THE LADIES.

MR. F. C. KIMBER, responding to the toast of the ladies said—About a month ago I was invited here to the inaugural dinner of the Sydney Hotel; and I was further and more highly honored by being called on to respond to the ladies toast. The occasion being a festive one and unusual, I broke through my usual habit and invested a very considerable proportion of my previous month's salary in a bottle of champagne; and under its influence the barrier of my natural reserve melted away; and encouraged, moreover, by a benign and almost fatherly smile which I observed illumined the countenance of the gentleman whose a honored guests we are this evening, I boldly stated that if in the exercise of that gentleman's wisdom he could not see fit to increase my salary to enable me to start a small and very modest establishment of my own, it would not be my fault if I remained for an indefinite length of time a bachelor. (Laughter.) Gentlemen, I regret to say, and you will regret to hear, that my pathetic appeal has so far not resulted in the materialization of my wishes. (Laughter.) Not because of lack of opportunity, either; for on the morning following the event I have referred to, I had the pleasure of standing side by side with the resident manager of the Dominion Coal Company. He was good enough, with that grim humor which is characteristic of the gentleman, to compliment me on what he was pleased to term my "essay on woman" of the previous evening; but he was careful, gentle neu, to repress any generous impulse. (Laughter.) I have watched the mail day by day since with increasing anxiety, but with ever lessening hope; and I may add that my expectations have sunk below zero. But although, through man's inhumanity to man, I am compelled, hopelessly, to a life of miserable loneliness, I am always ready to respond to the toast of the ladies, and any other service in their behalf. (Applause). I may say, too, that I think—as the chairman himself said, it is a matter of great rejoicing that so many ladies accompanied the gentlemen who are assembled around here to-night; and while responding for the ladies in general, I should like to thank you for those ladies who are enjoying—and I hope will continue to enjoy—their visit to Cape Breton." (Applause.)

THE CHAIRMAN.

MR. B. T. A. BELL, having fittingly proposed the health of the Chairman, Mr. David McKeen, whose guests they were, and in response to the vocal and vociferous assertion that he was "a jolly good fellow"

MR. DAVID McKEEN, M.P., said—I cannot, though a good deal embarrassed, let your good will pass without thanking you for the way you have received the toast of the two Societies. In bidding you here, I, as one of the Committee, felt some little hesitation as to whether we had the means or facilities at our hands for making your visit an agreeable one, more especially when we undertook to receive you here to-night and entertain you with this dinner, such as it has been. I think we all felt that possibly we might not be able to make this function as successful as we should like. But if you have enjoyed yourselves—and I judge you have from the way you have expressed yourselves—we are more than repaid. It has been a great pleasure for us to see you all, and I trust this is only the commencement of many happy meetings.

This assemblage has not been altogether disinterested on our part. You in Ontario, and more especially in Quebec, are our principal customers. You are the people who take a very great supply of coal we are annually mining, and especially up the St. Lawrence. Hence we felt it our interest to extend an invitation to the Mining Associations of Quebec and Ontario to come and see what we are doing and to offer you an opportunity of viewing our modes of work.

That your visit may be a successful and pleasant one, both to yourselves and ladies, I am sure, is the sincere wish of the committee who have the responsibility of receiving you, and also of every man holding an official position in the Dominion Coal Company."

Songs by Mr. H. J. Williams, of Thetford, Que.; Mr. Geo. Boak, of Halifax; Mr. W. R. Thomas, of Montagu; clarionet solos by Mr. E. D. Ingall, of Ottawa; and recitations by Mr. Gordon Rogers, of Ottawa, were interspersed during the evening, which was regretfully concluded by the lusty and loyal singing of God Save the Queen.

COAL MINING IN CAPE BRETON.

THE HISTORY AND ORGANIZATION OF THE COMPANIES—THE COLLIERIES OPERATED AND THEIR EQUIPMENT—STATISTICS OF OUTPUT AND SHIPMENT.

In addition to the data given elsewhere in this issue, the following notes respecting the companies engaged in mining coal in Cape Breton will be of interest:

The Dominion Coal Company, Ltd.

Incorporated by Act of the Legislature of Nova Scotia 1st February, 1893. Authorized capital, $18,000,000; issued, $16,500,000; common, $15,000,000; preferred, $1,500,000; authorized bonded indebtedness, $3,000,000; first mortgage bonds at 6 per cent. issued, $1,500,000.

Directors—Henry M. Whitney, Boston; Sir Donald A. Smith, Montreal; Henry F. Dimock, New York; Hugh McLennan, Montreal; F. S. Pearson, Boston; Sir W. C. Van Horne, Montreal; Robert Winsor, Boston; W. B. Ross, Q.C., Halifax; Alfred Winsor, Boston.

General Offices: 95 Milk street, Boston. Henry M. Whitney, President; Alfred Winsor, Vice-President; J. S. McLennan, Treasurer; F. S. Pearson, Chief Engineer. *Canadian Office:* Glace Bay, Cape Breton, N.S. David McKeen, M.P., Resident Manager; W. Blakemore, M.E., Assistant Resident Manager; J. R. Blackett, Cashier, B. F. Pearson, Halifax, Secretary. *Canadian Selling Agents:* Kingman, Brown & Co., 14 Place Royale, Montreal, and M. R. Morrow, 50 Bedford Row, Halifax.

This, the most important coal producing organization in Canada, operates in Cape Breton, under a lease which gives a tenure of its mining property of ninety-nine years, the royalty to the Nova Scotia Government for the whole period being fixed at a maximum of 12½ cents per ton, with a minimum gross amount for each year to be paid on at least as many tons as were in the year 1891 sold by all the collieries it acquired. The property extends over an area exceeding seventy square miles of coal lands in Cape Breton, upon which the following collieries are worked:—

Caledonia Colliery—One mile from Little Glace Bay; Superintendent, J. G. S. Hudson; Underground Manager, George Scott; coal raised, 1893, 169,041 tons; to 30th June, 1894, 15,867 tons.

Phelan seam of 7 ft. worked; dip averages 1 ft. in 10 ft.; vertical depth of shaft, 185 ft.; length of slope, 1,600 ft.; endless haulage driven by 1-12 in. cyl. engine. Patent dumping cages and selfweighing tanks.

System of working: pillar and bord.

Ventilation by Murphy fan 12 x 6 ft., running at 120 revolutions per minute and giving 100,000 cubic ft. of air.

Naked lights.

Boilers: Babcock and Wilcox.

Pumps: one No. 7 Blake.

Hoisting engines: 1 20-in. double cylinder, 3 ft. 6 in. stroke, with 8 ft. drum; 1 double engine for hauling coal from deep, having 12 in. cylinder, 15 in. stroke.

Air compressor: One 20 x 30 piston inlet, Ingersoll make, with a capacity for 12 coal cutters; 8 Sergeant coal mining machines and necessary boilers, air receivers piping, etc.; also one Rand Compound Air and Steam Compressor from World's Fair, Chicago.

Coal heading machines: two Stanley.

Glace Bay Colliery—Situated 14 miles from the town of Sydney, and half a mile from Glace Bay Harbor, from which shipments are made. William Adamson, Underground Manager. Total coal raised 1893, 128,316 tons; to 30th June, 1894, 62,433 tons.

Harbor seam, 6 ft.; dip averages 1 ft. in 10 ft.; vertical depth of shaft, 240 ft.

System of working: pillar and bord; coal from deep hoisted to pit bottom by a double 12 inch cylinder engine; coal from rise workings lowered to pit bottom by self-acting incline; 1 18 in. cylinder engine driving endless haulage.

Ventilation: by Murphy champion fan, 8 ft. dia., driven at a speed of 90 revolutions per minute, giving 35,000 to 40,000 ft. of air and capable of being worked up to 80,000 cubic ft.

Naked lights.

Boilers: one flue, 33 x 3 ft., 16 h.p. steaming fan engine; six plain cylindrical 33 x 3 ft., 66 h.p., at hoisting shaft for engines, pumps, etc.; two multitubular.

Hoisting engines (on surface): one double drum, 18 in. cylinder, 24 in. stroke; drums 8 ft., built by Matheson, New Glasgow; (below ground) one double 12 inch cylinder, 24 in. stroke, drums 4½ ft., built by Davis, Pictou.

Pumps: two in number—one steam (Cameron's "special"), and one double 10 in., having independent 9 in. col. (double).

Screens: ordinary plain parallel, ¾ stationery.

Air compressor: one, 20 x 20 x 24 in stroke, working two Ingersoll coal cutting machines.

International Colliery at Bridgeport, 12 miles from the town of Sydney; John Johnstone, Superintendent; Thomas Johnstone, Underground Manager. Total coal raised 1893, 126,000 tons; to 30th June, 1894, 60,333 tons.

Harbor seam worked averages 5 ft. 10 in.; dip, 1 in 12; length of slope, 2,800 ft.; vertical depth shaft, 90 ft.

System of working: pillar and room.

Ventilation: Murphy fan, 8 ft. dia.

Naked lights.

Winding engines (on surface): pair 16 x 36 in. and 14 x 30 in.; 8 ft. drum; (below ground), pair Lidgerwood, 9 in. cyl., 12 in. stroke, tandem drums, 30 in. dia.

Pumps: one Knowles, 160 ft. suction, 2,300 ft. discharge.

Boilers: five, aggregating 300 h. p.

Victoria Colliery, situate at Low Point, on the south side of Sydney Harbor; T. J. Brown, Superintendent; John Wilkinson, Underground Manager.

Ross seam: 6 ft. 7 in. worked; dip averages 25°; length of slope, 1,740 ft.

System of working: pillar and board; bords 18 ft. wide; also one section of longwall.

Ventilation: Murphy fan 6 ft. dia.

Naked lights.

Hoisting engines: one horizontal engine, having two cylinders, each 24 in. dia by 4 ft. stroke; drum 7 ft. dia.

Pumps: one forcing pump, cyl. 18 in. dia. by 4 ft. stroke; pump dia., 8 in. one Knowles, cyl 2 in. dia. by 1 ft. 3 in. stroke.

Boilers: three cylindrical egg-end, 30 ft. long, and four multi-tubular.

Screens: four, each 5 ft. wide by 20 ft. long.

There are also two locomotives and 120 waggons.

A borehole 8 in. dia. and 600 ft. deep is being put down for pumping water to surface.

Gowrie Colliery, situated on the north side of Cow Bay, A. M. Evans, Superintendent; Alex. Macdonald, Underground Manager. Total coal raised in 1893, 117,993 tons; to 30th June, 1894, 65,000 tons.

Seam worked (MacAuley) averages 5 ft.; dip 1 in 8; Odiorne shaft, 200 ft.; New Pit, 260 ft.; two slopes from pit bottom, being West Slope, 1,400 ft.; East Slope, 2,600 ft.

System of working: pillar and room (modified, the rooms being 10 yards wide and the pillars 7 yards), and one section longwall.

Ventilation: by furnace, 7 ft. 2 in. x 6 ft., giving 40,000 cubic ft. air.

Naked lights.

Winding engines: pair, 20 in. x 3 ft. 6 in., direct acting by hoisting engines; 8 ft. drum, and pair 10 x 12 in. Lidgerwood hauling engines, geared 5-1; 4 ft. drums, also pair 9 x 12 in. tail rope hauling engine, geared 6-1; two drums, 3 ft. 6 in.

Pumps: 1 Knowles pump, 20 x 36 x 10 in., 1 Knowles pump, 14 x 24 x 8¾ in., 1 Cameron pump, 12 x 12 x 5½ in., 1 Fly Wheel pump, 10 x 12 x 5½ in., 1 V. Bob Lift pump, 16½ x 48 x 10½ in.

Boilers: 2 30-h.p. tubular, 5 ft. 3 in. x 17 ft. 6 in.; 1 30-h.p. tubular, 5 ft. 6 in. x 17 ft. 9 in.; 6 12-h.p. shell, 3 x 30 ft.; 5 10-h.p. shell, 2 ft. 10 in. x 27 ft.

Screens: common bar (3); angle 31°; size 18 ft. x 5 ft. 9 in.

Air compressors: one 16½ x 20 x 24 in. stroke and one 20 x 20 x 24 in. stroke.

Patent fuel plant: Yeadon's; capacity five tons per hour.

Mitchell longwall machine.

Reserve Colliery, situated at Bridgeport Basin, two and one half miles from Glace Bay; James McVey, Superintendent; Norman McKenzie, Underground Manager. Coal raised to 30th June, 1894, 70,629 tons.

Phalen seam, averages 8 ft. 8 in; dip 1 in 13; worked by two slopes, of which the "Main" is 2,500 ft., and the "French" 3,580 ft. long; vertical depth about 267 ft.

System of working: pillar and room.

Ventilation by furnace.

Naked lights.

Hoisting engines: one winding engine, 22 in. cyl., 3½ ft. stroke; geared 2-1; drum, 4 ft dia., and one 22 in. cyl., geared 4 to 1, working endless haulage.

Pumps: one pumping engine, 15 in. cyl. 8 in. water cyl., 24 in. stroke; one Cameron pump, 14 in. steam cyl., 8 in. water cyl., 18 in stroke; one plunger, double, 6 in. diameter, 8 in stroke.

Boilers: nine boilers, 3 ft. dia., 30 ft. long, flash flues.

Screens: three in use, 20 ft. long.

Old Bridgeport Colliery, situate on north side of Lingan Bay, ten miles from the town of Sydney; Robert Robson, Superintendent; George W. Greenwell, Underground Manager. Total coal raised in 1893, 50,363 tons; to 30th June, 1894, 9,975 tons.

Phelan seam, 6 ft. worked; dip averages 1 in 11; shaft, 120 ft.; system of working, pillar and bord.

Naked lights.

Ventilation by furnace.

Two air compressors: one 20 x 20 x 24 in. stroke; one 24 x 24 x 30 in. stroke working 2 Stanley Coal Heading machines and 4 Ingersoll cutters.