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PROVINCIAL RAILWAYS.

Lyttelton to Christchurch.—The gauge of this section will be changed from 5 feet 3 inches to 3 feet 6 inches, and the station at the termini re-arranged and enlarged. This, with the alteration of the gauge of the Northern section from Christchurch to Amberley, will greatly facilitate the working of the railway. The break of gauge has shown itself in New Zealand, as elsewhere, to be an intolerable hindrance to rapid and economical working.

The following rolling stock will be rendered unserviceable by the change, but can probably be sold

at fair prices: -9 locomotives, 287 wagons, 22 carriages, 2 break vans.

The stock to replace them will have to be provided, and an order for 300 narrow-gauge wagons,

has been telegraphed to England.

The stations at Christchurch and Lyttelton will have to be rearranged and enlarged, as they are at

present not suited for the traffic.

Complaints have been made of the insufficiency of the rolling stock to do the traffic in the grain season, but the real difficulty has been the inability of the consignees to take delivery of the grain when brought to Lyttelton. If the storage sheds at Lyttleton were large enough to hold the harvest of the

year, the railway could easily bring the grain to the sheds. At present, however, the consignees cannot take delivery, and the railway wagons have been used as stores.

Albury Branch was constructed by the Timaru and Gladstone Board of Works, and open for traffic at the beginning of the year. A few weeks afterwards a severe flood occurred, which so seriously injured the line that traffic has not yet been resumed over 7 miles out of a total length

Marewhenua Branch.—Constructed by the Province of Otago. The permanent way of this and other Otago branch lines is very light, the sleepers being only 3 inches thick, but as the gradients are good, and light engines can therefore be used, it will be perhaps sufficiently strong for some time.

The only new works proposed are an engine shed and loading bank, with the necessary sidings.

Waiareka Branch.—The permament way of this line is of the same description as that above mentioned, the rails weighing 28 lbs. per yard. As the gradients are very severe, a heavier class of engine is required than on the Marewhenua branch, and the permanent way is too light. Mr. Convers recommends the substitution of 40-lb. rails and the ordinary sleepers used in New I fully concur in this recommendation, and suggest that as soon as possible it be Zealand. carried out. The rails taken up may be used for renewals on other lines where 28 or 30 lb. rails are

Some further station accommodation will also be required.

Western Railways.—Wallacetown, 11 miles 74 chains; Otautau, 17 miles, 22 chains. Tenders have been invited for the former of these lines, which will be completed in March next. The permanent-way materials for the latter cannot be brought on to the line until the former is A number of sleepers of New Zealand timber only 3 inches thick have been supplied for these lines, but I do not consider it safe to run engines on such weak sleepers, and have therefore recommended the use of 5 inch sleepers, which has been approved. Rolling stock for these lines is required, but sufficient for present purposes has been ordered.

Rolling Stock for Provincial Railways.—The Provincial Government of Canterbury supplied

sufficient rolling stock for the lines constructed by them, except passenger carriages and brake vans, of which the supply is short, but the Otago Government have made scarcely any provision for furnishing their lines. A sum of £133,000 will be required to stock the several provincial lines, and to replace the broad-gauge stock thrown out of use by the alteration of gauge. I estimate, however, that £73,400 only need be spent this year, as the balance may be supplied from the stock furnished by

the General Government for their lines.

WATER-RACES.

I append a very full and clear report from Mr. O'Connor, District Engineer, on the water-races on the West Coast of the South Island, which fully describes the present state of those works.

The only race in the North Island (that at the Thames) is completed, except the distribution to

the batteries, which it is proposed to put in hand at once.

PROVINCIAL WORKS.

When the Abolition of Provinces Act came into force, there were several works under construction by the Provincial Government of Canterbury, which were transferred to the Public Works Department; but as the accounts have been paid through the late Provincial Auditor, I have not the same knowledge of the cost as I should have had if they had passed in the ordinary way through this office.

Waimakariri Gorge Bridge consists of three spans of 125, 110, and 95 feet respectively. It is

formed of iron plate-girders, and is designed of sufficient strength to carry a railway, although at

present it will be used only for road traffic.

Delay in the completion of this work was caused by the loss of one of the caissons last year in a heavy flood, and by unnecessary delay in England in sending out a duplicate.

The abutments and piers are finished, and the girders launched over two out of the three spans. The whole work, including the approaches, is expected to be completed in August.

Lyttelton Waterworks are completed now, and the supply of the Railway Station at Lyttelton

It is intimated that there will be a surplus sufficient for the town and shipping. provided for. It is intimated that there will be a surplus sufficient for the town and shipping.

Malvern Water-race.—The object of this race is to bring a supply of water from the Kowai to the waterless district between the Selwyn and the Waimakariri. The appropriation granted by

the Provincial Legislature was, I believe, intended to finish the first and most expensive section, 2 miles in length, including the head-works.

Rakaia Gorge Bridge.—A sum was appropriated by the Provincial Government for a bridge to be built at the Gorge of the Rakaia. This, like the Waimakariri Gorge Bridge, is intended to eventually

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