

It should be remembered that silver was produced very cheaply in the first two years of the camp during the gathering stage.

For the year 1908 some costs were as follows:—

| Mines.               | Gross Value. | Charges.  | Cost of Production (include marketing). |
|----------------------|--------------|-----------|-----------------------------------------|
| La Rose Consol. .... | \$819,823    | \$281,420 | 17c oz.                                 |
| Kerr Lake .....      | 789,312      | 247,359   | 15 6-10c oz.                            |
| Nipissing .....      | 933,544      | 339,078   | 18 1-2c oz.                             |
| Crown Reserve ...    | 910,350      | 159,984   | 9 3-10c oz.                             |

These show that notwithstanding the increased difficulty in extracting the ore, these companies are still able to mine within the average.

With regard to the surrounding camps, little can be said other than that legitimate mining has just commenced, and there is some good positive evidence in favour of some of the ore bodies. They can but enhance the silver output.

The accompanying prints show diagrammatically the layout and process of the proposed works. They do not purport to be complete, except in principle.

As a corollary, it may be said that the capitalists interested in this Sampling Company are all residents of Toronto, and are not in any way connected with mines or smelters. Messrs. Campbell and Deyell hold control of the stock in order to ensure the present and future neutrality of the company.

### DISCOVERY.

There has been a lot of discussion in Northern Ontario concerning the advisability of requiring an affidavit of discovery of "valuable mineral in place" at the time of recording a claim. The wording is explicit and requires of the prospector a condition that in other provinces is only required or is expected after an opportunity to thoroughly explore the claim.

For instance, in Quebec, under the new Mining Act, any holder of a prospecting certificate may stake out a claim on finding "mineral" or an "interesting indication." Then he has four months to prospect his claim before recording or making any payment whatever. Then the discovery of mineral and a rental per acre is required. If nothing is found the claim may be abandoned.

Again, in British Columbia a "valuable deposit of mineral" is required. This is defined as "mineral in place, in appreciable quantity, having a present or prospective value sufficient to justify exploration." The last phrase allows the prospector an opportunity to open up a favourable indication without leaving himself open to a charge of perjury, which is the only result of the hard and fast Ontario law.

Having in mind the area being prospected for silver in New Ontario, the most conscientious prospector would not hesitate to stake on a showing of cobalt bloom, yet it could hardly be called a "valuable mineral in place;" it is only a favourable indication. The only possible thing is to find native silver or its ores, which is absurd to expect in every case. So the prospector, knowing the impossibility of living up to the exact letter of the law, allows himself a loose interpretation of it that practically nullifies the discovery requirement. For instance, having found a flake of iron pyrites in diabase, he will stake a claim. He argues that iron pyrites is a valuable min-

eral and is assuredly "in place," so for the chance to prospect he will commit perjury, morally and perhaps legally, depending on the interpretation of the law.

All the prospector wants is a chance to prospect. Due to staking booms, this is almost impossible in New Ontario. The man who conscientiously tries to prospect finds it staked from under him and tied up for an indefinite period. His only recourse is to stake first and prospect after, which introduces the harsh word perjury. A big factor in these rushes is the fact that a staker may stake three claims each on behalf of as many of his acquaintances as take out licenses. This has introduced many evils, including "blanketing." In one case a gang of men staked out ninety claims "en bloc," in the depth of winter, with four feet of snow on the ground. Many other groups of from twenty to fifty claims were staked out at the same time. Operations like this force the prospector out in winter, when it is ridiculous to think that a bona-fide discovery could be made on even one per cent. of the claims recorded.

The discussion aroused by these conditions would indicate that some change will have to be made soon, to give the prospector a chance. The remedy can only be arrived at by discussion and consideration of amendments in the law as it stands at present.

Some have proposed that the locator only be allowed to stake for himself. This would greatly lessen the evils of the "rushes" and would force the locator to be more careful in his prospecting. Company interests may object, but the hardship to them would not be very serious.

A relaxation of the stringent requirements as regards discovery would create a greater regard for the law, but under the present act would not be of much benefit. If coupled with a provision, such as is in the Quebec law, allowing some time to prospect after staking, but before recording it would undoubtedly relieve the situation.

But while one man may stake out any number of claims, rushes, winter staking and perjury in regard to the discovery of "valuable mineral in place" will flourish.

It is to be hoped that mining men who are interested in the opening up of the undeveloped mineral areas of Ontario will take part in a discussion; that can do no harm, and will, no doubt, be of much benefit in bringing before the authorities suggestions for the improvement of the admittedly imperfect Ontario Mines Act.

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A suggestion was made some time ago in South Africa that coloured wrappers be used for explosives, so that detection of unused fragments in sumps and working faces would be easier. This has been improved upon now by the proposal that the explosives themselves be coloured. If each kind of explosive used were given a different colour, accidents might be traced more readily. This might entail a small sacrifice of strength, but the compensation in added safety would no doubt be ample. Of course, both wrapper and explosive should be coloured. Unsulphonated red azo-dye, being soluble in nitro-glycerine, would be suitable for colouring the explosive.