

Situated in the Glace Bay basin are the Schooner Pond, Ontario, Caledonia, Glace Bay, Emery, Reserve, Lorway, Gardener, International and Bridgeport mines.

The Sydney Harbor Basin.—The next basin includes the Lingan, Barasois, Low Point and Sydney mines districts, extends from Indian Bay and Bridgeport Basin to Point Aconi and embraces all the coal seams in the field. An anticlinal axis which skirts the north shore of Bridgeport Basin and runs thence westerly, parallel with the North Head anticlinal, to a point midway between McPhee and McKay Brooks on Sydney Harbor, divides this basin from that of Glace Bay. On the north side of this axis the rocks dip at angles varying from 12 to 16° at Lingan to 40° at Victoria Mines. From Lingan to Low Point lighthouse the strike is nearly parallel to the shore and brings the entire volume of the coal measures upon the cliffs in several fine sections which show 349 feet overlying the highest strata of the Glace Bay section; and the exposures on Sydney Harbor are equally fine.

The Lingan, Victoria, Sydney and Collins mines lie in this basin.

The Bras d'Or Basin.—West of the Little Bras d'Or, a low broad anticlinal running from Point Aconi to Saunders Cove deflects the strata to the south to form this basin, which includes the Boularderie and Cape Dauphin districts. According to Brown, Hind and others, the Little Bras d'Or runs approximately on the line of a fault, of which, however, as also of a similar supposed fault on the line of the Lingan anticlinal, Mr. Robb could find no evidence.

On the northwest side of Boularderie Island the coal measures are exposed in an unbroken section, extending, in the direction of the dip, over a distance of about six miles, from Point Aconi to the mill-stone grit, which here includes two coal seams not workable. In the Boularderie district the coal has been very little developed. In the Cape Dauphin district only the lower part of the productive measures, probably as high as the horizon of the Sydney Mines main seam, is developed; the principal seam worked at the New Campbellton mine is the continuation of the Blackrock or Number Three seam of the Sydney Mines section, and that underlying, cut in a vertical attitude in the tunnel near the mountain, is the equivalent of the Collins seam of the Little Bras d'Or. The Blackrock and New Campbellton collieries are situated within this district.

Mr. Robb's table showing the equivalency of the principal seams in the various districts and basins is here appended. It will be observed that he assumes the Blockhouse, Harbor, David Head, Victoria and Sydney Mines main seams to be the same and places them on the same horizon in the table. Most of the sections summarized in his report were carefully measured in the cliffs.

Table showing the Equivalency of the Principal Coal Seams, with the Intervals between each in the several Sections.

NAMES OF THE DISTRICTS AND BASINS.

COW BAY.

NORTH SIDE.	Strata and Coal.	SOUTH SIDE.	Strata and Coal.
	Ft. in.		Ft. in.
Block House.....	9 2	Block House.....	9 2
Seam D.....	319 1	Seam D.....	235 8
Seam E.....	130 6	Seam E.....	107 0
McAulay.....	118 0	Seam E.....	2 6
Spencer?.....	7 9	McAulay.....	160 7
Long Beach.....	215 10	Spencer (South Head).....	4 11
	338 6	Long Beach.....	187 9
	1 4		330 11
			3 1
Total thickness coal.....	27 5	Total thickness coal.....	23 5

GLACE BAY.

EAST SIDE.	Strata and Coal.	BRIDGEPORT.	Strata and Coal.
	Ft. in.		Ft. in.
Hub.....	9 10	Hub.....	9 5
Harbor.....	366 3	Harbor.....	344 4
Bouthillier.....	299 3	Harbor.....	6 1
Back Pit.....	2 0	Bouthillier.....	238 7
Phelan.....	74 2	Back Pit.....	4 0
Ross.....	4 9	Phelan.....	92 1
Lorway.....	112 9	Emery.....	4 0
	8 3	Gardiner.....	83 3
	188 3		8 7
	5 6		108 1
	307 7		1 8
	4 0		279 2
			5 9
Total thickness coal.....	39 6	Total thickness coal.....	39 6

LINGAN TRACT.

LINGAN SIDE.	Strata and Coal.	SYDNEY HARBOR.	Strata and Coal.
	Ft. in.		Ft. in.
Seam A.....	3 0	Paint.....	13 4
Carr Seams.....	306 2	Crandall, &c.....	176 3
Barasois.....	6 5	Victoria.....	7 11
David Head.....	190 1	Willie Fraser.....	320 3
Seam D.....	12 1	Number Three.....	6 7
North Head.....	379 3	H. McGilvary.....	308 8
Lingan Main.....	8 0	D. McGilvary.....	3 6
Seam G.....	235 0	Seam H.....	83 11
Seam H.....	3 0		4 0
	78 1		116 4
	4 0		6 3
	75 11		126 6
	8 0		2 2
	95 3		362 9
	2 6		0 10
	340 5		
	1 0		
Total thickness coal.....	47 0	Total thickness coal.....	44 6

SYDNEY MINES.

SYDNEY HARBOR.	Strata and Coal.	L. BRAS D'OR.	Strata and Coal.
	Ft. in.		Ft. in.
Cranberry Head.....	3 8	Lloyd Cove.....	8 1
Lloyd Cove.....	281 4	Seam B.....	231 7
Chapel Point.....	6 4	Sydney Main.....	4 2
Sydney Main.....	269 1	Sydney Main.....	380 7
Willie Fraser.....	3 9	Bryant.....	3 0
Indian Cove.....	322 9	Edwards.....	205 0
Seam F.....	6 0	(approx).....	2 0
Stony.....	315 10	Seam F.....	78 0
	1 4	(approx).....	5 5
	117 0	Collins.....	100 0
	4 8		2 9
	87 0		100 0
	1 7		5 0
	123 9		
	3 0		
Total thickness coal.....	30 4	Total thickness coal.....	30 5

BOULARDRIE.

CAPE DAUPHIN.

WEST SIDE.	Strata and Coal.	MIDDLE.	Strata and Coal.
	Ft. in.		Ft. in.
Point Aconi.....	3 2	Seam D.....	1 8
Bonar.....	242 0	Four Feet.....	237 0
Stubbart.....	6 10	Seam F.....	4 0
Seam C.....	218 9	Seam F.....	53 3
Millpond.....	7 6	Six Feet.....	1 9
Blackrock.....	413 3		54 0
Seam F.....	2 9		6 0
Seam G.....	219 4		
	3 11		
	176 5		
	3 0		
	125 8		
	0 8		
	43 9		
	0 11		
Total thickness coal.....	28 9	Total thickness coal.....	13 5

DISCUSSION.

MR. R. H. BROWN—I have a doubt as to whether the Sydney Mine main seam can be regarded as identical with the Ross seam of the Victoria Mine. The Sydney Mine's seam dips North-East at an angle of seven degrees, and has been explored half way across the harbor; whereas, the Ross seam dips very steeply nearly at right angles to this direction. If identical, it would appear that the seams are separated by great dislocation.

MR. FLETCHER—I admit the possibility of the dislocation; but I think that the evidence given by Mr. Robb of the identity of the two seams is incontrovertible.