

The mines at Greymouth were the first to be opened out; and a considerable trade had been established prior to 1879. The total output up till December, 1878, was estimated at 117,400 tons. The Westport mines were of no importance till 1881. As already stated, these are the only two places on the West Coast where coal is raised in quantity for transmission to other parts of the colony. The Reefton mine only supplies the local demand.

There are three large mines at Greymouth and two at Westport; but one at each of these places is not yet in complete working order: the other three have been in full operation for several years. There are six small mines at Reefton and one each at Westport and Greymouth. The Mokihinui coalfield is just opening up; it will not, however, be of much importance till connected by rail with Westport.

The mines at Westport and Greymouth yield bituminous coal of the best description, suitable for the highest purposes both as steam-coal and in manufactures. The Westport coal is particularly good for steam, and that from Greymouth is believed to be unexcelled anywhere for making gas—it makes 25 per cent. more than the best Newcastle. Some of the smaller seams at Reefton are bituminous; but the majority are glance- or pitch-coals of the Kaitangata class. They are deficient in gas, but make good steam-coal, and for household purposes are probably superior to bituminous coal.

*Extent of Coalfields.*—The aspect of affairs as regards the coal deposits on the West Coast and their relation to the railways is considerably altered since my report of 1879 was written. Speaking from the best information then available I said, “It should be pointed out that the main deposits occur in a narrow belt along the sea-coast, which entails the maximum length of carriage right across the country. Coal has been discovered in small quantities up the Buller Valley to within forty-five miles from Nelson, and this has been urged as a reason for the construction of a railway in that direction. But the deposits are small, and, according to the geological map, there is not much likelihood of a large coalfield being found in that or any other locality many miles from the coast at the Grey or Buller—at any rate, in the vicinity of the direct lines across the country.” It will be seen from the accompanying map that, instead of being confined to a narrow strip along the coast, as above stated, the bulk of the coal-formations is in the interior.

In a previous section of this report I enumerated the coal-bearing formations within the area affected by the proposed railway so far as yet determined. There are eight separate though scarcely distinct fields, containing in the aggregate about 1,250 square miles. The two classes of coal—bituminous and non-bituminous—are found in different proportions in all the fields; but the only extensive tracts of the latter, as yet known, are situated in the upper Inangahua basin, around Reefton, and along the coast near Brighton. It must not, however, be assumed that coal exists continuously all over the extensive area above given: it is the area of the coal-producing formations, not of the coal-beds they contain. In the present state of our information it is quite impossible to give even an approximate estimate of the coal-beds. The country is in many places very rough and densely bushed, and no survey has been made; so any estimate would be little more than a random guess. A portion of the Westport field has been accurately surveyed, and found to contain about 140,000,000 tons of coal; and the present coal leases at Brunnerton and Blackball are calculated to contain 62,000,000 tons of workable coal.

*Greymouth.*—The Greymouth coalfield is admirably placed for the transmission of coal both by sea and land. It is only about eight miles by rail from Greymouth, where a good harbour is in course of construction; and the proposed East and West Coast Railway terminates in the middle of the field. At present some little inconvenience is experienced in getting the coal across the Grey by a horse-bridge taking one truck only at a time; but another bridge is in contemplation, and ultimately, I have no doubt, there will be a railway on both sides of the river. The thickness of the coal-seams at present worked at the Grey is from 8ft. to 16ft.

*Blackball.*—The Blackball coalfield is practically an extension of the Greymouth one. The coal is the same quality and the seams of much the same thickness. There are no mines on this field yet, but arrangements are now being made to open one.

*Reefton.*—There is a seam in one of the Reefton mines 21ft. thick; but the usual thickness is from 6ft. to 11ft. The mines are accessible, and easily worked.

*Westport.*—Although so far apart, the Westport mines are really in the same field as the Reefton ones. The Westport mines are not so favourably situated as those at the Grey, being on the top of a plateau 1,800ft. above the sea. The coal is lowered down steep inclines by wire ropes—a somewhat cumbersome and expensive arrangement. Doubtless a more convenient method of getting the coal to the sea-level will be adopted when the mines are further developed. A locomotive railway will possibly be got to some of the mines. The Koranui mine is working in a seam 7ft. to 10ft. thick, and the Banbury mine is one of 16ft.

There is practically no outlet for the Westport coal except by sea. The distance to Nelson and Picton—156 and 188 miles respectively—will always be a barrier to its transmission by rail; but there will be great facility for shipping at Westport when the harbour is finished.

*Mokihinui.*—The Mokihinui mines are situated at the northern end of the great field that runs obliquely across the country from Reefton. They have not yet been fully developed, but one mine has been opened out on a 4ft. seam. So far as facility of working is concerned the mine is favourably situated on a low level near the sea; but, as already stated, there is at present a difficulty in getting the coal to a market.

*Upper Buller.*—The coalfield in the Upper Buller is a comparatively recent discovery—at any rate, as regards its extent. The first official notice of it is in memoranda submitted to the Railway Extension Commission of 1883 by Dr. Hector, who had a special survey made for the Commission—a detailed report and plan by Mr. Cox is given. They show that an extensive area of coal-bearing formation exists in a favourable position for working and distributing coal. Dr. Hector says, “The great advantage that will follow the opening-up of coal and other mineral deposits at the summit-level