

Mr. Robbins opens his report with a general tabular summary of silver produced and silver shipped during the past four years, and a general statement of costs for the year 1909. We notice that a total of 2,722,992.64 ounces of silver has been produced in the period 1906-1909, inclusive. As set forth under "Expenditures for Operations," the total cost per ounce of silver produced is 17 cents—a very creditable figure in view of the limiting conditions that affect the McKinley-Darragh. Under "Operations," Mr. Robbins includes all costs for shaft sinking, timbering, cross-cutting, raising and other development work. If these items were charged to capital expenditure as development, and this is the usual practice, the cost per ounce would be reduced to 14 cents. Mr. Robbins' method is to be commended.

A particularly interesting table is that giving itemized marketing costs. Of the five items—consular fees, insurance, freight, sampling, and smelter charges—the last is by far the heaviest, amounting to 4 cents per ounce. The total marketing cost is 5.3 cents per ounce.

The estimates of ore reserves, 110,300 tons, containing 5,725,000 ounces, are given in round numbers. Here Mr. Robbins avoids the meaningless refinement of arithmetic whereby reserves are estimated down to the odd ounce or even to a fraction of an ounce.

In dealing with the accidents that occurred during the past year, a careful classification as to causes is followed; and the resulting injuries are specified. This is not only sound engineering practice, but it is also good citizenship. Were this policy followed by all Canadian mine managers, there would be fewer accidents.

The extent and distribution of underground work Mr. Robbins sets forth fully. The amount of stoping is reported in cubic yards. The amount, also, of trenching is reported.

Commenting upon the character of the rock, the manager states that a man and helper in one shift of nine hours, using a 3 1-8 inch drill, will drill 25 to 30 feet in conglomerate, 30 to 35 feet in lower Huronian measures, and from 35 to 45 feet in slates, all holes being about five feet deep. The average charge of powder is about 2.1 pounds of 60 per cent. dynamite. The number of holes required for breaking a face, 5 feet 6 inches by 7 feet, varies from 9 to 13, according to the rock, the conglomerates being the toughest.

The mining, milling, and general charges are carefully analyzed. The wage schedule is given. We note that \$2.25 per day is the lowest rate obtaining. Drill runners are paid \$3.25 per day. The cost of supplies, such as meat, coal, lumber, and dynamite, appears on page 11.

Following this general information, the work done in each vein is stated, and provisional estimates of the reserves on each are furnished.

We could readily continue culling from Mr. Robbins' report, but space will not permit. Many items of interest we must be content to omit. Our readers will

find the report reproduced almost in its entirety on other pages of this issue.

The coloured maps, the diagrams, plans, and tables imply an immense amount of labour. The general text gives evidence of a critical choice of words and more than usual facility in condensation. In fact, Mr. Robbins has begun and ended his task with the clear intention of telling his directors and shareholders everything that they have a right to know. And he has succeeded in doing this within most reasonable limits.

We sincerely hope that our readers, especially those readers who happen to be mine managers, will study thoroughly the McKinley-Darragh report. Time thus spent will not be lost.

CONSERVATION AND COMMON SENSE.

On several occasions we have emphasized the fact that our sympathies are strongly with the work of the Conservation Commission. The desirability of educating the nation up to a point where ruthless waste of nature's bounties will be looked upon as a crime is beyond question. But so far as we have been able to observe, the personnel of the Commission leaves much to be desired.

In the first place, the Commission is not composed of men who possess first-hand knowledge of the resources to be conserved, or, rather, to be used economically. Lumbermen, farmers, and miners are, naturally, the persons who respectively possess the most intimate knowledge of the three basic industries. Yet not one of these industries is represented on the Commission. We should like to know the reason for this. Are lumbermen, farmers, and miners not to be trusted? Are they uniformly robbers and plunderers? Or are they ignorant children who, forsooth, must be led by the hand?

In one other respect the Commission must be criticized. The word "conservation" has become a shibboleth. The unthinking take it for granted that the present generation is the only one that has attacked the problem of utilizing properly the country's natural wealth. This, of course, is far from the truth. The fact is that "conservation" is merely a new label. In Canada, for instance, the Geological Survey and other Government bureaus have been engaged in the work of collecting and disseminating information for the last sixty-five years. And much of this information has had to do, either directly or indirectly, with various phases of conservation. The records and reports of the Geological Survey, for instance, constitute an almost exhaustless mine from which the Conservation Commission cannot do better than draw.

As we have remarked above, "conservation" is merely a new label. In all essentials the lumberman, the farmer, and the mining engineer (we mention these classes merely for illustration) have been and are becoming more and more the exponents of practical con-