Arthur's Pass Tunnel.

At the Otira end of the tunnel all work has been done by day labour, and progress has been slow, owing to the presence of water and the necessity for heavy timbering. At the Bealey end there is very little water, but progress has not been very rapid. The men at this end are now working on the co-operative system.

A steam plant has been installed at the Otira end to supplement the water-power, and has proved

very useful. At both ends the plant has been concentrated in order to reduce operating-costs.

The total length of heading driven during the year (both ends) is 34.29 chains, and the length of

tunnel completed 32.38 chains.

The distance between the ends of the headings is now 2 miles 23.83 chains, and between the completed portions 2 miles 61.05 chains.

CULVERDEN-WAIAU RAILWAY.

A tender has been accepted for the construction of the first 3 miles of this line, and some progress has been made. Further contracts are in course of preparation, and tenders will be invited shortly.

WESTPORT-INANGAHUA RAILWAY.

Cascade Section (5 m. 74 ch. to 12 m.).—Practically the whole of the earthwork on this section is being carried out by contract, eighteen contracts having been let, of which six have been completed and one abandoned. Further contracts are being prepared, covering the remainder of the section.

GREYMOUTH - POINT ELIZABETH RAILWAY EXTENSION.

This line was completed and handed over to the Railway Department on the 15th November, 1913.

CATLIN'S-WAIMAHAKA RAILWAY.

Catlin's End.

Puketiro Section (24 m. 8 ch. to 31 m. 30 ch.).—This section was completed some time ago, with the exception of a few cattle-stops, buildings, &c., which will be out of hand shortly.

Papatowai Section (31 m. 30 ch. to 36 m. 60 ch.).—The small amount of formation remaining at

the end of last year has been completed; also all drains, culverts, fencing, and public crossings. Platelaying was completed to the end of the section, with the exception of a short length in Maclennan (Papatowai) Station yard. The second lift of ballast ha been completed. Most of the station buildings at Caberfeigh and Maclennan have been erected. The bridge over the Maclennan River has just been completed under contract.

Tahakopa Section (36 m. 60 ch. to 41 m. 65 ch.).—The formation on this section, which included a large amount of drainage-work, is practically finished. The rails have been laid to 41 m. 34 ch., including Stuart's siding. First lift of ballast extends to 39 m. 63 ch., and second lift to 37 m. 20 ch. A contract has been let for erection of station buildings at Stuart's and Tahakopa. It is expected that the section will be completed about the end of October.

LAWRENCE-ROXBURGH RAILWAY.

Beaumont Section.—Formation, culverts, road-diversions, &c., are completed. A road-bridge was erected on a deviation opposite 32 m. 15·35 ch. The Lowburn Bridge, at 34 m. 36 ch., is in course of erection. Fencing is nearly completed. Rails are laid to Lowburn Bridge, and ballasting is in progress. A contract has been let for station buildings at Craigellachie and Beaumont, but the line will be available for traffic before these buildings are completed.

SURVEYS OF RAILWAYS UNDER CONSTRUCTION, NEW LINES OF RAILWAYS, LAND PLANS, ETC.

KAWAKAWA-HOKIANGA RAILWAY.

A trial line has been run from 19 m. 44 ch. to the Hokianga waters at Rangiahua, via the Waihou Valley. This is an alternative to a line via Utakura Valley to Horeke, surveyed some years ago. Further surveys are necessary to enable this line to touch deep water in Hokianga Harbour, and to be extended, later on, towards Mangonui. These are now in hand.

A flying survey was run from Kangiahua to Mangonui Wharf via Te Tio, the Mangamuka River, Maungataniwha Saddle, and Oruru Valley, a distance of about 40 miles.

KAIHU VALLEY RAILWAY.

A trial survey was run early in the year from Tarawhati Station (19 m. 22 ch.) to Donnelly's Crossing (23 m. 70 ch.). This has since been permanently pegged.

WHANGAREI SOUTHWARDS RAILWAY.

Several trial lines were run during the year, and one permanently pegged for a distance of 14 miles, following the Whangarei Harbour, passing through Mangapai and down the Tauraroa. From 14 m. onwards the line passes down the Waiotera Valley, joining the North Auckland Main Trunk Railway at about 20 m.

Mangapai to Waipu.

A trial survey was made of a suggested line from Mangapai Wharf, at 8 m. on the Whangarei Southwards Railway, to join the surveyed railway-line between Marsden. Point and Waipu, a distance of 15 miles 47 chains.

KAIKOHE TO OHAEAWAI.

The survey of a railway-line from Kaikohe Station (on the Kawakawa-Hokianga Railway) to Ohaeawai has been commenced. The distance is about 7 miles.