

British Consulting Engineers and to Simons Limited, the former replied that the particular requirement had not been regarded because it was understood that the pumps were to be used for dredging sand, and that such pumps could not be expected to lift such stones; and the builders intimated that they did not, for the same reason, regard the requirement as having been seriously stated.

The Board at its own cost ultimately substituted pumps made in Australia which entirely fulfilled the specified requirements. The Consulting Engineers on being informed of this fact said they were not surprised, but that such pumps would probably wear out very quickly.

A dispute as to the charges for the alterations in Britain to make the dredge pump whilst under way in place of at moorings, and as to the liability for the pumps substituted in New Zealand, was finally settled by an additional payment by the Board as a compromise. The correspondence shows that the Board, after receiving the dredge, stated to the Railway Department that they were quite satisfied that Messrs. Simons and Co. tendered for a dredge of a totally different character to the kind required and specified by the Engineer to the Board, and they further specifically stated that they did not in any way blame the Railway Department for what had occurred.

STAITHS.

52. The staiths are obsolete and of little use except for small craft, and then only at certain stages of the tide. They are not in use by the larger vessels trading to the port, because the shoots will not deliver coal to the centre of the hatchways. In some conditions of the river-current they are a danger, as not infrequently the top hamper of vessels has come in contact with the chutes, and damage has been done either to the vessel or the staiths, or on occasions to both. Having been of little use for many years past, they have been allowed to fall into disrepair.

WHARF CRANES.

53. The Board has four working cranes on the wharf, used principally for loading coal, three made by Jessop and Appleby, and one by Anderson Limited, of Christchurch.

The first crane placed on the crane wharf in 1900 was an imported one made by the British firm of Jessop and Appleby, and designed to lift 15 tons, and cost £3,506. In 1904 Messrs. Anderson Limited were employed to construct a somewhat similar crane, which cost £4,245. This crane was found not to be satisfactory, and two further cranes to lift 20 tons each were obtained in 1907 and 1909 from Jessop and Appleby, at the costs respectively of £3,974 and £4,157; but these cranes were made self-moving, and the first British crane has since also been made self-moving. The Anderson crane is movable but not self-moving. Notwithstanding many alterations, the Anderson crane is not so satisfactory as the imported cranes. The design of the Anderson crane was approved by the officers of the Railway Department on behalf of the Board.

The present crane service is sufficient for the present trade of the port, but if the staiths are removed and the site converted into a continuation of the crane wharf, eventually additional cranes will probably be required.

COAL-STORAGE.

54. Suggestions have been made that facilities should be provided at the port for the storage of large quantities of coal. The evidence placed before us shows that the best place for coal-storage, if required, is at the mines. It is not economical to store in trucks, nor to double-handle the coal at the wharves by erecting storage-bins there. The staiths are not satisfactory for storage purposes for the class of coal sent away from Westport. The suggestion that coal should be stored in great heaps, and be handled by mechanical contrivances, is a method not suited to the easily friable coals of the Westland district. It was shown in evidence that there are at least twenty-six different classes of coal delivered at the port for shipment, for which it would be scarcely practicable to provide separate storage.