

GOLD MINING IN NOVA SCOTIA

BY GEO. W. STUART.

I have been asked to express an opinion as to the cause of the decline of gold mining in Nova Scotia.

The question would imply rather an erroneous impression, one not entirely borne out by the facts as established by the Government statistics. Last year, 1906, the yield of gold, by the sworn reports at the mines office, when compiled, will exceed 14,000 ounces. In no less than ten different years during the period since the inception of gold mining in the province (1862), the yield fell below these figures. The returns of 1874 show the minimum yield of 9,140 ounces, and the returns of 1898 show the maximum yield of 31,104 ounces. From 1872 to 1881 there was but little life, energy, or money, put into the business; therefore, with the exception of 1877, when the yield reached 16,882 ounces, the returns were, approximately, but from 9,000 to 13,000 ounces.

In 1881 there was conceived a new hope for the industry, caused by the discovery of a rich lead in the Montague district, known as the "rose lead." This lead was discovered far away from any float or drift, that escaped from it. The discovery was made through scientific conclusions and research, put into execution for the first time in the province. The methods adopted were freely made known to others, and soon other leads of much value were unearthed; among which was the new Caledonia, or DeWolf lead, in Montague, and the Dufferin at Salmon River, both large producers. From this date the yield steadily increased, until, in 1898, it reached the maximum above stated, 31,104 ounces. For the five succeeding years the average yield was 28,500 ounces, but in 1904 it dropped to 14,279 ounces. It will, therefore, be seen, by the above figures, that many times during the 45 years gold mining has been in progress in Nova Scotia it has been at a lower ebb than at the present time; at least less gold was reported to the Mines Office, as obtained.

Presuming that the greater portion of this gold obtained was mined at a profit, some idea may be formed of the great difference in the thicknesses of the veins it has been taken from, when we find by the tonnage returns so vast a difference in yield per ton. For instance, in 1865, 24,423 tons of ore yielded 25,454 ounces of gold—more than \$20 per ton. In 1882, 12,081 tons yielded 14,107 ounces, an average of \$23 per ton, while in 1902, 192,076 tons yielded but 28,279 ounces, only an average of about \$3 per ton of ore. It is not to be inferred, however, that the \$3 ore may not have been mined at a profit, or that the \$23 ore was mined at exceedingly great profit; but it is a reasonable conclusion that the initial expense for plant and appliances to mine large quantities of low grade ore, at a profit, is much greater than that of a plant to mine and mill small veins of rich ore.

Since 1882 the average yield of gold per ton of ore mined and milled has gradually—with some fluctuations—been lowering, until to-day the average is about \$5 per ton. The leads, however, now being worked are, in the main, much larger than the average in the earlier years of gold mining, and, I believe, though under adverse circumstances, to which I will shortly refer, all the mines now working for profit—and not simply doing development work—are succeeding.

Why the presumed decline? is the question I am asked. My answer is that there is a combination of causes and circumstances for the present unsatisfactory condition of gold mining in the province, none of which are the causes generally assigned by those of the outside world who are not in a position to know all the facts. Some, at least, of the causes I am about to refer to, could have been, and should have been, avoided, and some can be remedied yet, if those in power would take the slightest interest in the welfare of this industry.

Cause 1.—In the early years of gold mining in the province—up to the eighties—Nova Scotia miners were in plenty, at most reasonable wages; later, many of these men—some of the best of

them—went West, where they obtained much higher pay; and later, after the great mining boom started in our Western country, our miners practically deserted us, until, during the last eight or ten years, the greatest difficulty has been experienced in getting and keeping experienced men to operate our gold mines. Nova Scotia miners, when opportunities are afforded them, are recognized throughout this continent as being rather a superior class of workmen, and therefore they have been able to obtain wages abroad that the operators of mines here felt they could not afford to pay; therefore it has been constantly necessary to employ green men, and the experience has been that too many of them, as soon as a reasonable knowledge of the business is acquired, take flight to the regions where there is more boom and more excitement, and, as they believe, greater opportunities. Thus, mine operators are often left with their mines less than half manned.

Cause 2.—The excessive cost of fuel for power has played a most serious and paralyzing part in the cause; perhaps the greatest in the catalogue. Our mines are largely on the sea coast, mostly of easy access to shipping. Throughout all the early years of mining, and up to the taking over, under new leases from the Government, the large aggregation of coal mines in Cape Breton by the Dominion Coal Company, we were able to buy coal delivered at our wharves at a cost of from \$1.75 to \$2.75 per ton. Since the advent of this Dominion Coal Company into this country the price of coal in Nova Scotia has been nearly doubled in cost to us. This is a most serious drawback, and is the chief cause for the closing of a number of mines. Particularly has this been the case in the operation of low grade ores, on which the prosperity of the industry must depend in the future. This cause could have, and should have, been provided against by the Government when granting new coal leases to this powerful company.

It has been found, too, that in some of the more inland districts, where wood for fuel has to be used, and is fairly abundant, the large timber limit owners, who have acquired boundless areas at the nominal cost of forty cents an acre—surveys paid for by the Government—have put on practically prohibitory prices for wood, though only fit for fuel, and of no use for milling purposes. Thus the fuel question is the most serious one for all the districts.

Cause 3.—Large blocks of valuable areas are held in many of the districts by men who are, in some cases, mere speculators, and by others who are of the dog-in-the-manger type. These idle sections are entirely apart from those referred to, which have been closed down for the causes above mentioned, and this evil can only be remedied by an amended act.

Cause 4.—Much of the gold contained in our ores is coarse and nuggetty, and it has been a well-known fact that gold stealing has been practiced to an extent, in some mines, that necessitated closing them down; and yet, as the law is at present, no man can be convicted of stealing gold unless he is caught in the act. A workman may be found with any quantity of gold on him, or in his possession, but the owner—the man he has stolen it from—cannot prove it is his unless he—the thief—has been seen to take it. In Australia they have a law making it incumbent upon the possessor of unwrought gold to prove how he came in possession of it. This law has worked well, and has done wonders for the preservation of the mine owners, and the stimulation of the industry in that colony—where legislators look after the best interests of those who are legitimately developing its industries. These facts have been clearly shown to the Federal Government of this country, and for the past five years we have, through the Mining Society of this Province, been praying for such a law to protect us, but our appeals have been in vain.

None of the causes above enumerated can be charged to the gold mine owners. There are some causes, however, that lie at their own doors, and one is the indifference there has been exhibited in the gold-saving appliances. We have depended, practically, entirely on free amalgamation in the past, resulting,