

so as to demonstrate the effect of rough hand-sorting; the low assays were therefore of second-class ore; the whole number of assays gives, however, the average yield of the ore just as it comes from the mine without sorting. The higher assay numbers (last assays made) were, in general, from ore mined nearest the surface, and which accordingly was found at the centre of the dump. Nearly one-half the dump was milled, and the last milled came from the centre of the dump.

NOTE.—The proportions of gold and silver in the assay buttons were obtained by parting 89 buttons in one operation. It was found the average was 68 per cent. gold, 32 silver. The following table gives only the gold, or 68 per cent. of the weight of the button:

Record of Assays of Canada Consolidated Gold Mining Company's Ores, mostly from the Gatling Mine—108 samples, mostly 5 tons each, representing a total of 515 tons of 2000 pounds.

1.....	\$33 04	29.....	\$6 33	56.....	\$9 84	83.....	\$10 90
2.....	14 06	30.....	8 08	57.....	42 18	84.....	11 07
3.....	9 84	31.....	25 31	58.....	28 12	85.....	9 49
4.....	18 98	32.....	7 03	59.....	27 06	86.....	7 38
5.....	43 94	33.....	33 74	60.....	14 76	87.....	4 57
6.....	15 11	34.....	7 38	61.....	39 37	88.....	5 98
7.....	11 60	35.....	7 38	62.....	11 25	89.....	32 34
8.....	10 55	36.....	6 50	63.....	9 84	90.....	7 03
9.....	11 76	37.....	12 65	64.....	23 20	91.....	7 73
10.....	8 44	38.....	16 17	65.....	16 17	92.....	5 62
11.....	11 60	39.....	9 84	66.....	9 49	93.....	33 04
12.....	8 79	40.....	18 28	67.....	8 44	94.....	32 34
13.....	9 84	41.....	21 79	68.....	12 65	95.....	15 47
14.....	9 14	42.....	14 76	69.....	10 72	96.....	6 33
15.....	7 73	43.....	7 03	70.....	10 90	97.....	9 49
16.....	11 25	44.....	10 55	71.....	6 33	98.....	17 58
17.....	16 17	45.....	7 73	72.....	5 27	99.....	17 58
18.....	14 06	46.....	4 92	73.....	8 44	100.....	9 14
19.....	7 38	47.....	9 14	74.....	9 81	101.....	5 45
20.....	11 25	48.....	53 43	75.....	5 62	102.....	12 83
21.....	9 49	49.....	5 62	76.....	7 38	103.....	13 36
22.....	7 03	50.....	5 62	77.....	12 48	104.....	4 92
23.....	9 14	51.....	5 62	78.....	11 07	105.....	15 11
24.....	8 79	52.....	17 58	79.....	5 98	106.....	5 62
25.....	11 25	53.....	13 71	80.....	7 03	107.....	28 12
26.....	8 44	54.....	18 98	81.....	10 90	108.....	11 95
27.....	18 28	55.....	8 44	82.....	8 26	109.....	7 03

Average 108 samples, 515 tons Gatling ore, assayed by A. Thies, \$13.37 gold per ton.

Check assays, by Prof. Richards, of Boston, and Gifford, of New York, \$14.75.

Average value Gatling ore, East vein, \$14.06 per ton.

Average samples, aggregating 63 tons Tuttle shaft, East vein, \$24.88.

Average samples, aggregating 12 tons, Middle vein, \$30.82.

Allowing the proper proportion of ore-reserve to each of these shafts, the average assay value of the ore in reserves I find to be \$18.65 in gold per ton.

From these most exhaustive tests, the average gold contents of the ore were determined with great accuracy.

Perhaps the most interesting and certainly one of the most important and valuable facts developed was the very remarkable uniformity of the gold yield of the ore.