

<i>Shops.</i> —Carpenter shop	0.0091	
Smithy	0.0148	— 0.024
<i>Materials.</i> —Explosives	0.0436	
Coal	0.0353	
Timber	00.331	
Steel	0.0022	
Caskets	0.0074	
Grease	0.0078	
Various	0.0031	— 0.132
<i>Tools.</i>	0.0091	
Depreciation of machinery	0.0273	
" waggons and rails	0.0035	— 0.040

Total per ton..... \$0.717

The cost of stowing per cubic yard may be detailed as follows, one cubic yard corresponding to about 2.7 tons of ore:—

Cost per Cubic Yard for 1890.

Superintendence.....	\$0.0114
Quarrying stone, inclusive of explosives	0.0556
Throwing small stuff over dumps.....	0.0540
Transport of stone to shafts and lower-	
ing down in shafts	0.0931
Underground transport from shafts to	
winses and topping	0.0654
Underground transport from winses to	
workings	0.0720
Building up in workings	0.0360
Various	0.0164

Total per cubic yard..... \$0.40

For the better appreciation of these cost-sheets I may here give the average daily wages earned by workmen in the district:—

Wages Earned Per Day.

	Reals.	Dollars.
Foreman of the mine.....	24	1.00
Engine-drivers.....	20	0.87
Stokers.....	10	0.43
Carpenters.....	20	0.87
Smiths.....	20	0.87
Masons.....	16	0.70
Miners.....	12 to 16	0.52 to 0.70
Trammers.....	12	0.52
Ordinary laborers.....	10	0.43
Boys and girls.....	6 to 8	0.26 to 0.35
Cost of coal.....	150	6.54
" firewood.....	45	2.00
" six foot props, each 10	43	

The following is the cost of a ton of ore, mined by the pillar-and-stall system, where other conditions are the same as above:—

Cost of Pillar-and-Stall System Per Ton of Ore.

<i>Labor.</i> —Superintendence.....	\$0.0128
Breaking the ore	0.6540
Loading into waggons	
and tramping	0.0501
Engine-men, etc.....	0.0362
Timbering.....	0.0152
Unwatering	0.0048
Various	0.0078
<i>Shops.</i>	0.024
<i>Materials.</i>	0.132
<i>Tools.</i>	0.009
Depreciation	0.031

Total per ton..... \$0.977

The cheaper working over the pillar-and-stall system is entirely on account of the cheaper breaking of the ore, the difference being about \$0.26 per ton.

The system here described was started by Mr. C. Roepel, M.E., and subsequently carried on by the writer and Mr. P. E. Carr, M.E. It can be applied in all large masses and wide lodes, and is a safe and economical mode of getting all the ore.

The Cabezas del Pasto mine is one of the mines worked by the Besle Metal and Chemical Company, Limited, of Newcastle-on-Tyne.

EBEN E. OLCOTT,

CONSULTING MINING ENGINEER.

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MINING NOTES.

[FROM OUR OWN CORRESPONDENTS.]

Ontario.

Port Arthur District.

The mill of the Badger Silver Mining and Milling Co. resumed operations on Tuesday, 24th ult., and the mine is also being worked. There was some slight trouble that necessitated the closing down of the mine and mill for a few days, but we are pleased to say that we have been informed that the trouble has been amicably settled, and that the mine will be worked steadily by a large force of men.

A report reaches us that the owners of the iron locations near Kaministiquia intend opening up and developing their property. It is also said that the company is in communication with the C.P.R. company with the view of having a spur run from the main line to the location.

The British Columbia Iron Works Company are now making a large boiler for the Westminster Slate Company's quarry at Jervis Inlet. The boiler is five feet wide, and sixteen feet long.

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Annual Report, 1888-89,

VOL. IV.

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AN ORDINARY

QUARTERLY GENERAL MEETING

OF THE

GENERAL MINING ASSOCIATION

OF THE PROVINCE OF QUEBEC

WILL BE HELD IN

THE ASBESTOS CLUB HOUSE,

BLACK LAKE, QUE.,

ON TUESDAY, 14th JUNE, 1892,

COMMENCING AT HALF-PAST FIVE O'CLOCK IN THE AFTERNOON.

For the convenience of members and their friends attending this meeting a special car will be attached to the ordinary train (Quebec Central Railroad), leaving Sherbrooke, Que., at 8 a.m. on the morning of Tuesday 14th June. Black Lake members will join the party at 10.42 a.m. Train will arrive at Thetford Mines at 10.45 a.m., where some time will be spent in a visit to the Asbestos mines. Lunch will be served at half-past twelve o'clock (noon). Party will leave Thetford Mines at 1.30 p.m., returning to Black Lake by teams kindly furnished by the local Committee.

The ORDINARY QUARTERLY GENERAL MEETING for the reading and discussion of papers, etc., will be held in the

Asbestos Club House, Black Lake,

commencing at 5.30 p.m. Papers will be read by Mr. J. Burley Smith, M.E., Glen Almond, Que., and by Mr. L. A. Klein, M.E., Black Lake. At 7.30 members will be entertained to a dinner given in their honor by the Asbestos mine-owners and mine managers. Train will leave at 1 o'clock a.m. Wednesday, 14th inst., for Sherbrooke, where connection will be made for Montreal and points west. Tickets, \$5.50 for the round trip (from Sherbrooke to Thetford and return) may be obtained from the undersigned, or from Mr. A. W. Stevenson, C.A., Treasurer, 17 St. John Street, Montreal.

GEORGE IRVINE,

President.

B. T. A. BELL,

Secretary.