

I was informed that a seam of coal, 18 in. or 2 ft. thick, occurs at "The Elevation," two miles from Picton, but this is not mentioned in the old Geological Survey reports,* although the probability of coal being found in the locality is given some prominence.

After 1884 no work of any consequence was done on the Shakespeare Bay coal, but about 1893 there was a renewal of prospecting in the locality. No tangible results followed.

Recently residents of Picton have formulated a scheme for boring the possible coal-bearing country near Picton, or any area for which Picton is the natural outlet. So far nothing has been done, and those interested are waiting for the present report.

COAL PROSPECTS NEAR PICTON.

The question to be considered here is not whether coal can be obtained near Picton, but whether coal can be mined profitably as a commercial proposition. Having definitely made up my mind concerning this matter, I will state my opinion as briefly and clearly as possible. That opinion is: There is no chance whatever of coal being mined at a profit on a large scale either at Shakespeare Bay, "The Elevation," or in the upper Tuamarina valley—for example, at Mount Pleasant. The reason for this is that the coal-bearing areas are exceedingly small, whilst the coal present is dipping at high angles almost everywhere, is much faulted, irregular in thickness, and variable in quality. Abundant confirmation of these statements may be obtained from the old Geological Survey reports.

It is possible that near Shakespeare Bay a few hundred tons of coal can be mined without loss for local use, but even this is very doubtful. A little surface prospecting may not be inadvisable, but any hope of coal being found in quantity is, I repeat, ill-founded. Boring, shaft-sinking, or any expensive form of prospecting must be condemned as leading only to disappointment and loss of money, without any compensating advantage.

COAL PROSPECTS NEAR BLENHEIM.

The Wairau Plain appears to be the depressed portion of an earth-block tilted to the north-north-west. Far below its surface there may or may not be the coal-measures of which only remnants are found near Picton. After a geological survey of the Wairau valley and adjoining areas has been made it will be possible to state in a rough kind of way what the probabilities are. At the present moment, with very few geological data as a guide, I am not able to recommend boring the plain at any point. In any case, drilling in advance of geological survey must be deprecated. Even on the supposition that the results of a survey are as favourable as can be expected according to our present slight knowledge, boring in the first place will have to be undertaken in a tentative kind of way.

COMPOSITION OF PICTON COAL.

The Picton coal, though somewhat variable in composition, is of a bituminous character, as shown by the following analyses by W. Skey:—

	(1.)	(2.)	(3.)	(4.)	(5.)	(6.)
Fixed carbon	40.28	44.81	63.21	61.28	50.17	47.12
Volatile matter	39.50	34.57	31.06	31.73	40.04	39.09
Water	4.88	2.08	4.32	3.18	3.99	4.06
Ash	15.34	18.54	1.41	3.81	5.80	9.73
Total	100.00	100.00	100.00	100.00	100.00	100.00
	(7.)	(8.)	(9.)	(10.)	(11.)	(12.)
Fixed carbon	51.79	21.80	50.02	56.22	41.83	58.39
Volatile matter	39.22	13.60	33.97	35.16	34.74	16.76
Water	4.79	8.20	2.21	4.81	3.41	4.22
Ash	4.20	56.40	13.80	3.81	20.02	20.63
Total	100.00	100.00	100.00	100.00	100.00	100.00

References.

- (1) and (2).—Shakespeare Bay. Ninth Ann. Rep. on the Colonial Museum and Laboratory, 1874, pp. 14–15.
 (3) and (4).—Forwarded by Mr. Gell (? Fell) from Picton. Seventeenth Ann. Rep. on the Col. Mus. and Lab., 1882, p. 24.
 (5), (6), and (7).—Forwarded by Mr. E. T. Conolly from Shakespeare Bay. *Op. cit.*, p. 26.
 (8), (9), and (10).—From Picton and neighbourhood. Eighteenth Ann. Rep. on the Col. Mus. and Lab., 1883, p. 40. No. (8) was forwarded from Picton by Mr. John Renfrew; No. (9) from "Queen Charlotte Sound" by Mr. E. Cargill;† No. (10) from "Whangarei," Shakespeare Bay, by Mr. Plimmer.
 (11) and (12).—Forwarded by Mr. W. J. Hunt from Picton. Twenty-seventh Ann. Rep. on the Col. Mus. and Lab., 1893, p. 14.

* See, however, Inspector G. J. Binns's report in H.—11, 1883, p. 8, concerning the "Queen Charlotte Sound Coal-mine," which may have been in this locality.
 † This sample may have been from the "Queen Charlotte Sound Coal-mine." See H.—11, 1883, p. 8.