

eastward of the crosscut, and another somewhat limited area to the dip of the present No. 2 level, for the drainage of which by electrically driven pumps boreholes have been drilled from the surface. In No. 2 section, westerly rise workings, development of the bottom seam continues. This seam varies between 3 ft. 6 in. and 6 ft. in thickness. The greater proportion of the output during the year was obtained by pillar-extraction. As in the case of the State colliery at Seddonville, this colliery is rapidly approaching exhaustion.

The surface equipment and branch line of railway in connection with the Liverpool State Colliery at Seven-mile Creek, near Point Elizabeth, being completed, the output of coal will shortly commence.

After a cessation of operations at the Paparoa Colliery for about a year, towards the end of 1912 work was resumed and a small output made, bringing the total production of this mine up to 71,360 tons, mostly soft coal, since operations commenced four years ago.

The Blackball Colliery produced 202,878 tons, being an increase of 46,056 tons above the output for 1911. This mine is worked on the panel system, owing to the liability of the coal to spontaneous combustion. Development generally throughout the mine has been satisfactory, and the mine has been found to be more free from faulting than any other mine on the Grey Coalfield.

At the Kaitangata Mine development was unimportant, and a slight decline in output has occurred.

The Nightcaps Colliery improved its output, and was successful with its development. A new section of the mine is being commenced to work the lower (10 ft) seam from the outcrop situated about 90 ft. below the seam hitherto worked. A considerable proportion of the pit-head works was destroyed by fire during the year, but, fortunately, very little loss of working-time was caused thereby.

In conclusion, it may be remarked that during 1912 development of new coal-areas, with the exception of that at the Westport-Stockton Mine, has been unimportant. The most promising of the working collieries—viz., Taupiri, Blackball, Millerton, and Nightcaps—have produced record outputs; but at Denniston, Point Elizabeth, Kaitangata, and the North of Auckland collieries the output of coal has declined during 1912. The anticipated addition of the Waipa Colliery and the Liverpool State Colliery at the Seven-mile Creek, near Point Elizabeth, to the list of producing collieries during 1913 should in a great measure make up for the decline in output from the older mines.

COAL-SHIPPING PORTS.

The following is a summary of the business done and the volume of trade at the coal-shipping Ports of Westport and Greymouth during 1911 and 1912 :—

	Westport.		Greymouth.	
	1911.	1912.	1911.	1912.
Receipts (ordinary)	£91,190	£101,585	£35,597	£30,394
Expenditure (ordinary)	£71,946	£122,061	£21,094	£25,939
Coal exported (tons)	770,410	797,460	379,004	382,312½
Coke exported (tons)	..	1,656	2,397	2,476½
Steamers visiting	1,116	1,167	739	760
Sailing-vessels visiting	9	8	18	14
Aggregate tonnage	711,881	691,614	382,427	367,023
Average depth of water on bar at high tide during the whole year	24 ft. 3 in.	23 ft. 6 in.	20 ft. 3 in.	21 ft. 5 in.
Average depth of water in river at high tide during the whole year	25 ft. 1 in.	25 ft. 6 in.	..	20 ft. 0 in.
Total rainfall, in inches	71.36	80.40	94.77	108.13

In addition to the foregoing, from the Port of Greymouth during 1912 there were shipped 1,072 tons of bricks, 1,142 bales of wool, 374 bales of flax, 51,366,993 superficial feet of timber, and 18,142 railway-sleepers. This port is destined to serve an extensive and fertile agricultural country. During 1912 there has been a slight decrease in the quantity of coal exported, due to the reduced annual output from the State colliery. With the addition of the new State colliery near Point Elizabeth to the list of outputting mines during 1913, a considerable improvement in the tonnage of coal shipped may be confidently expected.

A report has recently been obtained by the Greymouth Harbour Board from Mr. C. W. Darley, I.S.O., M.I.C.E., of New South Wales, an expert harbour engineer, upon a proposal that breakwaters be constructed off Greymouth to obtain a safer and more reliable harbour than that at present existing; but it is understood that such report was unfavourable. With the completion of the Otira railway-tunnel now being driven, an outlet will be made by which the congestion at the Port of Greymouth will be relieved by railway communication with the east coast.

At Westport the sum of £413,411 has been expended upon the construction of the two breakwaters and internal training-walls, and the results attained are better than were anticipated by the designer of the scheme, the late Sir John Coode. The Harbour Board is now engaged upon the construction of a floating basin and the extension of the western breakwater a further distance of 600 ft. For the purpose of proving whether workable seams of coal exist under the coastal plains within the boundary of the Buller Coalfields Reserve, from which the Harbour Board derives portion of its revenue, the Board have hired from the Mines Department a diamond drill, and have commenced drilling near the beach at Waimangaroa.

I have, &c.,

FRANK REED, M.I.M.M., L.S.,

Inspecting Engineer and Inspector of Mines.