

EDITORIAL

MINING INDUSTRY WANTS A REPRESENTATIVE ON CAPITAL AND LABOR COMMISSION.

At a recent meeting of the Council of the Canadian Mining Institute, it was decided to take action to obtain for the mining industry representation on the Federal Commission appointed to study the relationship between capital and labor. The name of Mr. D. H. McDougall, president of the Canadian Mining Institute, has been suggested in this connection. Mr. McDougall is well qualified to represent employers of labor. He has had much experience in the iron and coal industries, having advanced to the Dominion Iron and Steel Company before he became president of the Nova Scotia Steel & Coal Co. He is a successful manager, which means that he understands the human element in industry, as well as the technical side.

It is scarcely likely that the Government will fail to recognize the claim of the mining industry to be represented on this important Commission. That so important an industry should be overlooked when the commission was named is indication of the justice of the claim of those who have recently been agitating for more activity in public affairs by those engaged in the mining industry. We are pleased to see the Mining Institute giving evidence of its interest in this matter, and we hope that no effort will be spared to convince the Government that the mining industry must be recognized.

THE PROSPECTOR'S POINT OF VIEW.

A considerable number of leading prospectors have voiced their opinion with regard to the suggestion that claim holders are likely to be called upon to perform annual instalments of assessment work, or the alternative of paying the equivalent in taxes. Opinion seems to be largely in favor of some such measure, provided it can be applied with a minimum of hardship to the genuine prospector, and with a maximum of penalty for the "land grabbers."

Certain objections have been raised. Those following agricultural pursuits are permitted to secure patent for 160 acres of land, with the mineral rights thrown in, for living upon such land for a few months each year, and for clearing a few acres of land, plus fifty cents per acre. Why then should the claim holder be compelled to not only comply with doubly severe obligations, but also be compelled to perform such duties perpetually under penalty of forfeiting all rights to such property, provided his efforts are relaxed for any one period of twelve months? As the mining laws now stand a forty-acre mining claim costs its holder about \$1,250 by the time patent is secured. It follows that the cost of 160 acres would amount to approximately \$5,000. After reviewing this objection from various angles, it is not difficult to recognize its value. It brings to mind the question of just what affect would added compulsory working conditions or expense have upon the mining industry. Without some definite goal, that of securing a patent in due course and the attendant relief from further work, how many

claim holders would stick with their claims and perform even as much work as under the present law? On the other hand, under a system of work or pay, under penalty of forfeiture, mining claims should have greater value because they would not become part and parcel of an idle area in which all work may have ceased and toward which all or nearly interest may have died.

Looking at the question from a prospector's point of view, and supported by a great deal of comment from leading prospectors, it seems that some system of work or pay, although at first appearing as likely to add to the prospector's burdens, should really ensure to his general benefit. For instance, should the regulations be changed so as to require 30 days work to be done during the first three months following the staking, followed by 60 days during each of the following two years, then, instead of performing 90 days work during the third year as required under the present law, reduce the amount to 30 days for the third and all subsequent years. In this way, the claimholder, by performing the amount of work as at present required before patent, would hold the claim for a period of five years and three months, plus the expiration of an additional twelve months before his claim would become forfeited, or a total of six years and three months. By that time, in the great majority of cases at least, it would be possible to determine whether or not conditions warranted additional expenditure. If not, the claim would revert to the Crown and not be permitted to become idle. In this way the prospector would always be confronted with an area in which assessment work each year would make it active, or an area through which he could roam at will in search of hidden treasure. This would be in sharp contrast to the present situation in the majority of mining camps, where a few operating mines form the centre of activity, and where, for miles around, large areas of territory are held in idleness, under patent, and with no severe obligations to its holders.

Another point that should perhaps not be lost sight of is this: In cases where claim holders should decide to not perform the year's assessment work, but, instead, pay its equivalent in the form of taxes, the district in which the property is situated should receive the benefit of such taxes, a reasonable part of such money to go toward providing roads, trails, bridges, etc., for the general benefit of all concerned.—J. A. McR.

SHOULD ONTARIO MINING COMPANIES BE REQUIRED TO SPEND PART OF PROFITS IN PROSPECTING?

Officers of mining companies operating in Ontario will find something worth considering in the letter on "Encouraging Prospecting," which appears on another page. It is suggested that a tax of 2 per cent. be levied on all mining profits, the money thus raised to be expended by the company paying the tax in actual pro-

specting. The work would be under the sole supervision of the company and would be for the company's sole profit.

This appears to us as a scheme that should appeal to those who have been fortunate enough to make large profits from mining operations. We feel sure that they are ready to do their part towards making new discoveries if some reasonable plan is suggested. All know that discovery is the first essential in the mining industry. All wish to encourage the prospector. All will have more opportunities of expanding their business and perpetuating their company activities if more new discoveries are made. The scheme proposed not only points out a way in which companies can enlarge their operations, but affords them an opportunity of contributing towards the general welfare of the country by speeding up the development of our mineral resources. The prospecting tax would not be a hardship on the industry, but rather a sort of sinking fund for the provision of new discoveries. It would be at the same time a guarantee to the public that some part of the profits from successful mining ventures would be devoted to searching for other ore deposits. We believe that the interests of the mining companies and the general interests of the province would both be served by the adoption of a scheme of this sort.

GEOLOGICAL MAPPING OF MINERAL AREAS.

In the letter on "Encouraging Prospecting" will be found suggestions as to ways in which the Ontario Government might help prospectors in their search for mineral deposits.

With regard to geological mapping, the chief complaint which we would make is that there is not enough of the kind that has been done in some parts of Ontario. The Ontario Bureau of Mines, has through its geological department contributed greatly to the discovery and intelligent development of mineral areas. Unlike our English friends, the geologists of the Ontario Bureau of Mines have worked closely with the prospectors and development companies. We have had many instances of pioneering work by geologists in Ontario under the leadership of Dr. W. G. Miller, the Provincial Geologist. A serious attempt has been made to map promising areas ahead of the prospector, or along with him. Real assistance has been given.

Those who have prospected or developed prospects in such areas as Cobalt, Porcupine, Kirkland Lake or Gowganda will certainly acknowledge that the work of the geological department of the Ontario Bureau of Mines has great economic value. The reports and maps by Miller, Knight, Burrows and Hopkins have been especially useful.

But there seems to be no proper realization of the magnitude of the mining industry which could be built up in Ontario. We are making progress, but is far too slow. We are not organized on a scale which comes anywhere near approaching that which is needed. The geological mapping of promising mineral areas in this

province; preliminary mapping of new areas and more detailed study and mapping of areas that are being developed, is proceeding at a pace which would indicate that the Government is too easily satisfied. The record of what has been done is a good one; but in our opinion it is only an indication of what might be done. Possibly, if the past record were not so good it would be easier to direct attention to the possibilities ahead.

When it is realized that our progress is far too slow, that it does not measure up to the possibilities for mining development in Ontario, it will be found difficult to suddenly enlarge the scale of operations. Geologists capable of doing really useful work for prospectors in Ontario are not made in a day or a year. Even should the Government realize the necessity for speeding up the geological work, it will be found not easy to do so, owing to lack of suitably trained and experienced men.

This brings us to another matter, that of remuneration for geologists engaged by governments. There has been too much made of the honor, glory or "kudos" that accrues to scientifically trained workers for their contributions. The contributions would be just as good, and probably better, if the workers were properly paid. The industry is suffering from a failure to realize that the geological mapping is not proceeding at a proper pace, that there are too few workers, and that we are unlikely to have enough until this department of the industry is organized on a proper basis. It has been the fashion to get geological work done by bestowing praise. Only a limited number of men can be fooled in that way for a long time. The praise may be sincere, and there is often no realization of the way in which acceptance of praise instead of pay for work done reacts on the industry and delays development of our mineral resources.

The professor who tries to impress his students with the great value of a "halo" for scientific work accomplished is sometimes unwittingly delaying development. Geologists trained in our universities remain for a varying length of time under the influence of the "glory" doctrine. Our objection to the doctrine is that it delays development of mineral resources. The work of our Ontario geologists would be more useful if their salaries were doubled and they were given each several assistants at their present salaries, so that they might train up a body of men who would be able to do the required work on a scale that would be more in keeping with the natural wealth of the country. The purpose of mining is to add to the wealth of the community, and money expended in geological mapping would bring big profits.

There has been much talk lately of the failure of the public to realize the value of the work of technical men. There is good reason for such complaint, but so far as those who are engaged in mining are concerned, and we can speak of geologists in particular, the public is not so much at fault as the technical men themselves. The geologists have been buncoed. They have been handicapped by the fact that there has been confusion be-

tween geological work done solely to satisfy a thirst for knowledge, sometimes called "pure" science, and geological work done to gain information that will have a money value in the development of ore deposits. It is not surprising that those who wish to attract students away from industry should endeavor to surround such work with a halo in order to make it attractive. But those whose work is in the industry, those who are applying science to industry in order that they and the whole community will benefit, need no praise from their brother scientists. What they need is a fuller realization of the money value of their work.

We have no desire to belittle the geological work that is done without regard to economic results, for it is not always easy to determine what the actual value of such work will be. But where the purpose of the work is economic there should be compensation in money, not merely in praise. Labor and capital are expended in the mining industry for a definite purpose; to make profits. In order that the industry should grow properly, all those connected with it should have that purpose clearly in mind, and all should see that they share in the profits. If there is any department that is not receiving its share, then that department will lag behind and hold back development of our resources, for it will fail to attract a sufficient number of men who have a clear view of the purpose of their work.

It is generally admitted that development of our mineral resources is greatly to be desired, and there have been pointed out ways in which the government can help to speed up such development. Much of the work must be left to private enterprise; but the geological mapping can well be done by governments, provided that those in charge of such important work are properly paid for their services. A certain number of excellent workers have been kept in the service in spite of inadequate salaries; but the industry is not satisfied with this condition of affairs. If the government is to assume a part of the work in developing our mineral deposits, it should be more strongly impressed with the magnitude of the work to be done and endeavor to get ahead faster. At present, in Ontario, there is a serious endeavor being made by the geological staff of the Bureau of Mines to keep up with the prospector. Mapping is done each season in areas where prospectors are working; but there should be twice as many geologists doing such work, and there should be others of the same calibre mapping areas ahead of the prospector and others doing more detailed work in areas being developed.

COBALT SILVER MINES.

The shipment of nearly \$1,000,000 in silver bullion in addition to the large shipments of ore during the month of March from the mines of Cobalt is ample evidence of very satisfactory prosperity in the silver camp. With the largest consignment of bullion ever shipped to the Far East even now on its way to India and the flow of white metal expected to continue, and with the United States likely to be a purchaser for

considerable time to come, there are no visible signs of even the possibility of a recession in the quotations for silver. While work is being carried on at a maximum capacity at the mines of Cobalt, activity is increasing in the Gowganda and Elk Lake fields. Also, more or less interest is once more centering on the Casey-Cobalt area.

EXPANSION OF GOLD MINING IN NORTHERN ONTARIO.

At Porcupine the Hollinger Consolidated is beginning to reap the advantages from expenditures on equipment during former years. The entire 160 stamps are falling. Shareholders who have been denied maximum dividends in recent years should now reap profits in multiplied form. During the last half of the current month the mill of the Dome Mines will again be tuned up, after having lain idle and silent during the stress of war. Indeed life in the entire Porcupine camp is being rejuvenated. The same is true in the Kirkland Lake field. The Kirkland Lake mill set in operation two weeks ago is giving satisfaction. The Lake Shore mill is operating at full capacity. The Teck-Hughes mill is in operation, and with a reasonably short time the mill of the Tough-Oakes Gold Mines will be re-opened. Before the end of April the construction of the Wright-Hargreaves mill will be in full swing, and by fall at least five mines in the new camp should be producing gold.

ROYALTIES UNDER DOMINION LAWS.

Editor, Canadian Mining Journal:

Sir,—I beg to call your attention to an article which appeared in The Canadian Mining Journal dated the 9th instant, entitled, "Royalties under Dominion Laws," in which you state that the change from a freehold system to a leasehold system, insofar as Federal mining rights are concerned, was made by Order-in-Council, and has stirred the interest of all who were seriously concerned with the future of mining development.

Would you permit me to make a correction in this article? The change to which you refer was not made by Order-in-Council, but by Section 8 of Chapter 27, 4-5 George V., assented to on the 12th day of June, 1914.

This change in the provisions of the Dominion Lands Act rendered it impossible for the Department to frame regulations for the disposal of mineral rights by patent, but by lease only, and from the date upon which this legislation was assented to the form of final title to all mining rights acquired subsequent to that date must necessarily be made to conform to the provisions of this legislative enactment.

Yours, etc.,

H. H. ROWATT,

Ottawa, April 23, 1919. Controller.
Mining Lands and Yukon Branch,
Department of the Interior.

Ophir.

The ore shoot recently encountered at the Ophir property, although apparently more important than the one discovered a few weeks ago, has pinched out. Further lateral work is proceeding with fair promise of encountering additional shoots and with the hope of some one of these proving of substantial importance.

-:- Encouraging Prospecting -:-

Editor, Canadian Mining Journal:

Sir,—At the recent International Mining Convention which was held in Vancouver on March 17th, 18th and 19th, the British Columbia Government officially presented to the visiting delegates the advantages which that Province offered to the prospector. This was done through the Government engineers in charge of the six mineral survey districts into which the province was divided in 1917. Each engineer, acting on instructions from the Minister of Mines, gave a paper at the Convention dealing with the mineral resources and possibilities of his particular district, suggesting what districts offered the greatest chances for success to the prospector. These papers were all optimistic, in fact very optimistic, and the result of this official advertising cannot but be helpful to the province, not only through attracting prospectors from other provinces and states as well as holding their own prospectors, but by attracting many new men into the prospecting profession, and it is well known that this profession generally holds its members for life.

Manitoba is endeavouring to obtain control from the Federal Government of the natural resources of that province and, if successful, will make a strong bid for prospectors to explore that portion of the great pre-Cambrian Shield which is within her boundaries. The wonderful success attained by the few prospectors in that district in the past augurs well for the future and if, as suggested, the Manitoba Government encourages the opening up of that district by means of railroads, by subsidizing smelters, and even by "grubstaking" prospectors, we may expect many a northern Ontario pioneer to transfer his activities to the neighbouring province.

Several exploratory parties are to explore parts of the hinterland of Quebec this summer and the Dominion of Newfoundland has already taken more than one well-known explorer from northern Ontario.

The Province of Ontario is at present short of prospectors. Even before the war the number was decreasing. During the war many enlisted. A considerable number of these men have either made the supreme sacrifice or have returned physically unfit to continue their work in the bush.

The discovery of a new camp of sufficient importance to cause boom conditions for a couple of years would solve the problem, as many new men would be attracted to the game, but the probabilities of discovering a new camp are lessened by the very fact we are considering—the lack of prospectors. The necessity of the Province of Ontario holding the few prospectors it has against the inducements offered by other provinces, and the equal necessity of adding to this number must appeal to every person interested in the future of the mining industry in this province. It is unfair to point to the advancement made by this province during the past fifteen years and argue from that, that the future of the industry is assured without adopting any definite scheme for encouraging prospecting. It must be remembered that it was the discovery of Cobalt by the accident of railway location which gave Ontario a new industrial class, the prospectors. Before that there were a few prospectors in Sudbury, in western Ontario and

in Hastings county, but the number was very few. As against the argument of *laissez faire*, it should further be remembered that Ontario before 1903 as the richest and the most thickly populated and the most developed of any of the provinces of the Dominion, and yet it was practically unrecognized as a mineral province. The industry of prospecting, developed by the accidental discovery of Cobalt, directly resulted in the discovery of other silver areas and of the enormous gold area to the north.

The prospector is the first essential to the discovery of the mineral resources of a district such as northern Ontario, and yet, after the discoveries are made, it is not the prospector as a rule who reaps the greatest benefit from the development of these mineral resources. It is true that in many instances in the north the prospector made a fortune, but even in these cases the prospector did not desert the country. He either became an operator, or he used part of his money in grubstaking other prospects. But those people who reaped the greatest benefit form the rich mineral resources of northern Ontario, that is those who received dividends, do not as a class expend any appreciable amount of their profits in attempting to discover other mineral bodies to replace the ones the exhaustion of which is paying them large returns on the monies invested. Many of these people did not even participate in the gamble or developing the prospect. They bought it when the future of the property was assured. Would it not be fair to ask these people, in return for the profit they reap from the exploitation of the mineral resources of the province, that they expend a small proportion of these profits in prospecting for other valuable ore bodies the discovery of which would enormously increase their profits. A manufacturing industry does not hesitate to use part of its profits in seeing new fields. Many mining companies are anxious to develop new properties, but if we have not the prospectors, we cannot have the prospects to develop.

I would suggest that every mining company should use a small portion of its profits, say 2 per cent, in prospecting. During the past 15 years the mines of Ontario have paid not less than \$130,000,000 in dividends. The proportion of this I have mentioned would amount to \$2,600,000, or sufficient to have kept an army of between 250 and 300 prospectors in the field every year during the past 15 years. The mining companies are in a better position than anyone else to undertake and supervise this work. They have their own engineers acquainted with conditions in northern Ontario. These engineers would be able to intelligently direct what districts their prospectors should work in, and would decide whether any discoveries made were worthy of exploration. If encouraging locations were made, no time would be lost in seeking capital, or in arranging terms of purchase and any development work done would be done intelligently with a view to finding out as quickly as possible the value of the property and not with the idea of sale. Further, the company's engineer would know when to quit, and money would not be needlessly wasted. Such a scheme would almost certainly meet with success in a proportion of cases and would prolong the life of the company. The pro-

spector would require to be given an interest to ensure his best efforts and, during the winter months, would no doubt be employed in some capacity at the mine. I do not think the shareholders would object to such a requirement. The tax would be levied only on paying companies; it would not be a burdensome tax; the money would be expended in the interests of the company and would be spent by the company's own officials.

In addition, and to round out such a scheme, there should be aid on the part of the Government. This aid should follow the policy at present pursued by the Government, in mapping geologically, ahead of the prospector if possible, and in trails and roads, the free identification of minerals, the throwing open of any districts withheld from surveying, and making the Mining Act as flexible as possible. The last would necessitate the removal from the statutes of the obnoxious and foolish "discovery" clause. In addition, I think the Government should start night classes for prospectors in centres like Sudbury, Haileybury and Timmins. In Sudbury and Haileybury these classes could be in connection with the mining schools at these towns, utilizing the mining teachers already on the staff. Mineral collections containing all Ontario ores and minerals liable to be found in Ontario should be at all recording offices and at the night schools. A certain number of free assay coupons, good at the Provincial assay office, should be given with each miner's license. This would not be necessary for the mining company prospectors, but would be of advantage to the independent prospector. Further, a Government testing plant, where small lots of ore would be sampled and purchased by the Government from the prospector, would encourage the prospector to develop his claim.

To summarize, I would suggest the following as one way in which active prospecting could be encouraged in Ontario:

1. The levying of 2 per cent tax on all profits in mining, such money to be expended by the company paying the tax in actual prospecting and under their sole supervision and for their sole profit.
2. Increase geological work by the Government.
3. Government night schools for prospectors.
4. Collection of minerals at all Government recording offices, night schools, and other localities where of advantage to the prospector.
5. Five free assays with each miner's license.
6. Government testing plant, where small lots of ore could be sold.

Yours, etc.,

A. READER.

Toronto, April 24, 1919.

GOVERNMENT PROSPECTORS.

The Great War Veterans' Association, Winnipeg branch, has had before it, proposals concerning the development of Canada's mineral resources. The following resolution was passed a few weeks ago:

WHEREAS it is essential in the interests of Canada and of the returned soldiers that the natural resources of this country be determined and developed as quickly as possible;

AND WHEREAS during the last forty years the work done by the Geological department is infinitesimal compared to what remains to be done with regard to the determination with a view of development of said resources;

AND WHEREAS it is considered that four or five

hundred trained parties each under the direction of a competent mineralogist could with great advantage be sent out to examine different sections of the country each summer, particularly that portion of the Dominion lying between the Great Lakes and the MacKenzie River, and that all necessary instruction and training could be given to these parties during the winter;

NOW THEREFORE BE IT RESOLVED by this, The Great War Veterans' Association of Canada (Winnipeg Branch) that the Federal Authorities be requested to take up this matter as quickly as possible with a view to tabulating the mineral and other resources of the unexplored parts of this country in the shortest possible time and to training the necessary number of returned soldiers (say from 10,000 to 12,000) without delay, provision also being made to see that those discovering valuable resources obtain a fair share of the profits by way of royalty or otherwise in addition to such salaries as they shall receive as Government Prospectors.

Lake Shore.

During the month of March, according to official figures to your correspondent, the Lake Shore Mine produced \$45,364.46. This is the highest month's record in the company's history. Mill heads continue to average between \$24 and \$25 to the ton. The mill treated an average of a fraction under sixty tons daily for the period. Satisfactory progress was made underground.

Porcupine Towns Growing.

At last it has been definitely stated that the mill of the Dome Mines will be set in operation on a moderate scale during the last half of the current month, and that from then on operations will be rapidly speeded up. This official announcement followed a meeting of the directors held early in the week, in New York, at which time three new directors were added to the Board.

At the present time the number of mine workers engaged in the Porcupine field exceeds the total number engaged at the mines of Cobalt. This number will be still further increased by perhaps fifty per cent. during the next few months. As a result of this, the camp is booming. Housing capacity is not only taxed to the utmost, but is quite inadequate to meet the great and growing requirements, and an extensive building program appears to be imperative. Real estate, as well as interest in mining is rising rapidly. Instances on record show an increase in shares of mining companies some times amounting to two and three hundred per cent. The same is true of real estate.

B. C. Resources.

British Columbia, (Mr. Casey believes, has the greatest natural resources in the world, and the fact that they have hardly been touched is surprising. He is much impressed at the extent of water power to be had as well as minerals. The wonderful prairies with their productiveness, east of the mountains and the great harbors, he believes Vancouver is the natural doorway to the east and that there is evidence of a great prosperity and development close at hand.

The B. C. climate is superb and none better anywhere.

Mining Taxation in British Columbia

A review of the taxation legislation, passed at the session of the British Columbia Legislature just prorogued, shows that no important changes have been made insofar as the mining industry is concerned. The most noteworthy alteration is an amendment which brings the coal mining companies under either the Royalty tax of 10 cents a ton on all coal produced or the Income Tax Assessment, the Government having the power to select whichever will yield the greater revenue. Coal used in the manufacture of coke is not taxed until it becomes coke, when it is assessed 10 cents a ton. Two other amendments passed have to do with the regulations to govern assessors in arriving at what is known as "Taxable Income." One of these provides that "income derived by non-residents from interest on loans, salaries or directors' fees where these have been otherwise assessed with the Province," shall be exempt, and the other specifically states that no deduction shall be permitted for depletion or exhaustion of a mine.

The amendment relating to the collieries is noteworthy as indicating that the Provincial Government does not intend, as was suggested, increasing the 10 cent a ton tax to 25 cents a ton. Those referring to the Income Tax are worthy of special attention only because they make clear that there is no present intention to meet the wishes of some of the large metaliferous mining companies of the Province, the chief of which are that the income tax should allow the deduction of interest on capital borrowed from outside for the development and operation of the property, in other words, that taxation should be based on net and not on gross income, and that there should be further deductions for depreciation and for exhaustion of mine, etc.

The taxation problem is a serious one in British Columbia, as in fact it is throughout Canada at the present time. The Government two years ago announced its intention to attempt to revise, refine, and put on a more scientific basis its method of deriving revenue. With this end in view Prof. Robert Murray Haig, Ph.D., Assistant Professor of Economics at Columbia University, was appointed to make a special investigation of conditions and to offer suggestions for total improvement. A Taxation Board also was named to conduct thorough and detailed research work in conjunction with Prof. Haig to the end that a comprehensive measure might be prepared for the consideration and guidance of the Government. The Taxation Board's report, with which was coupled that of Prof. Haig, was laid before the House during the last Session, and some of its comments and recommendations in regard to the mining industry are of interest.

The Taxation Board submits what are termed its first and second reports, and in its former deals with mining as follows:

Re Allowing for Exhaustion of Mines.

"This Board, after hearing the evidence submitted and the pleas made to support the proposal that such an allowance be made, cannot recommend that any

such allowance should be made before income-tax is levied on net profits; for these reasons:—

"There is no law we have found providing for such in any country whose laws we have inquired into where the taxation on mines is a tax levied on the net income therefrom, and in England the decisions of the Courts are clearly against it. It is safe to assume that before capitalists invest money in a mine they will know with a great degree of certainty the value of the ore-deposit therein, or, rather, they will have some proof that there is enough ore to justify the venture, and will believe that in the operation of producing and selling the product of the mine they will be able to make enough profits to pay interest on the capital invested and create a sinking fund to replace the capital invested before the mine is exhausted.

"They will be guided by the same principle by which a teamster is guided when he buys a horse, who expects to make enough profits from its use as will pay for feeding it and pay for another to take its place when it dies or is no longer able to do its work.

Re the Mineral Tax on the Value of the Ore, 2 Per Cent.

"The Board recommends the continuance of this tax, as it is levied in substitution for all taxes which might be levied upon the land from which the ore or mineral is taken, a tax on the estimated value of the ore in the ground, and for the personal property used in the working of such mines.

"The great efforts that have been made to show that to levy this tax and to tax the profits made in the undertaking is dual taxation must fail under a proper analysis of their relation.

"The mineral-tax is imposed on the party who is given possession of the mine, by licence or otherwise, and because he has been given control of it as against any one else in the community and secured by law in that control, and has no relation whatever to the principal or the basis of a tax on net income.

"It is levied on the same principle on which a farmer is taxed for the privilege given him by the community for the exclusive use of his farm, and for the benefits that he receives from the community in the enjoyment of that use, and has no connection whatever with the tax levied on the profits he makes out of the community by the exercise of his energies applied to that farm. And the tax that is levied on farmers' profits is no greater in proportion than the tax levied on other taxpayers who have no privilege or licence to use any part of the domain of the country.

Re Allowing Interest on Capital Invested by a Company in a Venture to be Deducted from Profits before Income Tax is Levied Thereon.

"This Board submits such should not be allowed. First, it is the amount of the net profits made by a company or individual which is the measure of the value of the opportunity given by the community to make such profits. This is the basis for and, indeed, proof of the fairness of a tax on net income.

"And seeing that there is no fixed relation between the amount of capital invested and the amount of

profit derived from the investment, it would work out unfairly to allow such deduction. It may happen—and, in fact, very often does happen—that a company investing half the amount of capital that another company invests will make as much profits from their venture as the other does.

“In support of this recommendation, that interest should not be allowed on capital invested by a corporation, we quote the following from Professor Seligman. He says:—

‘In England, the income tax payable on annual profits or gains, according to Schedule D of the income-tax, is advanced by the corporation, and is deducted by it from the dividends on interest due the security-holders, who are then to that extent exempt from the income tax.’

“He says further, ‘Taxation of interest on corporate debt is not double taxation, because the coupons, like the dividends, are integral parts of the income; because both bonds and stock together form what is really the working capital from which the income is derived.’

“There is therefore the best authority for not allowing the deduction of interest on borrowed capital before income tax is levied, and this principle will hold, with equal force, against allowing any rate of interest on invested capital being set aside before income tax is levied on net profits.’

Taxation of Coal Mines.

In the Board's second report the submit of taxation of coal mines and the mining industry generally is commented on as subjoined:

“In the draft Act submitted herewith we have provided that the taxation of coal mines be changed to bring the owners thereof under the income tax provisions of the Act. We have done this for the reason, as we believe, that the present system is most unfair as between the owners of the different mines in that it takes, like the old tithe system, a fixed portion of the product without any consideration of the relative cost of production as between one taxpayer and another. The measure of this injustice will be found by comparing the cost per ton of getting coal to the point of delivery for sale from the mine from which coal can be produced the cheapest, with the cost per ton of getting the coal to market from other mines whose output is produced under less favorable circumstances. The inequality in the incidence of taxation under the present Act no doubt discourages the working of mines that afford but a small margin of profit, and militates against the opening of new mines, which in the early days of development are unduly burdened by this method of taxation.

“We have placed the value of coal lands, as such, for assessment at the price at which they can be bought from the Government—namely, \$15 per acre. There is no practicable way by which an assessor can determine the value of coal land as such, nor does the value of the surface give any index to that value. Therefore, to place these lands at an equal value for coal-mining purposes is probably as fair a way as can only be discovered by mining the coal. Although the relative value arising from difference of location might be considered as a reason for differentiation in assessed value, yet as this will be reflected in income and compensated for in the equalizing result of net income tax, it need not be considered as important.

“In providing for the taxation of mines other than

coal mines, we have followed the lines indicated in our former report; that is, to place in addition to a tax on the net income from the mine an initial tax on the net value of the ore in substitution for all the other taxes that might be levied—namely, a tax on the value of the surface of the land for the purpose for which it is used, a tax on the estimated value of the ore in the mine, and a tax on all the buildings, plants ore in the mine, and a tax on all the buildings, plant and machinery used in or about the mine in connection with its operation. We have left out the alternative given to the Government by the present Act, to take a tax on the product of the mine or a tax on the income from it, whichever is found to be the greater. We submit that this method is wrong in principle and that it should not be followed, as it places an unequal burden on mine-owners in the comparative advantage to the mine with the richest ore and other favorable conditions as compared with other mines not equally favored.

“To put a fixed percentage tax on the net value of ore which costs 20 per cent. of its value to get it, and the same fixed percentage on the net value of ore which costs 80 per cent. of its value to get it, is so clearly inequitable that it has only to be stated to be condemned. Although the principle so condemned is applied in the draft Act submitted, its application to the extent provided finds justification in the fact that the tax so levied by it is in substitution for all the other taxes that might be levied, as above stated, as a real property tax, and for the further reason that in the case of a struggling mine during the early stages of development it may be much less than those taxes would be for which it is substituted.

“In the United States there is probably no subject of taxation which has aroused so much difference of opinion and controversy as the taxation of mines. This has arisen largely from the rigidity of the constitution of nearly all the different States, constitutions which crystallized into law the experience of a period when tangible property was taken as the sole evidence of the ability to pay taxes. The economic changes that have taken place since that time have created new conditions in which tangible property is not only incomplete evidence, but very misleading evidence as to where the “power to pay” is to be found. There is, therefore, in that country great effort being made to change this principle in taxation, and in many of the States some modifications have been made in that basic law. Yet few of them have got quite free from that die-hard notion that all things having a sale value should be taxed on that value irrespective of their nature or use—not yet realizing that it is not the thing or means used in the production of wealth that should be taxed, but that it is the wealth produced that should be made bear the burden of taxation, as that is the only thing that gives the “power to pay.”

“Hence we find two impossible things attempted by assessors there—one to value ore in the ground, the other to find out the amount of capital invested in some undertakings. The latter impossibility is stranger than the first, which arises from two causes—one of which is its amazing shrinkage if it is to be made the base of taxation, the other being its wonderful expansion if the interest thereon is allowed to be deducted before the income arising therefrom is charged with income tax. The members of this board have reason to think that no country in the world gives mine-owners

a safer method of taxation than the one submitted herewith, for it practically imposes no taxes on them until their mine reach a productive stage."

Prof. Haig's Comments.

Prof. Haig's comments on various phases of mining taxation are not altogether in harmony with those of the Board, and are appended:

Coal Lands.—"Coal lands are placed in a separate category for purposes of taxation. They are defined as all lands "owned, leased, held under licence, claimed, or occupied by any person for the special purpose of mining coal therefrom, and which is not held or used for any other purpose." These lands are subdivided into two classes. Lands in Class A, which include the lands which are being actively mined, pay the same tax ratio as improved agricultural real estate, 1 per cent. Class B lands, consisting of unworked coal lands, are taxed at a 4 per cent. rate (until 1917, 2 per cent..

"The distinction between the active and inactive coal lands rests on the same theoretical foundation as the distinction between improved and wild land. It is, of course, directly contrary to the fundamental theory of the income-tax. In any reformulation of policy which is attempted with respect to wild lands, coal lands should be included in the consideration.

"The tax on coal land is not of great fiscal importance, the total levies for years past, as set forth in Table VIII., having been in the neighborhood of \$50,000 annually. The increase in the rate on Class B land in 1917 causes a substantial increase in the levy. But, if the absence of formal complaint before the Taxation Board be of any significance, the higher rate has not caused great dissatisfaction. Certainly the burden added to the coal-mining interests is in no sense comparable to that added to metalliferous-mining interests by the legislation of 1917.

Table VIII.—Levies on Coal Lands, 1909-17.

Year.	Class A. (Active.)	Class B. (Inactive.)	Total.
1909	\$15,234	\$ 5,459	\$20,694
1910	17,367	5,004	22,371
1911	19,787	22,920	42,708
1912	20,651	23,651	44,303
1913	16,443	34,058	50,502
1914	22,696	33,444	56,140
1915	21,930	37,264	59,195
1916	20,093	36,400	56,493
1917	21,038	74,432	95,470

Allowances of Deduction for Depreciation and Depletion.—"The provisions of the present law make it impossible to deduct depreciation and depletion allowances from gross income in arriving at "taxable income." This situation does violence to business customs and good accounting practice, and is the cause of much bitter resentment, particularly among the large taxpayers. Depreciation is a very important item in many industries, and, moreover, it varies greatly from business to business. Consequently not only does the taxpayer consider himself taxed on an item of prime cost as though it were a profit, but he also, quite properly, feels himself at a disadvantage as compared with his neighbor whose capital is of a nature which depreciates less rapidly than his own. It is the prevailing practice generally where income-taxes are levied to allow reasonable deductions for depreciation, and it is strongly recommended that the

law be so amended as to permit such deductions in British Columbia. Allowances for depreciation should never be permitted to exceed the amounts charged for such purposes in the accounts of the enterprise. Repairs, narrowly defined, should be deductible in addition to depreciation, but renewals and replacements are properly covered by depreciation itself.

"Obsolescence is one of the elements in depreciation, but practice varies in regard to allowing it as a deduction in determining income for purposes of taxation. The Wisconsin law expressly forbids such deductions. The United States Federal law permits them, and the language of the new Dominion law is evidently sufficiently broad to allow them at the discretion of the Minister of Finance. In case they are allowed, the deduction should be restricted to the obsolescence which actually accrues. Obsolescence cannot be anticipated with a degree of certainty necessary to make it a proper deduction before its actual occurrence.

"As would be expected where mining forms so large a part of the economic activity of the Province, there is dissatisfaction because of the fact that no deductions are permitted on account of depletion. If the income-tax is to be a tax on true net income, such allowances should certainly be made. This coincides with the prevailing practice in American income tax laws. Depletion is specifically provided for in the new Dominion law, and in the Wisconsin income tax law. Formerly it was permitted only in part by the United States Federal law, but recent changes make possible full deductions.

"In allowing for depletion, the total deduction should never exceed the actual cost in cash of the ores and deposits. If this rule is applied, mistakes in the direction of too great or too small allowances for depletion tend to eliminate themselves. Thus, if depletion is claimed at too heavy a rate, the taxable income in later years would be increased, whereas if the rate of depletion is made too light it can be increased and the tax correspondingly lightened when this becomes apparent.

"Only two points can be advanced in defence of the present practice of refusing deductions for depreciation and depletion. One is that the Province cannot afford to give up the revenue which it would lose if allowances for these purposes were permitted. The other is that it is impossible to construct a satisfactory plan for the determination of the amounts to be allowed as deductions for such purposes. In regard to the first point, it may be confidently asserted that it would be better, in the case of depreciation at least, for the Province to advance rates on the new base to a height sufficient to make up for the loss in revenues. The second point, considered in the following section, is more serious.

Allowance of Deductions for Interest on Borrowed Money.—"At the present time the law forbids the deduction of 'any interest on borrowed capital from which an income is derived, if such interest is paid to a lender who is not a resident of the Province, or to a company as lenders, which company does not transact business in the Province, and which does not pay taxes thereon in the Province.'

"Whether deductions should be permitted for interest paid on money borrowed from non-residents in this particular situation is a question concerning which much can be said on both sides. Fundamentally it involves the whole theory of situs in income tax-

tion. It may be urged with some appearance of justice that the authority in whose jurisdiction the income is earned should have first claim upon it for purposes of taxation. But British Columbia does not accept this particular theory of situs in a rigorously logical fashion, for no allowance is made for deductions in the case of citizens of British Columbia who have invested their capital abroad. From the point of view of the business, no distinction between resident and non-resident capital can be justified. As the business-man views the situation, he is permitted to borrow locally without penalty, but can borrow abroad only upon condition that he pay the Province (in some cases) 10 per cent. of the interest. This seems to him to be anything but taxation according to ability to pay. Moreover, when there is such a dearth of local capital it appears to be a direct discouragement to capital seeking investment within the Province.

"However, there is a serious, practical question involved because of the manner in which many of the large undertakings in British Columbia are financed. For often the securities are so arranged that practically all of the money invested is represented by bonds, the true owners of the business appearing as creditors with their money loaned to the concern rather than as investors owning directly their equities. Under such conditions the deduction of interest charges in determining taxable income would convert the income-tax into an excess-profits tax. This would mean added variability in revenues and higher rates if the same yield was to be secured. A combination of a heavier property tax with such an excess profits tax offers interesting possibilities. At the present time, however, it is the opinion of the investigator that the allowance of deductions for interest on outside capital, important though it be, is not so urgent a matter as are some of the other changes, such, for example, as deductions for depreciation. If it can be afforded, it might be well to introduce it with a limitation upon the amount, somewhat after the fashion of the United States Federal income tax law, which permits deductions for interest on indebtedness "to an amount of such indebtedness not in excess of" the capital of the company and one-half of its interest-bearing indebtedness. The Wisconsin law, which formerly restricted deductions for interest in a fashion very similar to the Federal law, has recently been changed so as to permit full deduction. Such limitations are open to serious criticism. There is no logical stopping-point between any allowance at all and complete deduction of interest. Moreover, limitations of this kind have an unfortunate tendency to encourage excessive capitalization. They can only be defended on practical grounds of fiscal necessity.

Allowance of Deductions for certain Fees and Salaries.—"The law at present forbids deductions 'for directors' fees, and for salaries of persons holding offices as directors, and for the salary paid the president, vice-president, and general manager of any company or body corporate.' The only excuse for such a provision is that, in its absence, the practice would prevail of distributing dividends through the device of inordinately high salaries and fees. A less crude method of preventing such practices is to vest some body with authority to pass upon the reasonableness of fees and salaries. The distinction suggested between resident and non-resident officers is one which is not easy to defend. If a permanent Tax

Board is established, the control of these deductions should be made one of its functions.

Taxes Levied on the Royalty Basis.

The Mineral Tax.—"This is a levy of 2 per cent. upon the assessed value of all ore taken from metaliferous mines. The assessed value accepted for the purposes of the Act is the 'smelter return,' defined as the gross value after deducting 'the cost of transporting the said ore and mineral substances to the smelter or mill and the cost of treating the same.'

"As explained, the specific tax was formerly in substitution for income taxes, but this was changed in 1917, and the income tax now applies both to the corporation and to the dividends of such companies forming a part of the taxable income of stockholders.

"The Provincial receipts from the mineral tax for a series of years is shown in Table XI. The largest sum ever received, nearly \$300,000, was realized from this source in 1917. This is more than twice the yield of 1915, and three times the yield of 1911. Such excessive variability is a shortcoming of this type of levy. In this particular situation the great increase comes, oddly enough, when revenues from other sources are declining. The explanation is, of course, the abnormal demand for metals due to the war.

Table XI.—Receipts from the Mineral Tax, 1905 and 1910-17.

Year ending—	
June 30th, 1905	\$114,236
March 31st, 1910	102,608
March 31st, 1911	91,038
March 31st, 1912	100,659
March 31st, 1913	155,163
March 31st, 1914	153,880
March 31st, 1915	130,876
March 31st, 1916	163,335
March 31st, 1917	287,257

The Coal and Coke Tax.—"Coal-mine owners pay the Provincial Treasury a royalty of 10 cents per ton on all coal produced, except on coal shipped to coke-ovens in the Province. Owners of coke-ovens pay a tax of 10 cents per ton upon all coke produced. Several years ago the rate upon coke was 15 cents. The equal rate per ton on coal and coke is defended by coalmen on the ground that the difference in the quality of the coal used for coking purposes makes up the difference between the weight of a ton of coke, and the weight of the coal entering into it.

"The receipts from this tax, shown in Table XII, exhibit considerable variability. Less money was received from this source in 1917 than in 1910. The yield in 1913 was 50 per cent. larger than four years later, in 1917, but a part of this difference is explained by the change in rates.

Table XII.—Receipts from Coal and Coke Tax, 1905 and 1910-17.

Year ending—	
June 30th, 1905	\$ 94,682
March 31st, 1910	222,722
March 31st, 1911	248,332
March 31st, 1912	195,207
March 31st, 1913	302,225
March 31st, 1914	192,590
March 31st, 1915	158,867
March 31st, 1916	173,261
March 31st, 1917	194,536

Tax on Unworked Crown-granted Mineral Claims.—"A special penalty of 25 cents per acre is imposed on mining property held by Crown grant and not

worked. The tax is of long standing and apparently provokes no opposition. In its nature it is similar to the tax on wild lands and on unworked coal land, and what has been said of the theory of these taxes applies here as well.

"The receipts from this tax, shown in Table XIV., are remarkably constant quantities, but are not important in size.

Table XIV.—Receipts from the Tax on Unworked Crown-granted Mineral Claims, 1905 and 1910-17.

June 30th, 1905	\$39,869
March 31st, 1910	39,869
March 31st, 1911	42,020
March 31st, 1912	43,436
March 31st, 1913	42,733
March 31st, 1914	45,953
March 31st, 1915	40,296
March 31st, 1916	35,703
March 31st, 1917	37,903

That Prof. Haig is of the opinion that metalliferous mining is getting somewhat the worst of it under the present system is indicated by one of his concluding references to the situation generally with respect to mining taxation in this province. He says:

"To make comparisons it is necessary to reduce the elements to some common basis. Where a single tax is applied uniformly comparisons are readily made. But under the British Columbia tax law almost every interest is taxed upon a different basis and at a different rate. The assessment and tax data yield almost no information for drawing conclusions as to relative burdens. An inquirer who would know whether the coal-mining industry is heavily taxed as compared with the metal-mining industry must combine the various miscellaneous charges resting on each, and compare them with data regarding the economic strength of the industries gathered from some other source than the tax records. But it is difficult to escape the conclusion that coal-mines taxed merely on the royalty basis are equitably treated as compared with metalliferous mines, which, in addition to royalties, pay taxes on income and dividends. And it is not easy to see the equity in increasing 50 per cent. the taxes on Crown-granted timber lands when the charges are not increased upon timber companies drawing their supply from other sources than Crown-granted lands."

BEAVER CONSOLIDATED MINES.

At the annual meeting of the Beaver Consolidated Mines Company, held in Toronto, April 16, at which there was a fair representation of shareholders, it was announced by the President, Mr. F. L. Culver, who presided, that the Kirkland Lake mill, which is now in operation, will exceed its capacity of 150 tons. The underground work is progressing favorably, and rich ore is being encountered at the 700 ft. level. On the Beaver property, development work has been renewed at 1,400 feet. A new vein has been struck, that looks very promising. The directors of the Beaver Consolidated has just this week returned from the north, and were in a position to report first hand knowledge of the work on the company's joint properties, the Kirkland Lake gold mines and the Beaver silver mines.

A new director was appointed to take the place of Mr. J. H. Black, who has resigned, in the person of Mr. F. B. Mercer. The shareholders also passed a vote of thanks to the directors for the manner in which they have looked after the affairs of the company in the past year.

FAVORABLE DEVELOPMENTS AT NIPISSING MINES.

In his regular monthly report, manager Hugh Park, in reporting to the president and directors of the Nipissing Mining Company, says:—

During the month of March the company mined ore of an estimated net value of \$261,158, and shipped bullion from Nipissing and custom ores of an estimated net value of \$814,952. Favorable underground developments were met with at several shafts and general operations everywhere continued satisfactory. At shaft 73 drifting is progressing on vein 544. The depth of this new level is 548 feet below the collar of the main shaft. No high assays have been found to date, but the vein is strong and well defined, except where disturbed by numerous faults.

Particularly favorable developments are taking place at 96 tunnel. The new veins are being developed, one by winze and one by drifting. The vein being drifted on is one two inches wide and has been assaying several thousand ounces. Fifty feet of drifting has been done to date and the face of the drift shows two inches of high grade solid ore. Two small mud seams with fair assays in the country rock, have lately been found at the 120-foot level of shaft 128. This is the new shaft recently completed and which will explore the western area of R. L. 401 at the north end of the lake.

The high grade ore treated amounted to 208 tons. The refinery shipped 55,108 pounds of bullion which contained 802,698 fine ounces. The low grade mill treated 6,962 tons. The following is an estimate for the month of March:—

Low grade mill	\$162,946
Washing Plant	98,212
Total	\$261,158

DOMES HAS THREE NEW DIRECTORS.

It is the intention of the management of the Dome Mines, Limited, to have the mill running on a moderate scale in the latter part of April. From then on mill operations will be rapidly built up to a 600-ton daily basis. Such is the announcement, following the meeting of the directors in New York this week, made by a Toronto director, who was present.

It is believed that the annual financial statement of the company, which is being prepared, will show a surplus of current assets over current liabilities amounting to \$489,000. It is stated also that the Dome Mines, which took an option on the Dome Extension property some time ago, is developing the mine from the sixth level, from which a cross-cut has been driven into the Extension property, where an ore zone was entered showing an average grade of \$4 to the ton.

Three new directors were added to the board — namely, Mr. Colgate Hoyt, New York; T. R. Finucane, Rochester, and C. D. Keading, Porcupine. It is understood that the Board of Directors will be increased to nine members, and that Mr. Pouillon, of New York, will be the ninth member.

Wright-Hargreaves.

The construction of the mill, beginning with extensive excavations, will be in full swing at the Wright-Hargreaves mines by May 1st. The mill is designed to treat at least 200 tons daily, and will be the largest so far installed in the Kirkland Lake field.

THE ROAD TO KIRKLAND LAKE.

Interests representing some of the leading mines of the Kirkland Lake district are presenting evidence to the Ontario Government, showing the advantages and disadvantages of a steam railway, the disadvantages of an electric railway, as well as the advantages and disadvantages of a first class motor road. It will perhaps be a surprise to many to learn that these leading interests are not in favor of a steam railway, but appear to believe a first class motor road would best fill the requirements of the district.

A summary of the situation, viewed from various angles, is given herewith. It represents the opinion of a leading operator in the Kirkland Lake field, and is being submitted to those most vitally interested, asking for expressions of opinion. The summary follows:

As you are probably aware the Government has authorized the construction of a branch line of the T. & N. O. Railway from Swastika to Kirkland Lake at an estimated cost of \$155,000, the route selected being that through the Elliott-Kirkland, across the narrows of Kirkland Lake to a point near the Wright-Hargreaves office and thence across the Sylvanite towards the Tough-Oakes mill.

As you are no doubt much interested in this important question of transportation and after consultation with a number of men who have considered the question in all its bearings, I venture to submit some facts, figures and estimates which I have collected, as the result of enquiries on the spot, and from data supplied by Mr. Clement, the Chief Engineer, and Mr. A. A. Cole of the T. & N. O. Railway with a view to asking you to give an immediate expression of your opinion upon the question as to how the needs of the community can best be met in this matter of transportation.

There were originally three obvious solutions for consideration, viz:—

1. A trolley road, which would appear to meet practically all requirements and give a fairly frequent and flexible service.

This has been ruled out on the score of cost, the estimated capital outlay involved being approximately \$266,000, with the necessary transformer sub-station and equipment.

2. A steam railroad as outlined above, which has now been authorized:

3. A first class motor road capable of withstanding heavy motor trucks, and costing about \$72,000, which does not appear to have received much consideration.

You are now asked to consider the relative merits and disadvantages of the steam railroad and motor road.

Steam Road Advantages are that it will:

1. Enable freight, including heavy machinery, and passengers to be brought to the mines cheaply, irrespective of weather conditions.
2. Provide for unlimited expansion of traffic in the future.
3. Cut freight rates from Swastika to any point up to Tough-Oakes in all probability to .40c per ton on coal, with proportionately higher rates on other stores and supplies, with an average all round rate of about .60c per ton.
4. Cut passenger fares probably to .25c each way.

The Disadvantages are that it will:—

1. Not enable freight to be delivered direct to the stores or bunkers on more than perhaps one or two properties, and therefore in most cases roads will be required from the railway stations of which there will be but two (one near the Elliott and one on the Wright-Hargreaves at the east end of the lake) to each mine and the townsite and practically all freight will have to be loaded on to wagons and teamed over these roads which have yet to be made, in order to reach its destination at an average estimated cost of .40c per ton at least, thus making the actual average cost of freight \$1.00 per ton.
2. Passengers will in nearly all cases have to walk or obtain other means of transportation from the Stations to their destinations—distances varying from a few hundred yards to three-quarters of a mile or more.
3. The present wagon road will fall into almost complete disuse excepting isolated sections which will still be required, and it is unlikely that anyone will be inclined to make and keep in repair.
4. The service will be limited to one train per day each way, probably giving very little time for people to come in, transact business, or look for work, and get out on the same day.
5. The train service will necessarily be slow, with the stops for picking up freight, etc.
6. Consignees will require to have representatives present on the arrival of trains to take delivery or pay for their freight just as they do now at Swastika.
7. The estimated cost of operating and maintaining the branch, aside from interest on capital, amortization or depreciation, is \$100 per day which would require say 130 tons @ .60c and 88 passengers @ .25c per day to break even. The average freight handled at present is 36 tons and the average number of passengers about 40 per day, so that it is clear the Railway would operate at a heavy loss amounting to over \$20,000 per annum which must ultimately come out of taxes.
8. The right-of-way covers a considerable area of the claim over which it passes and tends to cut such claims in two with its bank or cutting and fences.

Motor Road. Advantages are that it will:—

1. Enable existing road freights to be reduced by means of motor trucks to about \$1.00 per ton for the full distance to the Tough-Oakes with proportionately lower rates for the shorter hauls, this being as low as the total cost of delivery with the steam road.
2. Enable passengers to be handled for about .5c per mile in motor busses or less than the steam road could charge.
3. Provide a flexible system of transportation at all necessary hours, delivering freight and passengers to or from their destinations on the various mines or the townsite.
4. Enable individuals to walk, bus or cycle to any point along the field at all times of the day or night, thus permitting men to have fixed homes while moving their place of employment as they require.
5. Permit branch roads to start off at any point to outlying properties instead of only from the two stations on the steam road.
6. Save more than half the first cost of the steam road while providing ample facilities for the present time and the immediate future.

Disadvantages of the motor road are:—

1. In winter snow would have to be ploughed off or the vehicles run on the snow as in most cities in winter.
2. Heavy cost (\$12,000 per mile) in order to make a thoroughly permanent water-laid or tar-macadam road.
3. Difficulty in getting a railway built in addition to the road later on unless a further great expansion takes place.

There is every probability that the matter will be settled definitely by the Government within ten days from date and meanwhile if it is considered by those interested in the Kirkland Lake field that a motor road would serve the purpose best **provided**.

- (a) That the Government authorized the work immediately under proper supervision and if possible agreed to maintain the road for say ten years — at a cost not exceeding the estimated cost of maintaining a railway road bed, and
- (b) That the mines would allow all available waste rock on their dumps to be taken for the work free of cost there is good reason to believe that the Government would readily adopt the latter plan.

Will you, therefore, please answer the following questions:

1. Are you in favor of a steam railway?
2. Are you in favor of a first class motor road, more or less on the line of the old road with modified and improved gradients?
3. If you have any waste rock dumped are you willing to allow it to be used for the road free of charge?

Special Correspondence

Silver Situation Unchanged.

The silver situation remains unchanged with apparently continued heavy demand. Recent predictions by metal authorities in New York that price restrictions might be removed about May 1st, and the price of silver be permitted to find its level on a basis of supply and demand seems to be exceedingly indefinite. Indeed there are various reasons for believing such action will not be taken. In the meantime the mines of Cobalt are experiencing prosperity and, although the removal of price restrictions would be favored locally, and would probably result in quotations moving to higher levels, yet the general feeling appears to be that the matter is an Empire question and one that should be regulated by those at the helm of state, particularly during the present period of reconstruction.

Lightning River.

Interests involved in property in the Lightning River district are appealing to the government for assistance in the building of a road to the centre of activity. For the present \$3,000 is being asked, which would be adequate until such time as the merits of the district are further proven.

Kirkland Lake.

Operations are being speeded up in all parts of the Kirkland Lake field. Following the announcement recently that the Ontario Government would construct a branch line of the T. & N. O. Ry. from Swastika to the centre of activity in the Kirkland Lake field, a distance of about six or seven miles, some of the leading mining interests have presented evidence to the government with a view to discouraging the construction of a steam road and building a first class motor road instead. The cost of a first class motor road would be about one-half that of the steam railway, and would provide a flexible system of transportation, making travel possible at any hour of the day or night and would land passenger or freight directly at their or its destination. Compared with this, the steam railway would land passengers at stations and make necessary walks or hauls of from a few hundred yards to three-quarters of a mile or more to the various mines. The full evidence is given in another column, and appears to be very reasonable and overwhelmingly in support of a first class motor road, the cost of which would be \$72,000.

Mine Workers Object to Governments Choice of Commissioners.

District 18, United Mine Workers of America, which comprises Eastern British Columbia and the Province of Alberta, is keenly interested in the announcement by Hon. G. D. Robertson, Minister of Labor, that the Industrial Commission, recently appointed to investigate the relationship between Capital and Labor in the Dominion of Canada in order that action may be taken to place it on a basis of better understanding than now exists, will take up the question of the labor situation in the mines of this province at the commence of its duties. The appointment of T. Moore, president of the Trades and Labor Congress, and J. W. Bruce, to the Commission as the representatives of Labor, however, is bitterly opposed by the coal miners. Telegrams have been forwarded from Fernie, B. C., to the Minister of Labor and to Dr. Bonnell, the member of Parliament for the District demanding that these appointments be reconsidered.

"One Big Union" Not Popular.

It will be remembered that at a recent Labor Convention held at Calgary, Alberta, approval was expressed of a proposal that Canadian workmen should organize "One Big Canadian Union," as it has been popularly termed, and withdraw from affiliation with American organizations. The idea, however, is not meeting with unanimous endorsement, however, as is evidenced by the observations of David Rees, international organizer of the United Mines Workers of America. Mr. Rees, who is a coal miner and in close touch with the coal miners' unions of British Columbia and Alberta, and who has been engaged in organization work for some years, says, in part:

"There is no doubt in my mind that the Western Conference held at Calgary should have done the thing that the Conference was called together for, that is: Outline a more progressive policy for the Trades and Labor Congress of Canada. We find that in centres like Toronto, Montreal and other parts of the East the labor people are clamoring for a change. Consequently had the Western Congress outlined their policy we would have hoped to have the Eastern Labor

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Dolly Varden.

The Provincial Government has nominated Mr. Justice Clement, of the Supreme Court, to act as referee in connection with the dispute between the Dolly Varden Mines Company and the Taylor Engineering Corporation, the points of which were the subject of investigation during the recent session of the Legislature. Judge Clements will go into the whole question of the financial obligations of both concerns and assess costs, etc., in accordance with the terms of the settlement decided upon by the Provincial House.

Title to Coal Lands.

Another phase of the dispute as to the title to coal rights within what is known as the Esquimaux and Nanaimo Ry. Belt on Vancouver Island has developed. Does the ownership of coal lying under School, Indian, Naval and other reserves, which were created by the province prior to the grant of the so-called belt to the railway company, lie in the province or the company? It is contended that these coal rights did not pass to the company, although, of course, the latter maintain that they, along with all under-surface rights not specifically mentioned in the Settlement Act, became the property of the railway company under the terms of the said Act. The issue has been before the courts which, in one instance, have upheld the contention of the company. There is considerable valuable coal property at stake in this argument and the province proposes to make an investigation of the matter with a view to the passage of legislation, if it should be found justified, declaring the affected areas to be reserves, thus removing them from the control of the railway company.

The Smelter Rates Enquiry.

From an unofficial but authoritative source it is learned that the Committee of Investigation, engaged on the question of custom charges made by the Consolidated Mining & Smelting Company at its Trail Smeltery, has received very little information or serious formal complaint from shippers of ore to Trail. The Committee, however, has proceeded with its work of investigation at the smelter and has acquired a large amount of definite practical data and has so far digested the material as to justify the engagement of the services of R. O. Whitaker, of Denver, Colo., and an accountant to assist him. With this aid the preparation of the committee's report will be carried on with all possible despatch.

Gold Strike on Morley River.

A gold strike which is attracting much attention is reported on the Morley River, about 150 miles to the northeast of the town of the Skagway and just a few miles south of the international boundary. Morley River runs into Teslin Lake. The surface dirt is said to pay from 30 to 50 cents. Bed rock has not yet been struck. It is expected that there will be a rush to the new diggings with the opening of the summer season.

BRITISH COLUMBIA.

A Road for Aspen Grove.

A road between the town of Princeton and the Aspen Grove Mining Camp is to be opened by the Provincial Government this season. It is known as the One Mile Road, and will shorten the distance between the towns of Princeton and Merritt by about 17 miles. Besides it will be of special value to the mining camp named and other similar centres.

Abandoned Claims.

The Mining Committee of the Provincial Legislature during the last session discussed the advisability of recommending the cancellation of all Crown Granted Mineral Claims which have reverted to the Crown through non-payment of taxes. The argument of those favoring the proposal was that by the cancellation of their claims, and the consequent eradication of the surveys from the records, the lands involved would become open for pre-emption by the settler. It was stated that land seekers often found it impossible to make up an even block of suitable agricultural land because of the existence of deserted Crown granted mineral claims. While these contentions were given every consideration, it was felt that no hasty action should be taken, more especially as these old Crown granted mineral lands have made substantial contributions of the public treasury, and, under the existing law, are open to the prospector who may feel that their possibilities have not been properly tested, on exceptionally easy terms.

The Peace River Oilfields.

There is no doubt that the Provincial Government's announcement that it proposes prospecting the oil deposits receives the endorsement of the people of this Province, and already there is speculation as to which district it is intended first exploring. As stated before in this correspondence the Peace River Section is generally thought to be the most promising. This is based on the drilling which has been in progress in Northern Alberta for the past ten years, and the results of the same. Within a short distance, comparatively, from the Peace River Country there are a number of small wells from which a certain amount of petroleum may be taken by pumping. Hon. T. D. Pattullo, Minister of Lands, made reference to one of these in addressing the Legislature. That to which he had reference is said to have a productive capacity of 200 barrels per day of a heavy black oil. The same country was drilled by Lord Rhondda, who obtained favorable indications, but found difficulty with salt water under great pressure, preventing drilling to depth. His representatives were strongly of the opinion that below the point reached the prospects would improve. Mr. Charles Camell, of the Geological Survey Branch, with headquarters at Vancouver, B.C., has for some years expressed the opinion that the Mackenzie River basin would prove one of the world's greatest oilfields, there being 350,000 square miles of geological formations favorable to petroleum. The difficulty in connection with the development of the natural resources of this far northern country is lack of transportation in the winter. In the summer the great rivers are navigable, thus rendering the problem of ingress and egress less formidable.