

a breastwork from the railway goods-shed to George Street, a distance of about thirty chains, which he considered necessary for reclamation and protection purposes, the necessity for this expensive work having been obviated by the accumulation of shingle caused by the breakwater.

I know from experience that the sea is encroaching upon the land by washing away the banks in heavy weather from the Waitaki northwards along the coast.

HENRY CAIN.

F. W. STUBBS, Esq., Secretary to the Geraldine County Council.

I HAVE resided in Canterbury for the last twenty-seven years. In the early days I was in the habit of travelling from the north southwards. There were then no roads, and we had to come along the Ninety-mile Beach. I noticed on each occasion that there was a sandy beach between the Rakaia and the Waikanui Creek.

I have also observed that the shingle-bank protecting the Washdyke Lagoon has been increasing in width, and I believe that it is now two or three chains wider than it was when I first saw it in 1853.

F. W. STUBBS.

HENRY JOHN SEALY, Esq., Licensed Surveyor.

As surveyor for the Government in 1864 I made a survey of the coast-line from the Waitaki to the Waiho. I have subsequently been over the same line, and have found that the sea has encroached considerably, washing away the cliff in some places as much as five or six chains in depth, and extending north from the mouth of the Waitaki about six miles, the shingle washed down by the Waitaki not being sufficient to protect the coast from the encroachments of the sea. I have noticed the same effect on the shingle-cliff between the mouth of the Otaio and the mouth of the Pareora. Also, that since 1863 and up to the time of the commencement of the breakwater, the sea has been gradually encroaching upon the land to the north of Whale's Creek; and I beg to state that protection to the viaducts would have been necessary even if no breakwater had been constructed.

With reference to the stone used for the protection of the viaducts, I assert that, notwithstanding Mr. Lowe's statement to the contrary, stone of a better quality than that which has been obtained from Lyttelton can be obtained in Timaru, and of a size anything up to 5 tons weight.

HENRY J. SEALY.

SAMUEL KIRBY.

I HAVE been a quarryman at Timaru for six years, and have been all my life engaged in stone-quarries. I have examined the stone which has been brought from Lyttelton to protect the railway viaduct: it is of a very brittle nature, and not calculated to bear either weight or concussion. I consider it far inferior to stone in the immediate neighbourhood of Timaru; and, understanding that the minimum cost at which stone can be brought here from Lyttelton is 12s. 6d. a yard, exclusive of a charge for loading, say 2s. a yard, I am prepared to say that a better stone could be provided here in any quantity, and, with the proper appliances for lifting, of any-sized block up to 10 tons, at a reduction of 4s. 6d. a yard. I have already supplied the Government with about 2,000 yards of stone from my quarry, for the protective works at the viaduct, at the rate of 70 yards a day, and at the above-mentioned price of 9s. a yard, the stone having been approved of by Mr. Lowe for the purpose.

I have also sent from my quarry bluestone for building purposes up to a size of 22 cubic feet to Christchurch.

S. H. KIRBY.

WILLIAM JONES, contractor, Timaru.

I WAS one of the sub-contractors for the construction of the railway near Whale's Creek, and recollect that the question of building a sea-wall instead of a viaduct was under consideration, and that I was asked to give a price for the construction of the sea-wall.

WILLIAM JONES.

JOHN GOODALL, civil engineer.

I HAVE carefully examined the coast to the north of Waimataitai Lagoon, and found that it is bounded by a compact bed of dolomite; so that if the spit at the mouth of the lagoon was at any time washed away by the sea the adjoining lands could not be encroached upon.

I am firmly of opinion that when the entire breakwater works are completed the viaducts at Whale's Creek will be in a great measure protected, and they will be more secure from encroachment than they have ever been before the breakwater works were begun.

JOHN GOODALL, C.E.,
Engineer, Timaru Harbour Board.

Enclosure 2 in No. 2.

EXTRACT from LETTER received by the Timaru Harbour Board from JOHN MCGREGOR, Esq., C.E., and dated at Dunedin, 2nd June, 1880.

"I MAY, however, state for the information of the Board that I see no very serious danger likely to be sustained by the railway works in consequence of the construction of the Timaru Breakwater; but, on the contrary, when the harbour scheme is completed very great protection will be given to the northern foreshore of Caroline Bay, along which the railway runs."

Enclosure 3 in No. 2.

EXTRACT from the *Timaru Herald*.

A SPECIAL meeting of the Timaru Chamber of Commerce was held on the 4th June. There was a good attendance of members. Mr. F. Archer presided.