

15. Underclay, to bottom of specimen.....	Ft. In.
	0 10
Total.....	40 8
Vertical thickness.....	38 6

Coal of Main  
seam.

The general character of the coal from the Main seam is that of a highly bituminous caking coal, generally of a laminated structure, and showing much mineral charcoal on the planes of deposition. Although much impurity exists in the form of shale, ironstone, and arenaceous material carrying pyrites, these may be easily separated from the good coal in taking out the different floors of the seam. The coal raised is also carefully examined at the shutes, any refuse or shale being thrown aside before the coal is put into railway cars for shipment.

Specific gravity.

The specific gravity of this coal is stated by Dr. Dawson to be from "1.288 (which is that of the best coal extracted,) to 1.447 (which is that of the coarsest coal that has been worked)."

The mean specific gravity of six samples, taken from the top, middle and bottom of the seam, in the central part of the mines, is stated, on the same authority, as 1.325, which agrees exactly with the result of some trials made for the American Government, by Prof. W. R. Johnson, whose researches will receive attention in the second section of this Appendix.

The following, being an abstract of the statements of Dr. J. W. Dawson in his *Acadian Geology*, is extracted from Prof. How's late work on the *Mineralogy of Nova Scotia*, published by authority of the Provincial Government:—

"Numerous analyses were made by Dr. Dawson in 1854, shewing the character of the Albion Mines coal from different parts of the upper floor of the mine, and also the varieties existing throughout the whole thickness of their Main seam, in a series of assays of coals taken at distances of one foot in thickness. The general results were that the best coal was found on the N. W. side of the old workings, deterioration taking place at either extremity of the workings of the upper floor. In all parts of the mine the lower coal was inferior to that of the middle of the seam, and still more so to that of the upper part (above the "holing stone"), or "fall coal" of the miners. On the west, this fall coal disappeared, or was reduced to insignificant thickness. The assays made to show the variations in thickness of the whole seam were on coal taken at this western part. This valuable series of assays of the coal of this seam, so familiar to the world, is here given.

\* *Acadian Geology*, p 333.