

REPRODUCTION FOR

Central Canada Chamber of Mines.

Statistical Analysis for The Year. 1898. Witwatersrand, Johannesburg, South Africa

2

Reproduced for the members of the Central Canada Chamber of Mines as an outline of statistical information, which with other matter will be compiled monthly by the Institution, printed and disseminated to the newspaper press for publication throughout the world, with the object of supplying reliable information, enlightening, and inspiring confidence in the centres of capital in Europe as to Canadian mineral resources, which are at present comparatively unknown.

No.	DIVISION AND COMPANY.	TONNAGE.				FROM MILL.				FROM TAILINGS.				FROM ALL SOURCES.				Ounces produced during the month.		REMARKS.	
		Crushed	Untreated	Total	Per Ton.	Yield of Gold.	Value of Yield.	Per Ton.	Per Cent.	Yield of Gold.	Value of Yield.	Per Ton.	Per Cent.	In Bullion.	Per Ton.	Total.	Per Ton.	Per Cent.			
WITWATERSRAND.																					
1	Anglo	120000	10000	130000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
WITWATERSRAND SUMMARY.																					
From Mill ...																					
From Tailings ...																					
Total ...																					
GENERAL SUMMARY.																					
Witwatersrand ...																					
Johannesburg ...																					
Grand Total ...																					

Where the value of the field is not stated by the Companies it is taken at 60 per cent. for mill gold and at 65 per cent. for cyanide gold.
* The highest number of stamps running is given.
The returns of Gold, Tonnage, and Concentrate are published on the responsibility of the Companies concerned.

The Mineral Resources of Central Canada.

An Address given by Mr. F. H. Malcolm (late President of the Johannesburg Diamond Boring and Developing Company Limited) to the Members of the Central Canada Chamber of Mines.

From the above statistics it will be noted that Transvaal ores are low grade, averaging only 6 1/2 dwts. to the ton, over the plates, in value slightly under \$6.00 per ton. The mines are deep averaging 2,500 feet, some exceeding 4,000 feet, before the reef is reached. Water is also scarce.

The cost of constructing these immense dams averages about \$500,000.00, and sinking and equipping a shaft to that depth about \$250,000.00, or £150,000 in all) has to be spent before they are on the same basis as a Canadian out-crop mine, when the first pick is put into the ground.

The Transvaal reefs average 10 feet 6 inches in thickness. In Canada a fair average reef is 4 feet, but many run in Ontario up to 15 feet. An average return from mines now working would give about \$14 to the ton, some giving much higher results.

Labour is considerably higher in Africa, averaging for white labour \$6.00 per day. Kaffir labour being \$17.00 per month and found. All necessaries of life are much more expensive in Africa and a workman's three-roomed cottage cannot be obtained in Johannesburg under \$35.00 per month.

Transvaal mines are highly capitalized but not more than twenty per cent. of nominal capital has been provided in cash as working capital, yet, notwithstanding this, the dividends are large as will be observed from these statistics. The dividends are paid also upon the vendors shares which equal about 80 per cent. of the whole nominal capitalization.

Both Transvaal and Central Canadian ores are free milling and these remarks apply to over plate yields only (in both cases) for the reason that few Canadian mines are equipped with modern Cyanide or other process for extraction of residues from tailings, slimes, etc., which would probably increase yields about 35 per cent., as in the Transvaal.

The Mill Batteries in Canada have mostly light stamps (in Africa the average weight of stamps is 1250 lbs. against 900 lbs. in Canada) and other appliances compared with the Transvaal are of most primitive description, (the advantage of heavy stamps being that they double the capacity at only 10 per cent. increase of power,) see returns.

The Johannesburg Chamber of Mines has been established only 9 years but has introduced during that short period about twelve hundred and fifty millions of dollars of capital equalling (£250,000,000) now invested in the mining industry in that region, and supplies of capital are always forthcoming for new enterprises. The reason of this being the absolute confidence reposed by European investors in the integrity of the Johannesburg institution which has disseminated its monthly statistical information and is now known and recognized as the Premier institution of its kind throughout the world.

The Johannesburg main reef is about fifty miles long by seven miles wide. In Western Canada the Lake of the Woods gold district alone is about 350 miles long by about 150 miles wide, then there are many other promising gold areas, such as on the shores of Lakes Manitoba and Winnipeg, Port Arthur, etc., and taking all these facts into consideration and comparing the conditions with those obtaining elsewhere, there is no reason whatever, with adequate appliances and machinery, why the Central Canadian gold mines should not soon be included amongst the most productive in the world.

As outside issues and enterprises emanating from the Johannesburg Chamber of Mines are the Railways and Telegraphs. No less than five lines of railway converge on Johannesburg, all built during the last six years, the cost of which is about equal to the entire Canadian Pacific Railway System, and a line of Telegraph is now being built right through Africa from the Cape to Cairo.

Johannesburg, at the time of establishing its Chamber of Mines, was much in the same condition as the mining districts of Central Canada are to-day, their very existence being unknown in Europe and necessarily, therefore, without capital. That city was centered in the heart of the South African Continent, and being without either railway or telegraphic communication, 1400 miles by road from Cape Town, was quite unknown to the rest of the world. It has achieved its fame throughout the world entirely through the reliable information and propaganda of its Chamber of Mines and now there is scarcely a newspaper in the whole world, in any language, that does not publish its telegraphed information of the progressive monthly output of gold.

Compare these results with the mines of Canada and the United States of America, which in consequence of no such institution being hitherto in existence, not a single American or Canadian mine has yet been listed or recognized on the Stock Exchanges of Europe.

In order to rectify this anomaly the Central Canada Chamber of Mines has been organized, for there is no doubt whatever that the mines of Central Canada are greatly superior to any yet known in South Africa, both in extent, size of ore body and grade of ore. The conditions and facilities for economical working are greatly in favor of Canada, both in respect to cost of labour, abundance of water power, cheapness of provisions, accessibility through regular railway communication in all directions, and the important fact that the reefs are payable almost from the surface as has been abundantly proved by the few mines now working at the Lake of the Woods and other centres, where with the most primitive appliances highly encouraging results are even now being achieved.

The total white population of South Africa never exceeded 500,000 persons, the gold fields being distant and difficult of access. Compare this with the central position of Canada, with probably eighty millions of people on the American continent South of us, and about three hundred and fifty millions in Europe, all within ten days reach of the Central Canadian goldfields. Many of these (especially those who have made money through mining investments elsewhere) would undoubtedly invest, if they knew of the existence of these mines, a fractional percentage of which will suffice to place Canada on a satisfactory basis as a gold-producing centre, and cannot fail to prove advantageous to Canada as a whole, and the great expansion of commerce generally.

F. H. MALCOLM,
(Late president of Johannesburg Diamond Boring and Developing Company Ltd.)

JOHANNESBURG CHAMBER OF MINES

STATISTICAL RETURNS.

The gross output for the past nine years was twenty-one millions, one hundred and fifty-three thousand, nine hundred and fifty-three ounces of the value (£84,615,853) or in Canadian currency \$423,079,060.00, in fine gold, exported as follows:

Year	Certified Total Output	Value
1890	484,817 ozs.	729,288
1891	1,210,969	1,478,477
1892	2,054,102	2,277,080
1893	3,947,782	4,114,561
1894	4,876,590	

The average return of gold over the plates being 6.51 dwts. (\$6.00) per ton, extraction from residues being 35% additional.