 267 ft. Total progress, 710 ft. A great deal of preliminary work was done in making tram-lines to give access to this tunnel.

Tunnel No. 2: A start was made at the inlet end in January, and over 700 ft. driven with hand drills, the country being soft and easily drilled. Machine rock-drills were installed in June; progress, 908 ft. At the surge-chamber end a start was made in April with the excavation of one of the twin tunnels for pipe-lines, and has been driven  $17\frac{1}{2}$  ft. beyond the centre of the surge-chamber; progress,  $193\frac{1}{2}$  ft. Total progress,  $1,101\frac{1}{2}$  ft. At the inlet end 132 ft. of invert has been concreted and 36 ft. completed. 59 chains of 6 ft. track has been completed to give access to the adits of No. 2 tunnel.