

to the Sutton Stream, 33 miles 11 chains. The bottom ballast is on for 5 miles beyond Flat Creek, and enough stone has been broken for ballasting right up to the Sutton.

Barewood Bridges Iron Piers and Superstructure Contract.—The three first and largest bridges—viz., those at Barewood, Slope Gully, and Flat Creek—have been finished. The contractors were disappointed in the first shipment of material, iron for the last bridges coming out first; so it is probable the contract will be a month or so behind time.

Middlemarch Section.—The formation has been completed, and the bridges and culverts are well in hand. The filling-in of the Middlemarch station-yard was finished last month, and, on the 6th instant, a tender was accepted for the erection of the necessary station-buildings. A plentiful supply of ballast being available 2 miles beyond Middlemarch, it is proposed to proceed with the formation and platelaying to that point, 42 miles from the Wingatui Junction.

HARBOURS.

WESTPORT.

Breakwaters.—There has been 131,157 tons of stone put into a further length of 382ft. of the west breakwater, at an average cost of 2s. 11d. Until the end of May, 1889, the stone was deposited from a tiphead without staging, but staging was then commenced, and 360ft. has been erected. The average cost per lineal foot of the breakwater, including staging, was £60.

The east breakwater has been extended 1,535ft., with 87,880 tons of stone, costing, on an average, 2s. 11d. a ton. After August staging was used, the length erected being 666ft. This brings the cost of the breakwater up to £12 10s. per lineal foot. The breakwaters were carried out under a large contract during the greater part of the year, but the work has now been let in small contracts to parties of the workmen.

Subsidiary Works.—A contract was entered into in February for 15 chains of railway from the Cape Foulwind line to the place for the proposed training-bank in the river. Thirty end-tip trucks have been converted into side-tip trucks. The contracts for piles and sleepers were satisfactorily carried out. Some small additions to the cattle-pens, further planting and repairs to the protective works at the Buller overflow, and the repairs and painting of the Harbour Board offices and stores have also been done.

Dredging.—At the approach to the cattle-wharf 3,200 tons of material were lifted, and 12,600 tons at the coal-staiths, where there is one berth with 18ft. to 19ft. of water at low-water springs, at which the s.s. "Cairntoul" recently loaded over 2,400 tons of coal. In ascertaining the nature of the materials of which the lower bars are composed, 4,800 tons were also taken out.

From the following table showing the depths on the Buller bar for each month of the year it will be seen that there has been an improvement of from $1\frac{1}{4}$ ft. to $1\frac{3}{4}$ ft. :—

				Mean Depths on Bar at High Water, taking Averages of Three Days at each Spring- and Neap-tide.	
				Spring-tides, ft.	Neap-tides, ft.
1889.					
April ...	...	...	...	21	19
May ...	...	...	...	20	$17\frac{1}{4}$
June ...	...	...	...	$17\frac{1}{2}$	$16\frac{1}{2}$
July ...	...	...	...	$18\frac{1}{2}$	17
August ...	...	...	...	$19\frac{3}{4}$	17
September ...	...	...	...	$22\frac{1}{2}$	20
October ...	...	...	...	$24\frac{1}{2}$	22
November ...	...	...	...	24	23
December ...	...	...	...	$22\frac{3}{4}$	22
1890.					
January ...	...	...	...	21	$18\frac{1}{2}$
February ...	...	...	...	$20\frac{1}{2}$	$18\frac{1}{4}$
March ...	...	...	...	22	20
Means for the year ...	...	...	...	21	19

GREYMOUTH.

Breakwater.—The north breakwater was completed in September, 11,209 tons of stone, costing 4s. 9d. a ton, having been deposited in an extension of 50ft., including 25ft. of staging. The average cost of the length constructed during the year was £56 per lineal foot.

The south breakwater has also been finished. An extension of 110ft., including 75ft. of staging, was constructed with 28,811 tons of stone. The average cost for the year of the breakwater was £53 per lineal foot, and of the stone 3s. 7d. per ton.

River Training-wall.—The training-wall, 900ft. long, opposite the new wharf has been made with 16,448 tons of stone, costing 3s. 6d. per ton. The cost of the wall averaged £3 5s. per foot.

Minor Works.—The quay wall has now been raised from the quarry to Tainui Street, in order to protect the railway and town from damage by floods. An extension of 10ft. was added to the cattle-wharf, so that vessels might be unloaded at low water. The tug-steamer "Westland" has been maintained and run during the year, and some small works in connection with the harbour-beacons and plant executed. With the view of maintaining a better depth of water at the wharves, some dredging and an additional training-wall opposite the upper part of the wharf are now being undertaken.