

and to the south are mostly diabases, diorites and green schists, with outcrops of quartzite.

A writer in the *Toronto Globe*, referring to the mineral wealth of the Abitibi country, says:—"Evidences of coal, copper and iron are many and prominent. I picked up a nugget of gold half the size of a five cent piece. The Indians tell of a discovery of free gold by Indians some years ago, but the locality is kept secret. Miles and miles of gypsum and mica have been found, also a lake of pitch, which was discovered accidentally by an Indian while chasing a fox."

Not far to the north, and east of Chapleau, on the Canadian Pacific, a tract of good land has been discovered extensive enough to contain eight townships. It contains as good land as any in Ontario, and is well watered and attractive. It lies due east of the Michipicoton iron country, and is evidently a dip down of the clay belt. An immense area of good land has also been located to the north-west of Lake Abitibi and about 150 miles from Lake Temiskaming. The soil is a rich alluvial clay, well suited for agricultural purposes.

These valuable possessions will all be rendered accessible by the Grand Trunk Pacific, the construction of which is now assured. The Temiskaming and Northern Ontario will be open to New Liskeard, at the head of Lake Temiskaming, in a few weeks. At North Bay, its southern terminus, connection is made with the C.P.R. east and west, and with the G.T.R. south. The latter is making a strong bid for the tourist traffic, which comes largely from United States cities, with which connection is made by way of Toronto and Hamilton. It also gives an outlet to many large manufacturing centres which will consume much of the mineral product of this vast undeveloped territory. J.J.B.

Appraisal of the Value of Coal Lands.

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(Concluded.)

EARNINGS AS A MEASURE OF VALUE.

The third method is one most valuable for the purposes for which it is used by Mr. Harris, namely, as a basis upon which reorganization may be planned, and a new company financed. It may not be adapted for general use, because it is cumbersome, and also because it does not include allowances for the value of established trade and connections.

The fourth method is useful in a majority of cases as corroborative of valuations reached by the fifth method.

The fifth method is based upon the actual earnings and the ability to maintain output at an increased rate for a long period. Should the value so reached be greatly in excess of the appraisal obtained by valuing the lands at what they fairly are worth, plus the value of plant and improvements, it is evident that the "good-will" or earning capacity is too highly valued.

While it is unwise to appraise at a high valuation the good-will of a purely commercial business, the value of a manufacturing industry producing staple products includes, as one of its most important factors, the established reputation of its products, its facilities for selling and distributing its output and the connections and friendly affiliations with consumers, dealers and transporting agencies that enable it successfully to retain its grasp upon the trade, to extend its operations and to expand and enlarge its business. In other words, an industry of this character can only be valued at its

true worth by taking as a whole its property, plant, improvements, reputation of its products, its established trade, selling facilities and connections. Proper investigation having shown that the output of the concerns can be maintained for a long period, even at a rate of production in excess of present shipments, its value as a business proposition may be safely appraised, and in so doing it is customary to assume that the business, including plant and property, is reasonably worth a sum upon which the yearly net earnings will pay a satisfactory return.

In order to confirm the valuation determined by this method, separate appraisals in detail should be made showing the value of the lands, plant and improvements.

VALUE OF PLANT.

It is a comparatively simple matter to fix the value of plant and improvements, because the cost of the materials, machinery and supplies, together with the cost of transportation and erection, or installation, can readily be ascertained. It may, however, be proper to discuss the principles upon which the valuations should be based and what allowances should be made for depreciation.

When the mine has a reasonably long life—i.e., is not approaching exhaustion—the plant and improvements, if modern (adapted to economic operation) and in good repair (in condition to give many years' service, or until the property is exhausted), may fairly be appraised at first cost, including the cost of erection, or at the present cost of replacement, because they are fairly worth this sum if the mine is to continue in operation. If this principle be adopted, no deduction should be made to cover depreciation excepting on those parts of the plant and improvements which have deteriorated in efficiency, or are approaching a condition requiring considerable expenditures for repairs or renewals, or are so old that their usefulness will be of short duration.

VALUE OF DEVELOPMENT.

In assigning values to underground mine development, the life of the mine, its daily tonnage capacity and quantity of coal tributary to it should be reviewed; the first cost of the improvements necessary for working the property, including shafts, air shafts, slopes, etc., should be computed; and a valuation reached approximately equal to the cost of the development and improvements necessary to secure a like capacity under similar conditions at a new plant. This estimate should fairly represent the value to the owner of the underground development work, but in cases where the life of the mine is short, a material deduction must necessarily be made from the appraised value.

In addition to the value placed upon underground development work proper, an additional sum should be included to represent the value of development work or dead-work, that has been done in excess of that required to maintain the output of the mine at its rated capacity. This work usually consists of headings, or entries, driven into new territory from which no coal has yet been mined; and they should be appraised at their full cost. In addition, in some mines a large amount of heading or entry work exists from which the coal has partially been mined; in these cases the work may be appraised at a value proportioned to the quantity of available unmined coal tributary to them. Another item of value which should be included in an appraisal of the value of underground development is the special work provided for future requirements connected with ventilation, drainage, underground transportation and the opening of new territory by means of inside slopes, planes or shafts.