18

Dr. Hayes' results were received on the 18th December, as ollows:-

No. 11345	0 oz. per ton or	\$17.485.04
No. 2 328	4 do	2,969,94
No. 3 169	8 do	2,208.44
No. 4 34	4 do	447.20

Although it was expected that the No. 1 sample sent to Dr. Hayes would prove richer than the No. 1 assayed by Mr Macfarlane, yet it was supposed that the other samples would pretty closely correspond. It will be perceived however that there were differences also in Nos. 2 and 4, but these differences may be owing to the unequal distribution of the very minute particles of metallic silver in the samples as indeed is suggested by Dr. Hayes, who it may likewise be remarked calculates to the United States ton of 2000 lbs. only.

For the greater satisfaction of the Board, it was decided to send a set of samples to Professor Chapman, of Toronto University, for assay. On the 13th inst. that gentleman sent in his results, and in doing so remarks, "these samples are exceedingly rich: the poorest even furnishes returns far beyond the ordinary yield of silver ores." His certificate as to the results is as follows:—

## MONTREAL MINING COMPANY.

"Besults of assays of samples of silver ore (Macfarlane's discovery) from Thunder Cape, Lake Superior:

"No. 1.-Mean of two assays: Silver 14.96 per cent=4886 oz. or \$6547.64 per ton of 2240 lbs.

"No. 2-Mean of two assays: Silver 7.88 per cent=2574 oz. or \$3449.33 per ton of 2240 lbs.

"No. 3.-Mean of two assays: Silver 5.27 per cent=1721 oz. or \$2306.85 per ton of 2240 lbs.

"No. 4.—Mean of two assays: Silver 1.71 per cent=558 oz. or \$748.52 per ton of 2240 lbs.

" EDW. J. CHAPMAN,

"Professor of University College, Toronto, and Consulting Engineer."

"TORONTO, January 13th, 1869."

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