## 1911. NEW ZEALAND.

## CLUTHA RIVER

(REPORT OF THE ENGINEER ON THE).

Return to an Order of the House of Representatives dated the 21st September, 1911. Ordered, "That the Report of the Engineer on the Clutha River be laid upon the table of the House."--(Mr. ALLEN.)

> Public Works Department, Dunedin, New Zealand, 4th September, 1911.

Shoal in Clutha River near Clydevale Wharf.

In reply to your telegram of 22nd ultimo :---

The existing landing-stage and shed is situated on an arm of the river off the main stream on the western bank. At present it is impossible to get near the landing owing to the fact that a large shoal has been formed, extending along the whole frontage, some 750 ft. long by 40 ft. to 45 ft. wide, and averaging 2 ft. high. The shoal is composed of silt and small ballast, exceedingly compact and hard. There is, however, a small stream of water passing along the front of the landing-stage, fed by an opening on the up-stream side about 6 ft. wide by 1 ft. deep (the landingstage is at present about 25 ft. above the water). The river is abnormally low—in fact, it has not been so low as at present for the past ten years.

It would be a waste of money to continue to attempt to open up in front of the present landing, which is not of expensive construction, and even if a channel were cut it would probably silt up again. It would also be necessary for the river to rise at least 5 ft. to enable the present landing to be used, and even then it is exceedingly dangerous for steamer to come in or go out owing to the presence of large rocks, which at high water or floods are practically hidden.

I would suggest that the present sheds be taken down and re-erected at a point some threequarters of a mile down-stream. There is a site which has already been chosen, and which site, in my opinion, would be an ideal place for the jetty, &c. It is a rock-bound shore on the main stream, and even now, with the low river, has from 10 ft. to 12 ft. of water. The entrance from the main road to the site is flat. The opposite bank of the river is also rock-bound, and the set of the river tends to keep the channel clear and deep.

With regard to the other shoals in the river, they are, no doubt, brought about by a silting-up and general deposit from the operations in the goldfields above, and naturally as the river widens the velocity decreases, causing the silt in suspension to be deposited. Good work, however, is being done by Captain Butler in the closing of the small creeks, and I would suggest that all such channels be closed where possible. as it tends to divert the water to a central channel.

If the old steamer were fitted with suction-pumps (and this could be done at a far less cost than purchasing a dredge) the worst points on the silt-banks could be considerably reduced.

A. D. PARK.

Under-Secretary, Public Works, Wellington.

For District Engineer.

Approximate Cost of Paper.-Preparation, not given; printing (1,400 copies), £1 10s.

BV Authority : JOHN MACKAY, Government Printer, Wellington.-1911.

Price 3d.]