decreases the average cost of development per ton in a very marked degree. Thus we find in the case given above that the $10 ore in the mine was burdened by a charge for resumption of capital of $3 a ton, whereas at the point where the highest aggregate profit is made it was only burdened by a charge of 43 cents per ton. In other words the value of a mine depends much more upon the number of tons which can be mined than upon the net profit per ton over the fixed cost of mining. A practical exemplification of this principle is seen in the well-known fact that the capital value of low-grade mines is nearly always greater than the capital value of high-grade mines. Another very interesting principle is also brought out. It is that the aim in mining is to mine the largest number of tons of the lowest gross contents per ton possible. A mine is successful according to the degree in which the gross value per ton of the ore mined is reduced, provided always, that it covers the fixed cost per ton. Few people grasp this very elementary principle. Those who ought to know a great deal better sometimes shake their heads when they see the gross contents per ton of the Rossland ores falling steadily year by year. That is the very thing which guarantees the progress, stability and permanence of the district. Another important consideration which follows from the principle illustrated above is that the capital cost of purchasing and equipping a mine is of very small importance. It is worth while spending almost any amount of money to effect a reduction of 50 cents a ton upon the fixed cost per ton. The fixed cost per ton is everything in mining, the capital cost and cost of development comparatively speaking nothing. A reduction of 20 per cent in the former might and frequently does enhance the latter a thousand per cent. The working of this process is obscured by the fact that most mines are overloaded with a false capital at the start. They do well if they live up to the exaggerated value set upon them by greedy promoters.

Some exceedingly valuable laws in reference to the population of mining districts, their industrial prosperity and taxable resources may be deduced from the principle we have been illustrating. It will be readily seen that the country gains the same benefit in the way of supporting a permanent industrial population from the raising of one ton of poor ore as it does from the raising of one ton of rich ore provided the cost of raising a ton of Slocan ore is three times the cost of raising a ton of Trail Creek ore. Then the Slocan with an output of 30,000 tons of ore per annum will support an industrial population exactly one half as great as Trail Creek with an output of 180,000 tons per annum. It may of course be a better "poor man's country" in the way of affording better opportunities to those who wish to invest their labour or speculate with their brains. That is not the point. We are now discussing the number of those who wish to sell their labour who can find a market in the respective countries. What may be called the secondary taxable resources of a country, a mining country, depend directly upon the industrial population which that coutnry is able to support. Therefore the taxable resources of the Slocan under the imaginary circumstance we have assumed would be one-half those of Trail Creek. But the wealth produced from the two districts would, under those conditions, be practically the same. Their primary taxable resources would be equal. From this it may be deduced that a tax upon mineral output is not only convenient to the revenue, but essentially just in principle.

When, however, we come to consider the incidence of this taxation some very important lessons are taught by the arithmetical calculations we have already made which are essentially true in reference to the facts of mining although cut and dried by the necessary limitations of that mode of illustration. Let us observe the incidence of the present tax of two per cent. upon these cases.

Value Per Ton.	Tons.	Gross Cost.	Result.	Tax.
10.	100,000	10.50	− 50,000	$ 9,000
9.33	300,000	8.50	+249,000	19,999
8.5714	700,000	7.928	+450,000	35,980
8.	1,500,000	7.70	+450,000	60,000

The want of equity in this tax is that part of the fixed cost per ton of ore is not exempted from taxation. In our examples this has been placed very low, $1.50 a ton. Consequently the inequality in the tax does not come out in such a glaring way as if it were higher. In order to better exemplify the bearing of the tax imagine a case where the fixed cost of breaking and hoisting ore is $3 a ton. It is obvious that under the tax this is increased to $3.16. Now let us imagine that a body of ore is developed in some mine equal in tonnage to all the rest of the ore in the mine where the profit of mining it is only 10 cents per ton over the fixed cost of mining and treating it. That is a very narrow margin to work on. But the tax reduces the margin from 10 to 4 cents. Observe that the working of this ore means a doubling of the population supported by this mine and a consequent doubling of the secondary taxable resources of the district in which it occurs. The effect of the tax is to prevent this from happening. It strikes a blow at population, at the production of wealth, at the taxable resources of the community without adding one cent to the revenue because the ore in question remains in the bowels of the earth. It is not necessary to try to exempt the development cost per ton of ore from taxation. The more ore mined the smaller this becomes per ton. And in any case no conceivable tax short of absolute confiscation would bear any relation to what the owners of a mine place on it as its capital value. The output of the Le Roi mine is taxed to resume a capital of $5,000,000, at its market price, of $9,000,000. If it were only taxed to resume a capital of $8,000,000 and the remaining million paid into the treasury of the country no drawback would have been placed on its productive powers present or to come. Its promoters would have made smaller profits, that is all. Not that anyone outside a lunatic asylum would advocate such measures of taxation. The instance is merely given to show that development cost per ton need not be exempted from taxation. But the cost of breaking and hoisting ore is on an entirely different footing. It is an important item in the fixed cost of mining any increase to which has a vast influence upon the tonnage of ore mined on which, as has been shown, the population and prosperity of the country depend. How this cost is to be ascertained and exempted depends on wholly different considerations outside the present scope. But exempted it must be. Of course a tax of two per cent. is very small. But what guarantee is there that the mineral tax will stay at two per cent. The province must have revenue and mines are its greatest