## GEOLOGICAL SURVEY OF CANADA.

## COALS OF THIRD AND PURVIS SEAMS, ACADIA MINES.

Third and Purvis seams. These seams are now abandoned, and no analyses have been made of the eoal from them, as no samples lately taken from the seam could be procured.

## COAL OF THE MC GREGOR SEAM, ACADIA MINES.

The following extract is from the Report of Mr. Hoyt to the Acadia Coal Company, 1866 :---

McGregor seam.

"It has been found that the thickness of this coal (the McGregor seam) increases as we progress westwardly, but diminishes as we work to the east." The same remark will also apply to the quality of the coal. At present, only the upper divisions of the seam are worked. The bottom coal, which is of a coarse nature, is unsalcable, but would be very suitable for iron-smelting<sup>†</sup>; and in ease of the development of the iron deposits on the East River of Pictou, a good market would be created for it. The slaty band, between the top benches, is a source of much inconvenience and expense in mining; and with all the care exercised in picking, this foreign matter will, to some extent, get mixed with the good coal, which is thereby injured in character for gas purposes.

"The quantity of ash produced by the two top benches presents a marked contrast in the character of the coals, as will be seen by the following analyses, which have been obtained from the former proprietor, Mr. J. D. B. Frazer :"‡

Analyses.

	First bench.	Second bench.
Volatile matter	22.50	23.30
Fixed carbon	65.70	70.00
Gray ash	11.80	6.70
	100.00	100.00
Coke	77.50	76.70
Specific gravity	1.334	1.301
From these analyses the theoretical evaporative		
power would be	9.03	9.62

This coal cokes well when the better portions of the seam are selected. A very large amount of iron pyrites exists in the slaty portions of the seam, which, if not most earefully removed, makes the coal worthless as a gas coal. Careful attention in hand-picking, will probably obviate this objection to the coal.

\* See p. 96 of my Geological Report.

<sup>†</sup> I have not analysed this coal from the bottom of the McGregor seam, but it appears to contain too much sulphur and ash to be very suitable for iron smelting.

‡ Name of analyst unknown to me.

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