114 CARBONIFEROUS OF CAPE BRETON-GILPIN.

lustre, banded, with uneven fracture. The powder of the five and of the four feet seams when boiled in caustic soda imparts a brown color to the liquid, this with the percentage of water would make them approach in character to brown coal, although they occur in strata of Carboniferous age. The coal from the largest seam does not color a solution of caustic soda and is more closely allied with the typical carboniferous coals. Zinc blende was observed as a film in this coal. These coals are said to produce little smoke when burned in marine boilers.

PORT HOOD DISTRICT.

As yet but little mining has been done here, and the qualities of the coals have not been settled by practical experience. The Geological Survey Report, 1876-77, page 469, gives a report on the coal of the lower or 7 feet seam. It appears to resemble in its general characteristics the Broad Cove coal, and yielded on analysis :---

	Fast Coking.	Slow Coking.
Moisture	4.02	4.02
Volatile combustible matter	38.81	34.86
Fixed carbon	49.65	53.60
Ash (purplish red)	7.52	7.52

The coal is said to contain rather above the percentage of sulphur usually found in Cape Breton coals.

I have no analysis of the Chimney Corner coals. They are not as bright as many of the eastern coals, but are good steam coals.

Reference has been already made to the area of millstone grit extending from Sydney up the valleys of the Mira and Salman Rivers. These measures show several outcrops of coal beds apparently underlying large tracts of country. The beds are known only by natural outcrops, and no attempt has been made to ascertain if other beds are present. They do not exceed two feet in thickness, and, as the route of the Cape Breton railway will not follow these rivers as was expected at one time, they will probably not receive any attention for many years to come. The following analysis is from the Canadian Geological Survey: