

THE VALUE OF A MINE.

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What is the value of a mine? Probably most people to whom this question would be put would simply answer: "Just what can be got out of it."

But let us suppose that the purchaser is guided by rational business principles, and that he is buying a mine, or stock in a company owning a mine, as a good permanent investment.

In deference to prevailing conditions it will be assumed that the mine under consideration is owned by a joint stock company, and that the shares in this company can be purchased freely on the stock market.

The first point to consider, then, is how much money will the mine yield in dividends; and this is dependent on a number of conditions, such as:

1. How much marketable ore does it contain, or can be extracted from it? 2. How much will it cost to extract this ore? 3. What is its value at the mouth of the shaft? 4. What is the value of the plant and property, after all the ore has been extracted?

These are questions that the mining engineer must answer to the best of his ability. But after they have been answered as well as possible under all the known conditions, the further question remains to be answered: What is the present value of the property when a rational estimate has been obtained as to what dividends may be expected from it? It is to this latter question that some attempt will here be made to offer an answer.

It is probable that the majority of men who purchase shares in mining companies regard them in very much the same light as shares in other companies, with the added attraction of unknown possibilities in the form of new but usually very improbable discoveries of pockets of rich ore. The fact that investments in these two forms of companies are inherently different is generally disregarded.

Stock in transportation companies, banks, loan companies and industrial enterprises, if the companies are properly managed, may be expected to increase in value from year to year with the natural and regular growth of business. Thus, a company whose stock was worth par ten years ago may easily be worth 2 to-day, and ten years hence, with the natural enlargement of its business, it may be worth 4. For instance, stock in the Canadian Pacific Railway is worth four times what it was twenty years ago, even though additional stock has been issued to the shareholders on favorable terms in the meantime, and with the natural growth of the country the traffic and general business of this railway must still vastly increase, and the stock will become of still greater value.

Industrial enterprises might be cited to the same effect. The manufacture of agricultural implements has greatly increased in the past twenty years, and stocks in the manufacturing companies have correspondingly increased in value. There is no reason to suppose that the limit of this increase has been reached or approached. In fact there is every reason to believe that the value of these stocks will continue to increase with the continued increase in the volume of business.

But mining investments to be successful must be made on a different basis. Instead of increasing the mine is decreasing in value with every ton of ore taken from it, and the company owning it is living or deriving its profits in the using up of its capital.

When a man invests in railway or industrial stocks he feels that in the ordinary course of events and with the normal growth of business the value of his stock is sure to increase, so that when he wishes to sell he can get a little more than his original capital back again, and he consequently feels satisfied with a rather low rate of interest. He also feels that both his capital and interest are reasonably secure. There is no thought taken or no provision made for getting the capital back in a certain number of years, for the enterprise is intended to be carried on indefinitely.

A mine, on the contrary, not only decreases in value year after year as the ore is extracted from it, but production will cease altogether after a certain number of years, for the life of a mine is usually short. Dividends will then be things of the past. The investor in mining stock is therefore confronted with this condition, that he must look for the return of his capital along with proper interest on it within a limited number of years. Any investment in mining stock which does not provide for such repayment of capital is certain to be disastrous to the investor in the end. The dividends must include a sinking fund to replace the capital and interest at a rate commensurate with the risk incurred.

When this principle is thoroughly understood that dividends of mining companies must provide for the redemption of capital, as well as for payment of interest, the next questions that present themselves and the demand answer are: How many years should be allowed for the repayment of the capital, and therefore what percentage of it should be repaid each year in the dividend? And in addition to this, considering the possibilities of failure of the enterprise altogether, what interest should be looked for on the investment?

(To be Continued.)

NOTES ON THE MINERAL FUEL SUPPLY OF CANADA

By R. W. ELLS, LL.D.

(Abstract of paper read before the Royal Society of Canada.)

(Continued from Page 212.)

The carefully detailed work of Mr. Hugh Fletcher has revealed the existence of a possibly important coal basin southwest of Springhill, along the north flank of the Cobequids. A coal seam was struck by boring, at the depth of 2,000 feet.

Small seams, such as those at Debert, outcrop on the south side of the Cobequids in formations other than the productive coal measures.

The Province of Prince Edward Island does not show the presence of any coal seams. Since all the rocks of the island are Upper Carboniferous or Permian, coal if existing at all, must be sought for at a great depth. There are, however, several peat bogs of excellent quality.

In New Brunswick the Carboniferous rocks have a very wide distribution and comprise an area of more than 10,000 square miles. At many points throughout this area thin seams outcrop, and near the upper end of