

assuredly affect, as a growing evil, mining enterprises as now conducted in the western and northern districts in this Province, and that is, the rapid destruction of the forest. The construction of the Canadian Pacific Railway was attended with no protection of the forest in the public interest, with the inevitable result of the destruction of an enormous area of timber between the Ottawa River and Rat Portage. The residue within ten miles or more of the road is for the most part of little intrinsic value save as a protection to future growth and the possible re-foresting of portions of the burnt area. This gives the small timber which the prospector and miner will destroy by the square league for every camp fire, an extraneous but not inconsiderable value. No act of greater folly could be perpetrated than to allow prospectors to roam over the silent leagues of virgin forest which yet grow like islands in many of the rocky wastes of Thunder Bay and other districts,—each prospector necessarily the means of spreading fire far and wide, irresponsible and unwatched, unpunished for criminal negligence and tolerated as a necessary, and perhaps, welcome evil, with a degree of fatalism akin to imbecility. Not protect our forests against wholesale arson? Has it come to this, that we say this cannot be done?

Prof. Coleman's description, in recent issues of the *Globe* newspaper, of his own experiences while on a survey for the Government, the recent extensive forest fires in Wisconsin and Minnesota, and the great destruction of timber which has followed "prospecting" operations in Eastern Ontario, are warnings which should not be lightly considered. It must be kept in mind that there is no measure to the calamity we incur by the neglect of safeguards against the destruction of the forest. It is neither impossible nor improbable that the Minnesota horrors of this year may be visited on this Province with tenfold fury as the natural consequence of prospectors' camp fires.

6. The scientific and economical extraction of ores under Government management will afford supplies for all metallurgical industries required, or capable of being profitably maintained, in this country, and there is no doubt the ores can in many cases be profitably sold, and yet at prices which will offer bounties to the home metal manufacturer. The extensive use of lead pipe and of other manufactures of lead, afford a good home market which should be supplied from native sources, but which is not likely to be so for a long time to come, while pig lead cannot be purchased as cheaply here as in the United States. In view of the wide distribution of lead-bearing lodes, some also rich in silver, in various parts of the Province, there is ample reason why an effort should be made to develop and mine them. The growing demand for copper for electric purposes, and the presence of the ore in various forms in the Lake Superior district are facts which, under ordinary circumstances, would concur to promote mining enterprise. We are confronted by the fact that powerful corporations control the copper market, and that there never was a time when there existed so little encouragement to the private investor to enter into copper mining enterprise as is the case to-day. The Provincial Government have it in their power to enter into such enterprises with an entire freedom from risks and expenses from which no individual investor is safe. The cost of promoting companies and raising the capital required is usually one-third, or 33 per cent. The individual is never safe against the misrepresentation of promoters, whereas the Government can employ permanently the most careful experts and competent engineers, and in their permanent employment secure a guarantee of fidelity. The Government will have in its domain the most ample choice of location and the uttermost exemption from the influence of self-interest in its operations, and may under these favorable conditions put copper, lead and other ores into the market at prices which will ensure the establishment of great metallurgical industries in this Province. Last Session, \$25,000 a year for 5 years was voted to enable the iron smelter to get his ore as cheap as in the United States. This money is as likely to go into the pockets of speculators as into those of the mine owner or smelter. It would keep 25 men employed the year round at the iron mines in Thunder Bay district, and a similar number in Frontenac or Hastings, whose output should be 25,000 tons of ore or the entire amount of the bounty. Now if the Government could sell a good 50 per cent. ore at \$1 a ton, no better aid could be offered to those who would engage in smelting enterprise.

7. The acquisition of a large yearly revenue by the development and operation of silver, and especially of gold mines, becomes a necessity in the presence of the ever recurring and justifiable demands upon the Government for money for works of permanent utility, and for our rapidly growing educational requirements. Their operation by individuals or corporations will bring in no such results. In fact it is quite possible and extremely probable that mining companies will, under the present state of things, be organized to work frontier properties whose royalties and other returns will scarce pay the expense of collection together with the necessary Provincial expenses, whose machinery will be brought in duty free, whose agricultural supplies will necessarily be brought in from the United States, whose laborers will be chiefly foreigners, whose earnings and savings will benefit the United States alone, where the enriched mine owners will also spend their dividends. With more or less modification, this is likely to be the case with the greater part of the gold mining property in the Rainy River and Thunder Bay districts. I am well aware there are doctrinaires and professors, as well as brokers and commission agents, who will tell us that this state of things will enrich the country and that to hinder it will violate the principles of political economy. By all means then let us have instead another system of economy, under which this commonwealth of Ontario shall build the best school houses and raise the best men on this planet, with the help of the revenue to be won from the public mines.

The following draft of a bill for the establishment of a Department of Mines, and with various provisions respecting the management of public mines, are presented as suggestive merely, and not by any means as comprehensive of all the legislation required by the policy proposed:—

#### BILL.

An Act to establish a Department of Mines for the administration and management of the mineral property of the Province.

Her Majesty by and with the consent of the Legislature of the Province of Ontario enacts as follows:

#### CLAUSES RELATING TO THE DEPARTMENT OF MINES.

1. No lease or sale shall hereafter be made of any mining location or of the right to mine in the public lands.
2. There shall be a Department of Mines under the control of the Commissioner of Mines, who shall be a member of the Executive Council of Ontario.
3. The Department of Mines shall be composed of the said Commissioner and an Advisory Board of four mining engineers with a Financial Director, whose duty shall be to employ competent surveyors, explorers, mining captains and workmen for the public mines; to direct where such mines shall be opened and worked; to purchase machinery, mining equipment, supplies for miners, erect buildings, and engage in every undertaking requisite for the successful working of any mine; to operate diamond drills for exploratory purposes; to conduct any works for the dressing and concentration of ores, and for the reduction of gold and silver, and to sell such ores other than those of gold and silver at such times and at such prices as may be fixed by the Lieutenant-Governor in Council.
3. The sale of gold and silver bullion shall be made during the session of Parliament upon the report of the Commissioner of Mines as to the value thereof.

4. The Department shall erect and manage such works for milling, roasting, concentrating, and otherwise treating and smelting gold and silver ores as may be found expedient, having regard in such erection to facilities for private mining undertakings on such terms as may be just.

5. The Mining Engineers who shall with a Financial Director compose the said Advisory Board, shall be appointed by the Lieutenant-Governor in Council after investigation as to their fitness and special experience, and one such mining engineer shall be appointed to the charge of the following four divisions of mining operations respectively, viz.: Gold mines, silver and lead mines, copper and nickel mines, iron mines.

6. There shall be borrowed on the credit of the Province the sum of one million of dollars, which shall with any premium thereon constitute the Ontario Mining Fund, the repayment of which with interest shall be a charge upon the profits from the Provincial mines, to be paid in such manner and at such times as may be ordered by the Lieutenant-Governor in Council.

7. The management and investment of said fund, payments therefrom for all mining works, salaries and wages, and the disposal of accretions from sales and profits shall be under the charge of the Financial Director of the Department, but subject to the control of the Commissioner and the engineering members of the Advisory Board. And the Financial Director shall prepare a yearly statement of the condition of the mining fund and of the receipts and expenditures of the Department for submission to the Legislature with the report of the Commissioner.

8. Rules for the order of business in the Department of Mines, for the management of expenditures and for the audit of accounts, shall be submitted for the approval of the Lieutenant-Governor in Council, and on such approval shall have the force of statutory enactment.

9. Two per cent. of the mining fund shall be set apart as a reserve for the insurance of miners and workmen while engaged in Provincial mines against loss of life, illness or bodily injury, and every miner and workman shall pay out of his wages such weekly per centage as may be found requisite for securing to the family of such miner or workman insurance in case of death, illness or accident.

10. The Department may accept the surrender to the Crown of any land heretofore sold as mineral land on repayment by the Crown of the purchase money paid therefor with cost of survey, and may purchase any mining locations at tax sale. But the expenditure under this provision shall not exceed the sum of \$50,000.

#### CLAUSES RELATING TO THE MANAGEMENT OF PROVINCIAL MINES.

11. No quantity in excess of 50,000 tons of iron ore shall be exported in any year, and iron mining operations shall be so conducted that not more than two years' consumption for the furnaces of Ontario and Quebec shall be kept in stock.

12. No miner who is not a literate person, an adult, a subject of Her Majesty by birth or naturalization, and a resident of Ontario for one year preceding his engagement shall be employed in any of the public mines, but this shall not apply to Indians belonging to any reservation in the Province. No youth under 16 years of age shall be employed at any work under or above ground.

13. Miners, while engaged in the public mines, their wives and families, shall be afforded the means of procuring groceries, provisions and necessary clothing at an advance of 2½ per cent. on the cost thereof laid down at the miner's dwellings, and no officer or workmen engaged in any public mine shall sell goods on his own account or for other persons, to any miner or other workmen in the public mines, on pain of dismissal; but nothing herein contained shall prevent the miners from carrying on a co-operative store for the supply of all kinds of commodities except ales, wines and spirituous liquors.

14. No license shall be granted for the sale of ales, wines and spirituous liquors in any part of the districts of Thunders Bay, Algoma, Rainy River and Nipissing, not under municipal organization, or in any municipality hereafter to be organized, in which any public mine is operated at the date of such organization.

15. Allotments of land not exceeding forty acres shall be leased in perpetuity to miners and workmen on condition of cultivation and at nominal rentals. Allotments shall be made with due regard to the quantity of land available for the use of the miners and workmen at any mine.

In conclusion, let me emphasize the following matters for consideration:—

1. The enormous waste of capital in the organization of mining enterprises under the present system.
2. The losses incurred by mining enterprises through the lack of skill of mining engineers and miners and through financial stringency and mismanagement.
3. The wretched condition of miners, owing to the precarious and irregular method of conducting mining operations in this Province and the lack of insurance provision for loss of life, or bodily injury or sickness.
4. The certain destruction of large areas of timber under the present system.
5. The great revenue which may be gained to the Province by well directed mining operations in gold and silver mines, and the necessity for this revenue to meet the growing demands of our educational system and other requirements of advancing civilization.
6. The incalculable importance of affording to smelters and manufacturers of metals, a cheap and steady supply of raw material, such as, iron, copper, nickel and lead ores, at prices which, while affording a moderate profit to the Province, will practically extend a bounty to smelters.

NOTE—The reporters having published that the foregoing paper advocated the operation of public mines by day labor, and with the object of providing employment rather than of making a profit out of the industry: it is hardly necessary to say that I hold no such opinion, but the explanation is due that by "a moderate profit to the Province," I mean not less than ten per cent. Mining profits, frequently large, are generally anticipated by the prospector and broker to such a degree that a 25 per cent. dividend-paying mine would return 50 per cent. but for the price paid for its discovery and the cost of raising working capital. If iron, copper and nickel ores shall be economically mined and offered to smelters at a profit of merely 10 per cent. the result will transcend the influence of tariffs or direct bounties for manufacture. The views of President Cleveland on the value of cheap raw materials to manufacturers have no need of advocacy, as they are self-evident truths. To prevent other misconception, let me add that while the acquisition of a net yearly public revenue of ten millions of dollars from gold, silver and other mines seems to be quite practicable, there will be always less danger of excessive expansion of the mineral industry, and the creation of a too powerful mining interest under the system proposed than under private ownership. Once the Government enters upon the usufructuary ownership of the public mineral domain there will be less danger of the mining interest owning the legislature than now. There is no security given us that the existing legislation relating to mining land will be permanent. Once the public get a taste of the advantages of a large revenue from mines, it is not likely they will destroy its source by turning it over to private ownership.

The following extract from the advertisement above referred to of the Ontario Bureau of Mines, is from the advertising pages of *Mineral Industry*, published by the *New York Engineering and Mining Journal*. Although "further information" to be