

Appendix (G.)

29th January.

APPENDIX.

CONTENTS OF LODES.

The following table is given to shew, in a consecutive manner, the contents of the lodes, resulting from the lengths, widths and produces, ascertained by measurement and experiment. The third column is the length in fathoms multiplied by the breadth in feet, to give the means of determining the average breadth; and the fourth column is the product of the figures of the third multiplied by those of the produce, from the result of which is ascertained the average produce. The sum of the third column multiplied by 36, the number of feet in a fathom forward by a fathom vertical, will give the cubic contents in feet of one fathom in depth of the whole length of the lode (the probability being that the horizontal will represent the vertical dimensions), and this product by the weight of a cubic foot will give the weight of the vein-stuff in the same. The fourth column multiplied by the same figures, and divided by 100, will give the weight of pure copper in the same space. In the copper smelting trade there are reckoned 2352 lbs. or 21 cwt. to a ton of ore.

EASTERN LODES.

MAIN LODE.

Length. Fathoms.	Width. Feet.	Produce. pcent.		
175.00	6.00		1050.00	
30.00	5.00		150.00	
205.00	5.85		1200.00	
20.00	4.33	2.52	86.60	218.23
20.00	6.91	3.84	138.20	530.68
20.00	2.66	4.56	53.20	242.59
35.00	2.91	3.48	101.85	354.43
14.00	5.00	5.50	70.00	385.00
7.50	6.75	6.80	50.62	344.21
8.00	2.25	0.00	18.00	
7.00	1.83	2.80	12.81	35.86
11.00	3.25	9.60	35.75	343.20
7.00	3.00	8.24	21.00	173.04
31.00	3.00	0.00	93.00	
11.00	2.42	10.72	26.62	285.36
8.00	4.00	12.70	32.00	406.40
12.00	6.00	9.84	72.00	708.48
8.00	12.00	12.96	96.00	1244.16
6.00	6.00	10.00	36.00	360.00
18.50	3.83	10.00	70.85	708.50
53.00	3.83	10.08	202.99	2046.13
297.00	4.09	6.88	1217.49	8386.27
39.00	2.84	0.00	111.00	
258.00	4.28	7.57	1106.49	8386.27

NORTH BRANCH.

Length. Fathoms.	Width. Feet.	Produce. pcent.		
56.00	2.50		140.00	
19.00	2.00	9.76	38.00	370.88
16.00	3.50		56.00	
20.00	2.00	0.00	40.00	
3.50	3.41	10.24	11.93	122.16
10.50	3.00	0.00	31.50	
4.00	2.75	8.40	11.00	92.40
1.50	3.00	8.00	4.50	36.00
5.50	3.00	7.92	16.50	130.68
5.50	3.00	0.00	16.50	
12.00	2.00	0.00	24.00	
153.50	2.54		389.93	752.12
120.00	2.56		308.00	
33.50	2.44	9.18	81.93	752.12

Appendix (G.)

29th January.

SOUTH BRANCH.

Length. Fathoms.	Width. Feet.	Produce. pcent.		
13.00	1.50	6.96	19.50	135.72

RECAPITULATION.

	Length. Fathoms.	Width. Feet.	Produce. pcent.		
Main Lode,...	258.00	4.28	7.57	1106.49	8386.27
North Branch,	33.50	2.44	9.18	81.93	752.12
South Branch,	13.00	1.50	6.96	19.50	135.72
	304.50	3.96	7.67	1207.92	9274.11

9274.11

— 36 ft. x 185 lbs. = 262 tons of Copper.

100

9274.11

— less one-sixth x 36 ft. x 183 lbs. = 216 tons of Copper.

100

WESTERN LODES.

Length. Fathoms.	Width. Feet.	Produce. pcent.		
19.00	5.41	6.72	102.79	690.74
19.00	5.41	2.77	102.79	284.72
19.00	5.41	6.40	102.79	657.85
19.00	5.41	4.08	102.79	419.38
47.00	6.00	9.68	282.00	2729.76
123.00	5.63	6.90	693.16	4782.45

4782.45

— 36 ft. x 185 lbs. = 135 tons of Copper.

100

COPPER ORES, &C., SAMPLED AT THE BRUCE MINES, IN JULY, 1848.

	Tons.	Produce	Copper.
From Trial Shaft,.....	40	7.68	3.0720
" Harris' Shaft and West Stopes,...	600	7.92	47.5200
" Harris' Shaft, 10 fms. level, East,	65	9.36	6.0840
" Harris' Shaft, 10 fms. level, West,	28	8.32	2.3296
" Rankin's Shaft, East Stopes,.....	30	11.04	3.3120
" Rankin's Shaft,.....	50	8.64	4.3200
" Top of lode near Rankin's Shaft,	40	6.08	2.4320
" Rankin's and Harris' Shaft,.....	75	5.20	3.9000
	40	6.64	2.6560
	12	9.28	1.1136
	50	5.84	2.9200
" Davis' Shaft, West Stopes,.....	8	8.56	.6848
	21	9.60	2.0160
" Prideaux' Shaft,.....	20	20.00	4.0000
" Stope No. 12,.....	4	40.80	1.6320
	5	20.64	1.0320
	6	11.52	.6912
	16	9.84	1.5744
	16	6.56	1.0496
" Stope No. 15,.....	48	12.96	6.2208
" Moffatt's Shaft,.....	32	5.12	1.6384
	20	3.12	.6240
	70	2.80	1.9600
" Exposure of 76 fms. East End,...	17	6.72	1.1424
West End,...	6	4.08	.2448
" Simpson's Shaft,.....	40	6.80	2.7200
	28	5.84	1.6352
" Exposure of 47 fms. East End,...	33	13.04	4.3032
West End,...	55	9.68	5.3240
	1475	8.01	118.1520