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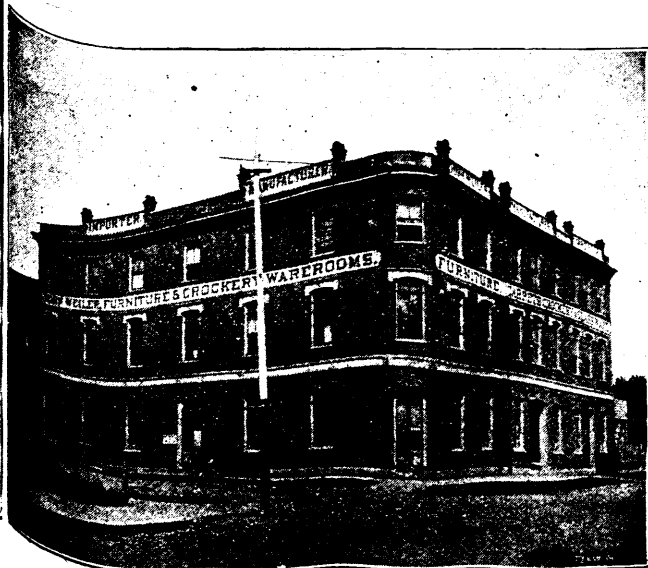
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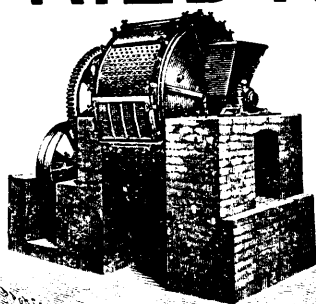
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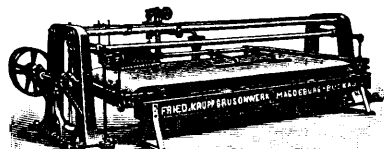
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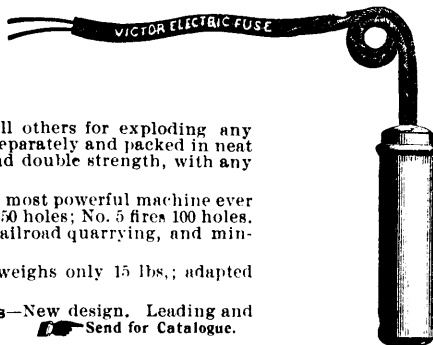


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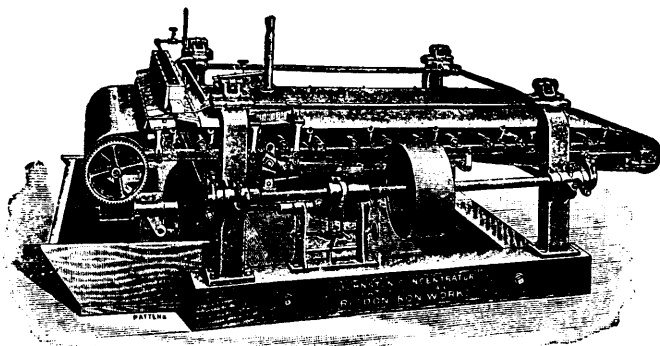
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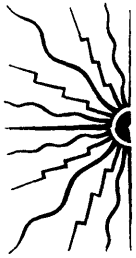
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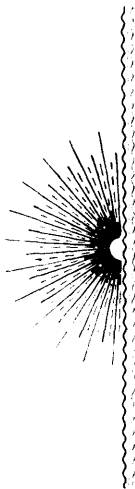
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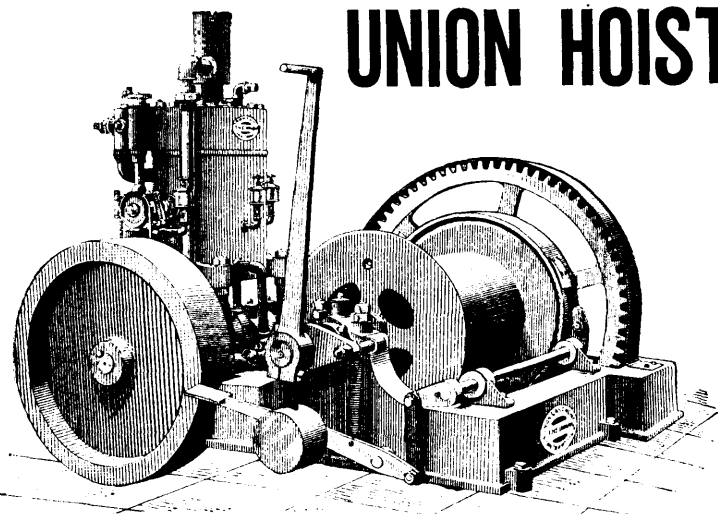
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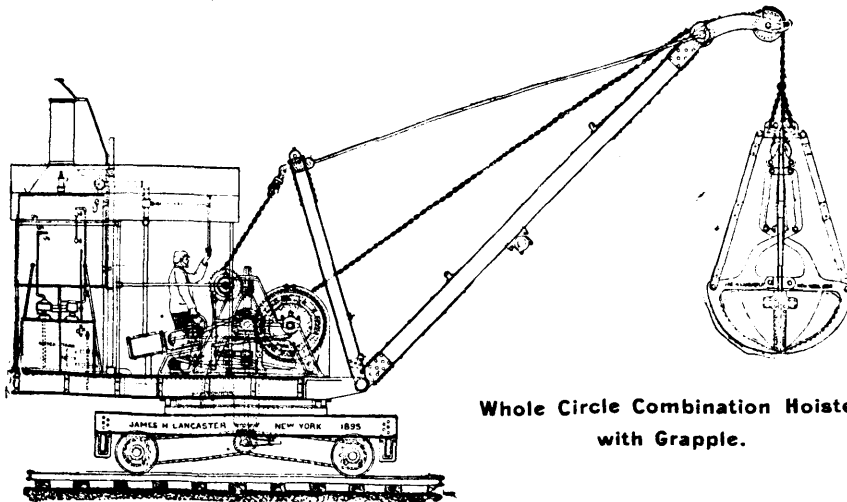
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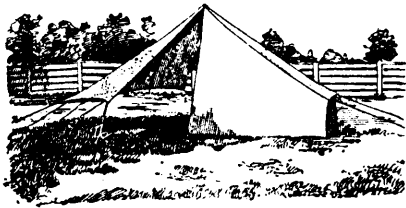
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# The Mining Record.

Vol. II.

NOVEMBER, 1896.

No. 11.

## BRITISH COLUMBIA MINING RECORD.

Devoted to the Mining Interests of British Columbia.

ALEXANDER BEGG, Editor.

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### Editorial Notes.

WE have incurred the displeasure of a certain class of men who find that our criticism of the methods pursued by them in regard to mining operations is interfering somewhat with their plans. On the other hand we have received a large number of letters from parties in the province and out of it thanking us for the stand we have taken in warning investors against the schemes of unscrupulous speculators.

We have also received letters from parties who unfortunately have invested their money in some of these schemes, asking for information about them. One of the latest enquiries is in regard to the Coolgardie Mining Company, and in another column will be found a copy of the prospectus issued by the promoters thereof.

It will be observed that the prospectus speaks of a mine with a shaft fifty feet deep and one thousand tons of ore on the dump assaying \$27 per ton in gold, silver and copper. The average width of the vein is stated to be twenty-five feet, and other assertions are made in regard to this property

which, if all were true, would make it a very desirable proposition to invest in.

But the *Midway Advance*, published in the district where the mine (?) is supposed to be, has this to say about it: "Turning to the records for the Kettle River mining division of Yale district, we soon ascertained that no claim bearing the name Coolgardie had ever been located or recorded in Copper Camp, and therefore the first assertion of the prospectus was proven to be untrue. The only claim bearing the name Coolgardie recorded in the Kettle River mining division was located in Summit Camp on the 17th of July, 1895, and recorded on the 22nd of July, 1895, and as nothing is on record to show that the claim ever passed out of the hands of the locators, it is hardly likely the prospectus could refer to it. Even if it did it would not divest the prospectus of its glaring untruths or invest the company with an air of respectability as the records show that this claim located in Summit Camp, was allowed to lapse, owing to the fact that no assessment work was recorded within the specified time allowed by law, and on this account the claim has been recently re-located, and under these circumstances could not by any chance now belong to the Coolgardie Mining Company."

Here we have a company incorporated, or said to be incorporated, for \$700,000 on the strength of a mine which the representative journal of the district says does not exist. If this be true, it is, to say the least of it, a most discreditable affair, and it seems to us the common law would afford a swift remedy to those who have invested their money in it.

Quoting the *Advance* again, it says: "Mr. Bostock's remarks before the Dominion House the other day touching this same question were far more timely than many are given to believe, and the attention of the Government having been drawn to the matter, it is to be hoped legislation will be effected which will make those amenable to the law who are guilty of lending themselves to schemes having for their sole object the extortion of money from an over-confident and ever-ready-to-be-gulled public."

The Government should certainly take steps to protect the investing public from scheming company promoters, and the publication of untruthful statements in a prospectus should be made a serious offence.

In our last issue we published a list of incorporated mining companies. We repeat it in this number with the names of a few companies added. There may still be some omissions, but we hope by next month to have the list complete.

We understand there are a number of companies doing business who have not yet registered. Some of these have secured certificates from the Mining Recorders, which should not have happened. A company should be obliged to register before being granted such a certificate.

Many of the registered companies have done nothing more than merely register their articles of incorporation. The promoters, Micawber-like, are awaiting for something to turn up. In other words, they are looking for someone to buy them out.

The incorporation of a number of these companies is therefore a matter of pure speculation on the part of the promoters, and this sort of thing should be checked.

At present a company incorporated with \$10,000,000 capital pays the same amount in registration fees as one with, say, \$100,000. Let this be changed and the registration fee based upon the capital.

At present the registration fees in force discriminate in favour of companies incorporated under our laws as against those incorporated under the Imperial Act. This does not seem to be fair. All should stand on the same footing, the basis of the registration fee being a percentage on the incorporated capital.

If the registration fees could be made large enough to act as a check on the excessive capitalization of incorporated companies it would be a step in the right direction. We would prefer it to levying a direct tax on capital.

We have already suggested that companies seeking incorporation should be obliged to show that their capitalization is fully warranted. Next, min-

ing companies should be obliged to publish regular statements of their position as to assets and liabilities, operations and condition of the mine or mines being developed or operated, and lastly, that the publication of false statements in a prospectus should be a punishable offence.

*Bona fide* mining companies owning and operating good properties, if not over-capitalized, have no reason to dread the ordeal we propose. It is only companies of a purely speculative character, formed merely for the purpose of extracting dollars from the pockets of unwary investors, who have cause to dread it.

The question as to assessability of stock sold below par and issued as non-assessable remains in doubt. It should be cleared up without delay by having the necessary legislation passed making the point plain one way or the other.

The North-West Mining Association, with headquarters at Spokane, is doing splendid work for the mining industry in several of the States to the south of us. British Columbia is included in the operations of the association and is represented by vice-presidents at a number of places in the province.

The interest thus shown in our welfare by our American neighbours is appreciated, but we think the time has come when we should form an association of our own, independent of any outside influence.

There are many questions affecting the mining industry of British Columbia requiring the attention of our governments and legislators, and certainly such matters should be presented for consideration by a British Columbia association rather than one established in a foreign country.

Americans having interests in British Columbia mines could belong to our association in the same way as some of us belong to theirs, and this would give them a voice in any action taken. But the association itself should be organized and conducted as a British Columbia institution.

When the mineral tax was being considered by our provincial authorities the North-West Mining Association of Spokane sent its president to interview the Local Government on the subject, and in his address during the late convention at Spokane

he took some credit for having the rate of taxation altered in the bill. He intimated that the association was an important factor in having the law amended.

This may be all very well, but it would show more independence of thought and action on our part if we had an association of our own to press such matters on the attention of our Government, instead of leaving the task to outsiders.

Let us then inaugurate a British Columbia Mining Association, with branches in every district of the province, and if it is carried on with the same zeal as that displayed by the officers and members of the North-West Mining Association of Spokane it will result in much good to the province.

In another column of this issue will be found a description of a plan proposed by a syndicate of English capitalists, represented by Mr. Ernest Grant Govan, for the development of mining claims.

We have every confidence that the syndicate will meet with success, if carefully managed, and we would like to see other English capitalists following the same plan. We feel sure it would not only prove highly profitable to them, but would also give an impetus to mining development in the province.

That Rossland is destined to become a great railway as well as mining centre may now be regarded as certain. Already two lines, the Columbia & Western and Red Mountain Railway, run into the city. The Great Northern is said to be looking for an entrance into Rossland, the C.P.R. has a line surveyed through the heart of the city, and now a movement is on foot to build a railway from the coast cities direct to the Kootenay, making Rossland the terminus. We predict that in five years' time Rossland will be double the size of Spokane, Wash., and one of the most important mining and industrial centres in British Columbia.

There are a few points we would like to impress upon capitalists who have money to invest. First, the mineral resources of British Columbia have been pronounced as wonderfully rich by every experienced man who has visited the province. Second, the gold and silver mines possess every indication of being as rich as any in the world. Third, the treasure being here all that is required is capital to develop and operate the mines in order to

realize millions of dollars. Fourth, the spirit of the people is to protect the capitalist in the safe investment of his money. Fifth, the spirit of our legislators is to frame the laws for the protection of investors, and the courts may be relied upon to see justice done. Under these circumstances is there a better field at the present moment for the investment of capital than British Columbia?

If the spirit of the people were not in favour of protecting the investor would we be receiving letters from all parts commending our course in waging war against the unscrupulous speculative company promoter?

The eastern capitalists who the other day invested in 842 lots in the town of Rossland know their business. It is more than likely that they will double their money in a very short time.

We want to see capital go into our mines and mining towns into the development of mining claims, into assisting the prospector, into building railways and smelters, etc., etc., and not into the hands of men who are more concerned about the promotion of companies for their own personal gain than the development of our mines.

We commend to our readers a perusal of the article on Cariboo and Lillooet to be found on another page of this issue. It is taken from the pen of the editor of the *British Columbia Mining Journal* at Ashcroft and gives a clear outline of the great prospects in store for those two wonderfully rich districts.

It is to be hoped that before long Nelson and Rossland will be incorporated. Why two such promising towns should continue to be cradled in the lap of the Provincial Government is past understanding.

The directors of the Hall Mines Company are showing their wisdom by spending their first earnings in the enlargement of their works rather than in paying them away in dividends. With the new machinery at their mine (the great Silver King), the improvement of their facilities for bringing down the ore and the almost trebling of the capacity of the smelting plant, the position of the company as a dividend payer will be vastly improved.

The building of the Crow's Nest Pass Railway

which may now be regarded as assured, will be of vast benefit to the Kootenay in more ways than one, but it is also of importance to the province that a more direct line of railway should be built between our coast cities and that great mining district. It is to be hoped, then, that the Government, when assisting the Crow's Nest Pass Railway leading eastward, will also remember to aid the proposed road leading westward. This is important, not only to Kootenay, but also to the general trade of British Columbia.

### *Cariboo and Lillooet.*

DEVELOPMENT work for the season of 1896 has served to materially advance the mining districts above referred to. The season of 1897 will see the opening up of some vast mines. At Quesnelle Forks work on the Golden River Quesnelle Company's dam will be pushed with 200 men employed all winter and in the early spring it is safe to say 500 men will be employed. The Cariboo mine, in conjunction with its Moorehead Lake ditch, and James Moore property that is to be opened up; the Montreal Company with their ten miles of ditch; the Fishback, Maud, Beavermouth, Harvey Creek and other big properties; the big drifting and hydraulic mines of the Horse Fly, only thirty miles away, Quesnelle Forks and vicinity will furnish employment to several thousand men. At Quesnelle the Law mine, the Cottonwood, the Maud M. ditch, the Columbia mines and various others; at Stanley work on a large scale will no doubt begin on famous old Lightning Creek; at Slough Creek, Willow River, Antler, Cunningham, Big Valley and other creeks, and at Barkerville on that richest of all known creeks in the world, from which \$25,000,000 was taken in two miles distance in early days and now being worked at enormous expense opened up to work by the Cariboo Gold Fields Company, with a hydraulic elevator, all speak well for the future prosperity of Cariboo. Many hundreds of men have this year found employment in this section and none who have really desired work at a fair wage have failed to secure it. Capitalists will find advantages which no other part of the world offers for investment. The quartz mines have not as yet been exploited only in a very superficial way, but the rich surface showing on Burns Island, and Bald Mountains, the Golden Cache mines and others at Lillooet, all tend to prove that further research and a fair use of capital will make the quartz mines of the Cariboo and Lillooet districts among the great producers and dividend payers of the world. From Ashcroft, on the C.P.R., the point of departure for all points in Cariboo and Lillooet, to Barkerville, 285 miles, more than eighty six to twelve horse teams are freighting and from the present outlook instead of shipping for the year from 150,000 to 300,000 pounds of freight per week it will be largely increased. Omineca and the Peace River countries, which are best reached by the Cariboo road, will attract much attention next season, as there is a large and practically unexplored section of coun-

try that is known to be rich in gold and silver. The opening up of Slate and Manson Creeks hydraulic mines by the 43 Mining and Milling Company of Ottawa, and the Victoria hydraulic, represented by Manager Black, will give that country a well deserved prominence. These mines are nearly 600 miles north of Ashcroft, are partially fitted up and will be in operation before the close of the season of 1897. There is said to be much rich hydraulic ground in that section, Mr. Black claiming to have ground that goes as high as seventy-five cents per pan. Of course he does not claim to have large quantities of such ground. The farming lands of the Cariboo and Lillooet district, where they can be irrigated, and in many places without irrigation, are very productive, and the demand for hay and grain, created by the immense freighting business, has made ranching profitable. No country on earth seems to have a brighter future than British Columbia, and of the different sections Cariboo and Lillooet are second to none. The newly built steamer *Charlotte*, which will hereafter make regular trips from Soda Creek to Quesnelle, will shorten the time to two days, and no night travel except by the steamer. The steamboat ride on the Fraser will add much to the pleasure of the trip. From Quesnelle to Barkerville it is one day's ride, or three in all from Ashcroft.

### *Capt. John Irving, M.P.P.*

NO one has done more to forward the mining interests of Vancouver and other islands along the coast than Capt. John Irving. He has made repeated trips with his steamers for purposes of investigation and the discoveries made on these occasions have done much to bring the mineral wealth of the coast and islands into prominence. The result of this activity on the part of Capt. Irving and those associated with him has been to attract the attention of mining men to the possibilities of several locations and islands as mining camps and a number of valuable discoveries made of late show conclusively that there is a vast amount of mineral wealth tributary to the coast cities. That there will be great activity in the way of prospecting, developing and operating mines on Vancouver, Texada and other islands during 1897 is certain and the result will be an increase in the trade of Victoria and Vancouver. The proximity of the ocean to these mines, and as a consequence cheap transportation of machinery and supplies as well as the ores, will add greatly to their value, and as there is no question as to the richness of the discoveries made at several points, we may expect to see next season one of most unusual activity along the coast. In bringing this about Capt. John Irving was largely instrumental.

Capt. Irving is still in the prime of life, having been born in 1854 in Portland, Oregon. When only sixteen years old he commenced to learn the steamboat business under his father, the late Capt. William Irving, and at the age of twenty he took command of the steamer *Onward*, then plying on the Fraser River. In 1872, on the death of his father, the responsibility of managing the immense transportation business then established fell upon



CAPTAIN JOHN IRVING, M.P.L., COMMODORE C. P. S. CO. FLEET.



the shoulders of the son "Capt. John," as he is familiarly called. He proved himself to be equal to the occasion, and for upwards of a quarter of a century through ups and downs has more than held his own, until now he is at the head of the most powerful steamboat organization on this northern coast.

A glance at his steamboat career may be interesting to many of our readers. From 1872 to 1875 he ran the steamer *Onward* on the Fraser River under a combination with another steamboat firm, Messrs. Fleming & Parsons. In 1875, however, he bought them out and his fleet then consisted of the *Onward*, *Hope*, *Glenora* and *Royal City*. The *Glenora* at that time was running on the Stickeen River, but in 1876 Capt. Irving sold her and the route to Capt. William Moore and gave all his attention to the Fraser River business. But Capt. Moore soon afterwards brought the *Glenora* over and entered into competition with Capt. Irving on the Fraser, and for a time steamboating on that river was rather lively. The Hudson's Bay Company about this time placed a boat between New Westminster and Victoria, and Capt. Irving, seeing the great possibilities of the route, bought the *Wilson G. Hunt* and ran her as an opposition boat. The Hudson's Bay Company then secured the *Olympia*, and re-naming her the *Princess Louise*, ran her against the *Hunt*. Competition between the two boats ran high, but did not last long as a combination was soon effected between the opposing parties, and this lasted until in 1883 the Canadian Pacific Navigation Company was formed.

In the meantime Mr. W. J. Stevens in 1880 entered the Fraser River field with the steamer *Cassiar*, and Capt. Moore built the *Western Slope*, so that Capt. Irving had a very strong competition to contend against. In order to meet it he built a splendid steamer, the *Elizabeth Irving*, which, however, was burned before she had an opportunity to earn a dollar. This was a heavy loss as the boat was uninsured, but Capt. Irving, undismayed at the reverse, soon had the *R. P. Rithet* launched, and Capt. Moore having gone out of the business, the *Western Slope* was purchased and added to the fleet. The *Cassiar* having been lost in 1881, Capt. Irving now had things all his own way on the Fraser. But on the Nanaimo route, which in 1885 the Canadian Pacific Navigation Company held, an opposition line was started by some Victoria and Nanaimo people. The steamer *Amelia* was placed on the route to run against the C.P.N. Co., and for a time a bitter war of rates was waged. It was ended by Capt. Irving and associates selling out to the Nanaimo people after which he devoted his sole attention to the Fraser and New Westminster and Victoria routes.

In 1886 the completion of the Canadian Pacific Railway had ruined steamboating on the Fraser and Capt. John Irving threw his energies into establishing a steamer service between Vancouver and Victoria. He also gave his attention to the trade of the northern ports, and by this and other means has been chiefly instrumental in developing the coast trade of British Columbia. Only the other day he added a fine steel steamer, the *Tees*,

to the fleet of the C.P.N. Co., which consists at present of :

STEEL AND IRON BOATS.

Islander (twin screw). Charmer. Danube.  
Tees.

SIDE-WHEEL AND STERN-WHEEL BOATS AND PROPELLORS.

Yosemite. Princess Louise. R. P. Rithet.  
Maude, Transfer. Rainbow.

The *Tees* and *Danube* are employed chiefly in the coast trade and the *Islander* and *Charmer* attend to the Vancouver-Victoria service. The other boats ply on the Fraser River-New Westminster-Victoria route.

Captain Irving is largely interested in the Columbia & Kootenay Steam Navigation Company whose boats ply on the Columbia River and Arrow Lakes, transporting passengers and freight to and from the mining camps along those routes. Capt. Irving is also member for Cassiar in the Legislature of British Columbia, and there is no better friend of the mining industry than he in that legislative body.

*An Outside Opinion.*

MR. JAMES P. KIMBALL, a prominent geologist and mineralogist of New York, who has been paying a visit to Trail Creek district, has the following to say about the methods being adopted in the formation of certain mining companies:

"I have but one criticism to make, and that is in regard to the over-stocking of prospects. It is a mistake to stock mere prospects and mineral claims as they are doing. It simply hinders the development of the country. The prospector, of course, is without means; he places his prospect in the hands of a broker, who stocks it and sells the stock for what he can get. With the small amount of money thus obtained a little development work is done, and the mine, perhaps, becomes a producer in a small way. Operated independently as it is the cost of operation is the maximum, and the risk is heightened.

"On the other hand, if the various owners of a large group of claims would combine and seek to attract capital in large lots, it would be ever so much better for the country. I am a great believer in consolidating contiguous properties, so as to make a property of a size that can be worked to the best advantage. When you have a large property you can work it at a minimum risk, especially in locations like Red Mountain, where the deposits are numerous. Operated as those mines on the mountain now are, the cost is great. Look at the item of expense for transportation. The narrow gauge furnishes facilities for but a few of the biggest mines in transporting ore down the mountain, and then at the highest expense. Now if some one company owned both the base and top of the mountain the road could be built with lower gradients, operated by the company itself, and the expense greatly reduced. The cost of operating the mine itself would be reduced. Instead of working from the top of the mountain down, as they are obliged to do now, with a single ownership they could tunnel to great advantage and at a minimum cost extract the ore."

### Coolgardie Mining Company.

THE following is the prospectus of the Coolgardie Mining Company referred to in the editorial notes:

PROSPECTUS COOLGARDIE MINING COMPANY, INCORPORATED.

Capital, \$700,000.

Seven Hundred Thousand Shares Fully Paid and Non-Assessable.

W. W. D. Turner, president; James L. McCulloch, vice-president; L. F. Williams, secretary.

General offices, Spokane, Wash.

Mines, Copper Camp, Boundary, B.C.

Trustees—W. W. D. Turner, president Le Roi Mining Company; L. F. Williams, treasurer Le Roi Mining Company; Hon. Geo. Turner, general manager Le Roi Mining Company; A. L. Davis, director Traders' National Bank; G. Schultz, capitalist; J. Leven McCulloch, M.E.; A. Brown, director Salem National Bank, Oregon; C. F. Bailey, mine owner.

The Coolgardie mine is located in Copper Camp, British Columbia, and was acquired by the present company by purchase.

The general formation of the district is porphyry, and is cut at right angles by two great ledges of iron and copper pyrites, which have a northerly dip of sixty to ninety degrees.

The principal work done has been done on what is called the Mother Lode. The mine is opened up with a shaft fifty feet deep, and numerous open cuts along the line of the ledge or reef.

We have now over a thousand tons of ore on the dump ready for treatment that gives an average sample assay of over \$27 per ton in gold, silver and copper. The average width of the vein is twenty-five feet.

The company has now let a contract to run a tunnel on the vein, which will give us a depth from apex of vein of about six hundred feet. The general character of the ore is pyritic copper and iron, carrying gold and silver; and there is one thing that can be said in regard to this particular character of ore, wherever they have found it they have always found permanent mines. We can refer to the great success made at Butte City, Montana, and in our own country, to the many great mines opening up at Rossland, Trail district, and the large amount of wealth they are producing every month. Of course it must be admitted that the Coolgardie is away from transportation at the present time, and we will have to wait a little while for a return on our investment. At the last session of the British Columbia Parliament there was a charter granted to a company to build a railroad from Rossland to Penticton, where it will connect with the Canadian Pacific Railway. It must be built inside of two years, and they are now at work on it.

This is a case the same as the famous Le Roi mine at Rossland. When the present owners of the Le Roi took possession of that property, it was a long way from a railroad, and now that they have one they are getting their reward. The same men are doing the same with the Coolgardie mine. They will push development work and open up their mine and get it into shape to be handled with large profits. The work done shows it to be a more valuable property than the Le Roi was at the same

stage of development, and with the advent of the railroad it will be a regular dividend payer. The mine is in charge of a practical mining man, who has had over thirty years' experience at mining.

At a meeting of the shareholders of the company, held at the office of the company in Hyde Block, Spokane, Washington, there were 200,000 shares of stock donated to the company to be put into the treasury, to be sold to raise funds for development and to buy machinery to put on the mine. It was also resolved that all stock be pooled for a year, so there is no other stock for sale unless treasury stock, so that investors are protected from a depreciation in value. Two years ago Le Roi shares were selling at twenty cents. You cannot get a share now for five dollars. This is a rare chance for a good, safe investment.

Treasury shares, fully paid up and non-assessable, par value one dollar, are offered at twenty cents per share. Application for shares should be made to

DONEEN & FAIR, Selling Agents,  
Temple Building, Montreal,

Who will issue scrip and have the same registered in the company's books.

JAMES L. McCULLOCH,  
Vice-President.

### A Practical System of Development.

IN an interview with a press correspondent Mr. Ernest Grant Govan, of London, England, who recently visited the Kootenay in company with Mr. Frederick W. North, states that the English syndicate of capitalists whom he represents will undertake development on the following plan:

They pay little or no cash down, but where a claim has reasonable promise they agree to spend whatever money is necessary to determine whether it is a mine or not, and if it be a mine they agree to organize a company in London, placing the shares on the London market, taking half themselves and giving the other half to the owner or owners of the claim. The theory is that the shares will become very valuable as soon as they go on the London market, owing to the backing of a powerful syndicate. They will begin developing operations in a short time and will distribute a big sum of money for wages and supplies. The magnitude of the enterprise they have undertaken will not at first be appreciated. It means the employment of a large number of miners and the carrying forward of most extensive operations. It is the first time English capital has taken hold here on such an extensive scale.

Referring further to their arrangements with claim-holders, Mr. Govan said that it is not their policy to buy unproved mineral claims, "mere prospects, or building land," but rather to find money to prospect under fully qualified direction, such of the claims offered to them as they may decide to accept. If, after being well prospected, the property prove unremunerative, their connection with it will cease. If, on the other hand, it develop into a payable mine, it can be stocked in London and the original holder will then share with them the consequent monetary advantage. Such an arrange-

ment appears to be far more equitable than the speculative plan of giving a claim holder a few thousand dollars, more or less, for a claim which may prove to be worthless or, on the contrary, to be extremely valuable. The syndicate's plan includes this additional advantage, that the original holder, if of the right stamp, may be employed in some suitable capacity on the claim with others engaged in the work of prospecting it. The fact that their offer to prospect claims on the terms indicated above, has been freely availed of, suggests that the plan has commended itself to many claim-holders as a thoroughly businesslike and acceptable method of testing the value of their holdings.

The plan as above outlined is in keeping with the suggestions offered to English capitalists by the *Mining Record* in its August issue. We have every confidence that the syndicate, if carefully managed under the direction of competent men in this country, will meet with success in its proposed operations, and we understand that Mr. Govan has already secured quite a number of claims in the vicinity of Rosslund upon which work will be commenced at once.

#### *Speculation in Mines.*

**W**OMAN gets the credit for being moody and unchangeable, but there is nothing so erratic as speculation. The reason for this is that it concerns the purchase of something or nothing, the value or liability of which is an unknown quantity. Every few years speculation gets into some new channel or some old channel which it had abandoned and follows it up till, like the handsome wide carriage road that mythical somebody pursued one day, finding that it led into a lane, then a cow-path, a squirrel track and lastly ran up a tree, it ends in the clouds. Sometimes it is land values that haunt the mind of the speculator day and night; oftener it is wheat and other grain, sometimes the succulent product of the porker and frequently stocks and bonds. But the trend of speculative minds generally runs in common. At present, as everyone knows, the speculative fancy is surfeiting itself with mining shares, and taking advantage of this, a number of sharpers, ever on the alert for the gullible and easily duped, are making a rich harvest selling shares in holes in the earth that they call mines and that will never perhaps in the hands of the present promoters develop anything in the nature of gold. It is from the dealing of such wild-cat properties as these, that the financial journals of this country should make it their business to protect the speculative and investing public. There are many projects in the way of mining concerns that the public should keep away from. The market has seen lately about an average of one company or more a day coming before the public with its shares for sale, and it is in connection with many of these companies that a note of warning should be sounded. Let us take for instance the case of a company with 1,000,000 shares offering to sell to the public 100,000 shares, the proceeds to be placed in the treasury and to go on record as treasury stock to be used for development work. The sale of this stock at ten cents a share would yield \$10,000. How far would this go toward developing any Rosslund property? After this money was spend the stock

holders would be confronted with the alternative of subscribing money for development work or the issuing of preference stock which would shut them out of the first right to dividend moneys. Then many of the new companies offer no satisfactory proof that their property contains any of the yellow metal. Besides all this, there is the most important consideration of all as to the assessability of the stock. This seems to be a question affecting some properties that has not been cleared up yet. It is most important, because when a person buys a thousand shares in a mining company he naturally would wish to be certain, whether or not he will, at some future time, be called upon to pay, in addition to the few dollars he paid the remaining ninety per cent. on the par price of the shares. If one bought a thousand shares at ten cents per share and then had to pay ninety cents more on every share his liability would, in addition to the first \$100 he paid, be \$900. Purchasers of mining shares should see to it that they are not to be let in for such a swindle as that.—*Money and Risks.*

#### *The C.P.R. and Kootenay.*

**F**ROM an interview with Sir William Van Horne published by a contemporary it is evident the Canadian Pacific Railway Company are fully alive to the importance of the Kootenay trade. We never for one moment supposed anything else, although we, like others, were inclined to wonder why the company did not show more activity in building into the district. It seems from what Sir William said the other day while in Vancouver that the Canadian Pacific people have been quietly laying their plans and before the close of another year they will be engaged in great railway undertakings in various parts of Kootenay. In the first place the Crow's Nest Pass road will receive their attention and in connection with it a number of branch lines that are projected will be built to tap the different mining camps. The cost of building these short lines will in the aggregate amount in all probability to as much as that of the main line, and as the Crow's Nest Pass Railway would be almost useless without these feeders it is of the utmost importance that they should be built.

It has been urged in more than one quarter that the Crow's Nest Pass Railway should be built and operated by the Government. We do not share that opinion because it would mean delay and incompleteness. The experience which the country had with government construction of the Canadian Pacific itself does not encourage us to hope that things would be any better with the Crow's Nest Pass line. Besides this, who would build the feeders already referred to? It is safe to say that the Government would not, at least for some years, and in the meantime the Kootenay would suffer from the delay.

The work, of course, might be done by an independent company, but the finding of the capitalists to undertake the work and the financing of it would mean delay with a possibility of failure.

We want the Crow's Nest Pass Railway just as soon as it can be built, and we want it to tap every

mining camp tributary to it. The only way that this can be done without delay is by having some large corporation like the C.P.R. do the work. Some people think that if the latter should build the road high rates will be the result, but the Government can easily provide against this by arranging the matter beforehand when agreeing to aid the work.

The Government of to-day at Ottawa may be relied on to look after the best interests of the people, and in giving the building of the Crow's Nest Pass Railway to the C.P.R. they may be trusted to see the public properly guarded in any steps they take.

It has become the fashion in some quarters to growl against the C.P.R., and no doubt there is some cause for it. A great corporation like it can hardly please everybody, but Canada as a whole may justly be proud of its national road and take pride in the way it has been managed. If the grumblers will only take a look across the border and see the condition to-day of nine-tenths of the railways there and compare them with the Canadian Pacific they will see that over the boundary it is mismanagement, robbery and bankruptcy, while with "our road" it is good management and solvency.

To come back to the Kootenay, Sir William Van Horne indicated that his company proposed at an early day to connect Revelstoke and Nelson by rail. The Nakusp & Slocan will be extended to connect with the Columbia & Kootenay Railway. Sir William also stated his opinion that the Crow's Nest Pass road would eventually be extended to the Fraser. The whole tone of the interview we have referred to shows that the Canadian Pacific Railway Company is on the eve of active development of a most important character in the Kootenay.

#### *Around Revelstoke.*

**R**EVERLSTOKE is the headquarters for the mining districts in North Kootenay, and surrounding it are many promising camps along the upper Columbia in Illecillewaet and at Trout Lake.

Some of the properties and claims are showing up well.

The Orphan Boy mineral claim, which is about sixty miles north of Revelstoke, is located on Barrett Creek, about two miles above its junction with McCulloch Creek, the latter being a tributary of Goldstream, which joins the Columbia River five miles to the west. A shaft is being sunk and work will be continued all winter. The shaft is now down twelve feet on the vein. The cropping of ore was about twenty inches wide, but in the bottom of the shaft the showing has increased to four feet of free milling quartz. Recent averages of the four feet yielded from \$72 to \$130. With the exception of the shaft no work has been done except on a few surface cuts and some stripping, which have opened up the vein clear across the claim in a diagonal direction of nearly 2,000 feet. The course of the lead is north-west and south-east.

On the Ole Bull, which lies a short distance to the north and east, an open cut has been run in on

the vein with a face of twenty-four feet. This cut shows six feet of ore, which the owner claims will average \$70 in gold per ton. The vein appears to be parallel to that opened on the Orphan Boy.

A Vancouver syndicate, represented by J. H. Hoar, has bonded the Ole Bull, Roseberry and C. O. D. for \$35,000, and is now working these claims. The same syndicate has secured a number of other properties on Barrett Creek.

The Last Chance placer claim covers a mile and a half along McCulloch Creek, below its junction with Barrett Creek. An incline shaft of about forty feet has been sunk on this claim and has now struck bed-rock and pay dirt.

On Smith Creek, which joins the Columbia opposite Goldstream, the Smith Creek Hydraulic Company is getting its plant to work and hopes to keep going all winter. Professor Nason is manager and has two giants at work with a force of nine miners. He reports good results from the gravel so far handled.

The Atkins syndicate, like the Smith Creek Company, composed of Chicago people, is operating on French Creek, another tributary of Goldstream, above McCulloch Creek. Its property is known as the Gold Hill placer claim. A drift is being run to bed-rock and the gravel has shown good values all the way.

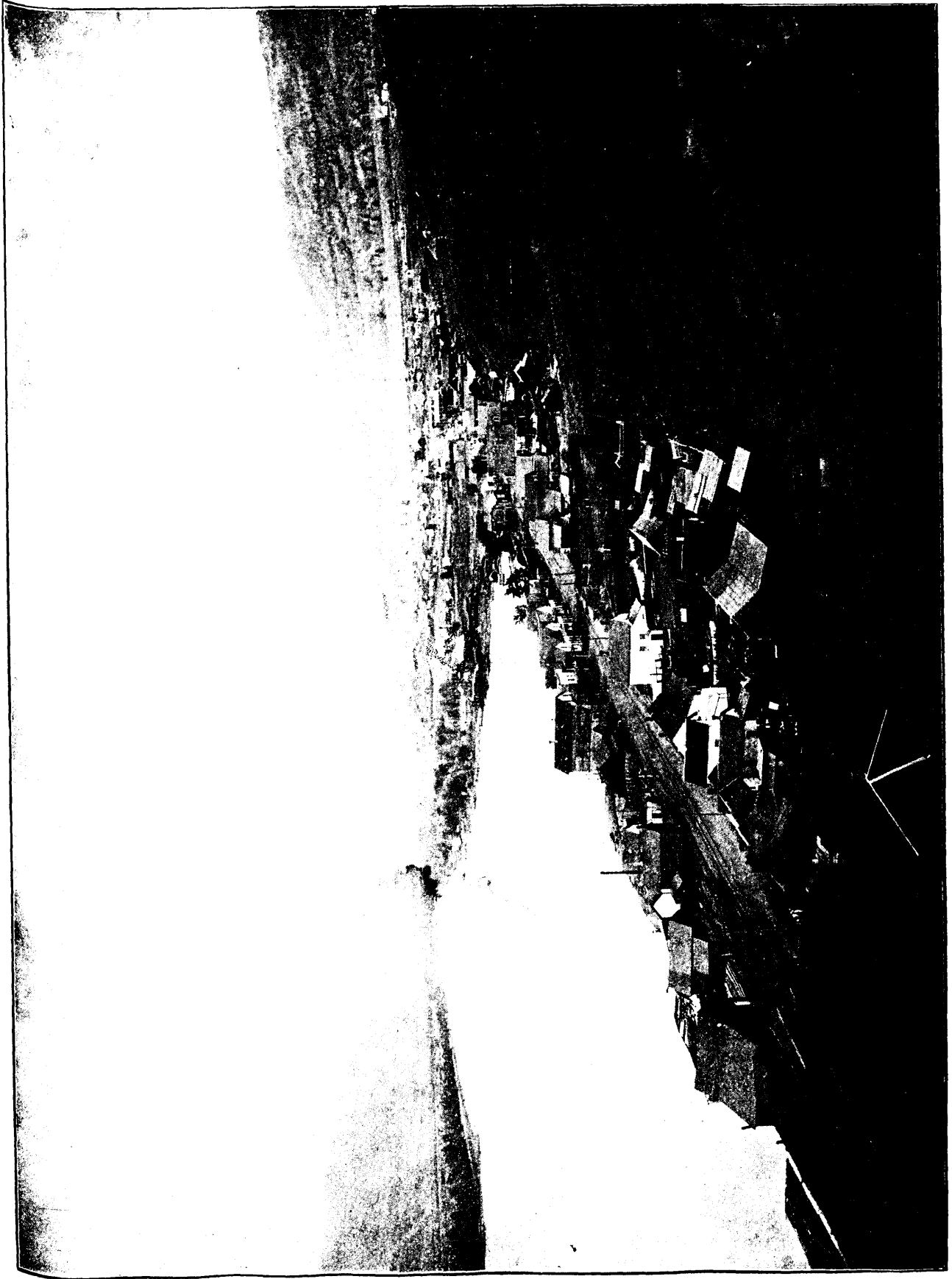
A big strike has been reported from Downie Creek, which is forty miles from Revelstoke. The discovery was made about three miles up from the Columbia River and consists of a big ledge of iron oxide and galena. The ore assays well in gold, silver and lead. It was only staked last month and no work is expected to be done on it this winter.

On Carne's Creek, which is only twenty-eight miles north of Revelstoke, what is known as the Revelstoke syndicate has a tunnel in on the vein on one of its claims which shows a full face of solid arsenical iron ore. This ore now averages \$40 per ton, though nearer the surface it only ran from \$14 to \$20.

A big strike has been made on the Broadview. This claim is at the forks of Lardo Creek which runs into Trout Lake. The property is under bond to the Lillooet Goldfields Company. The ledge is very wide and shows five feet of solid galena which is reported to be of high grade.

#### *Kootenay Oil Fields.*

**O**NE of the various resources of East Kootenay waiting for development is the petroleum found in the Flathead Valley, in the south-eastern portion of this district. This is a section of country but little known, and is separated from the remainder of the district by a high range of mountains. The natural outlet of the valley is down the Flathead River into Montana and the nearest railway is the Great Northern. Some years ago attention was called to this section through the finding of crude oil in the possession of Stony Indians, who annually hunted in this valley and they were induced to show some miners where they obtained the oil, which the Indians were in the habit of using as a medicine for complaints of all kinds. The surface indications are good, and two different qualities of



VIEW OF KAMLOOPS, B.C.

oil have been obtained at Kishneena Creek, a short distance north of the international boundary line. A black oil, similar to the Pennsylvania and Ohio oils is found. On Sage Creek, some eight miles north, there is found an oil that is nearly pure, of a light yellow colour, which will burn in a lamp as it comes from the ground. Close by there is natural gas escaping from the bed-rock, which burns freely on ignition. Some of this oil sent to the geological museum at Ottawa caused considerable excitement and comment and was pronounced a fraud on account of its purity. Dr. Selwyn, head of the department, made a special trip to the valley, and was surprised the find the oil genuine, and also that it was found in the Cambrian formation, which was something unknown, as all the oil fields recently discovered have been in Trenton limestone. Directly due east of Sage Creek, and on the eastern slope of the main ridge of the Rocky Mountains, in Alberta Territory, there are plenty of surface indications of crude oil. And the finding of these indications over a large area, and in the same formation, would go to show that there is a large oil field waiting capital to develop it. And we may expect that in the near future the oil fields in East Kootenay will be known all over the world.—Fort Steele Prospector.

#### *Increased Transportation Facilities.*

THE building of the large steamer by the Columbia & Kootenay Steam Navigation Company this winter means a daily boat service between Arrowhead and Trail in the spring. The improved service will be welcomed by all having business relations with the Kootenay. It is expected that the new steamer will be ready to run next March, when she will be placed on the route. This will give passengers on the Canadian Pacific quick and pleasant connections with the Kootenay, as there will be no delay in transferring at either Revelstoke or Arrowhead.

This increased service will be needed next season, as there will be undoubtedly a rush for the mines on the opening of spring.

The trip on the Columbia will repay anyone who delights in scenic beauty, and travellers besides will enjoy the change from the railway cars to the boat, especially when they know that no time is being lost in the journey.

The new steamer will enable the steamboat company to handle freight more expeditiously and there is no likelihood of blockades taking place next year. We trust that rates and other charges will be such as will give our coast cities a chance to compete with the East for the trade of the Kootenay, and in view of the agitation now going on for more direct communication between that district and the coast cities the railway and steamboat companies, in our opinion, would be wise to give the matter of rates the fullest consideration.

#### *Alberni and Surrounding District.*

THIS district is still forging ahead and gives promise of becoming one of the big gold producers of the province. Heavy capital is going in and

many properties are being developed on an extensive scale. James Dunsmuir is pushing work on the Consolidated Alberni, employing several men.

The stamp mill will soon be in operation and the waggon road completed. The diamond drill and compressors are showing up a body of ore that will assure the future of the camp, the ore being high grade and free milling.

The Mountain Rose Company is cross-cutting their vein at a depth of 150 feet. They are now in about eighty-five feet and expect to strike the ledge in about thirty days. The ore body on the surface is white quartz carrying free gold, and assaying from \$25 to \$300 to the ton. They have one claim.

The Mineral Creek Mining Company own the Halifax and American Boy. These are two of the most promising claims in the camp. The Halifax adjoins the Mountain Rose, catching their lead within twenty-five feet of their workings. They have a force of men on cross-cutting and exposing the vein.

The Mineral Hill Mining Company have five claims surrounding the Consolidated Alberni's property. They have exposed a six-foot vein, assays from which show \$60 to the ton in gold.

Numerous other companies are also at work, reporting encouraging showings, all of which be speak a prosperous future for the district.

That a gold belt exists on the Coast, commencing at Barclay Sound and crossing Vancouver Island through Alberni in a north-easterly direction to Jarvis Inlet on the Mainland, taking in Texada Island in its course, is now a well-established fact. The numerous strikes which are being made along its course are of such a nature as to convince the most skeptical.

The recent free gold discoveries on Texada Island placed on exhibition in Vancouver are the finest that have ever been found in the province. About twenty pounds of ore, containing two or three hundred dollars in coarse wire gold that could be picked out with a pocket knife, was on exhibition at the Leland Hotel, and caused a stampede of prospectors from the coast cities to Texada. S.

#### *Pertinent Points.*

HOWEVER gratifying to one's feelings in being the possessor of a mineral claim, or that limited section of ground in a well-known mineral district—which every free miner is entitled to by virtue of his license—whether acquired by purchase or by the more arduous form of "staking out" personally, still, in this connection it is well to be not over-sanguine as to its merits nowever well situated it may be in regard to other properties whose value is assured and made apparent by development. It may be safe to assume, on the whole, that in proportion to its contiguity to a good going mine so is the value of a mineral claim enhanced. But even in the acceptance of this fact as a hard and fast rule, in the vicissitudes of gold mining, there is always an element of uncertainty and this is a truism which is often overlooked by a trustful public in their anxiety to participate in profitable mining ventures.

In too many instances the promoting of a company

to work a mineral claim or group of claims entails the use of an amount of extravagant assertions bewildering to most people. We are forcibly reminded of these eccentricities on the part of certain sanguine company promoters by glancing over their prospectuses, some of which have of late been placed before the public. Their properties are situated in the Kootenay district and so far as appearances go may be well worthy of notice; but when we are gravely informed that each of the properties are enriched by the ore veins of two famous mines—also situated in that district—running through them, we are inclined to be somewhat skeptical. Accommodating as these veins may be, it is scarcely to be expected that they would radiate in such a convenient manner as to be found in everybody's property in the neighbourhood.

It cannot be doubted those statements act powerfully on the popular fancy and serve the purposes for which they were created; but they are misleading, and tend in a great measure to injure the reputation of mining interests, not only in the district named, but also in other mining centres. There are other considerations to which I would draw the attention of intending investors in mining property, not only for their own guidance, but also in justice to a rising mining community and their interests. The subject of the unscrupulousness of certain company dealings has been from time to time fairly well threshed out and need not further be commented upon; common sense and a wise discretion in the selection of their properties is an important factor in determining the ultimate success of mining ventures.

There is another class of whom I would speak whose utterances are apt to discourage intending investors. I mean those who enter a mining community, the reputed representatives of syndicates and, according to their own showing, backed up by plenty of capital. On the face of it they certainly are a welcome acquisition to any camp. But do they mean business? Let us follow one of this type in his wanderings in and around the mining country. Properties of more or less merit are brought before his notice, inspected, samples of ore taken, assayed; verdict, "not sufficient showing on surface to risk capital."

The chances are that our worthy representatives of capital return from whence they came disappointed and prejudiced men. It may be asked, why did those men return, as it were, empty handed? Well, they were hard to please—they wanted to take no risks—in fact nothing more nor less than a gold mine pure and simple would satisfy them, exhibiting in most cases an unreasonable desire to dictate the terms of purchase and so forth.

The wisdom of this line of conduct is open to question. Shrewdness in all walks of life is a quality to be desired, more especially as applied to mining business and its cultivation in this respect is a most necessary attainment. But there is a limit to over-caution, and those who make a practice of it in this business generally "get left."

I met a man the other day who had spent a short time in the Kootenay district. Speaking of Rossland, he gave it as his opinion that the value of mining properties and business interests generally were very much over-estimated. Now, I found

on questioning him further that he had visited Rossland "just to have a look around"—that he had no intention of interesting himself in her mines or any other business—that he had not even visited the mines; and yet I'll be bound to say that that man will return to the East and pose as an authority, and possibly by his erroneous theories convey to his hearers a wrong impression of the existing state of affairs in that thriving mining centre. Happily, the success of gold mining in British Columbia is assured—capital is steadily flowing in to develop her resources, and thus, in spite of shady practices, or pessimistic theories.

G. D. R.

#### *The Golden Cache Mines Company.*

CONTRACTS have been let for the erection of a ten-stamp mill, saw-mill and auxiliary steam power, the building of two bridges and the completion of the wagon road to the mine.

Recently the property has been examined by the well-known mining expert, Mr. J. B. Hastings, in the interests of his principals, the Gooderham-Blackstock syndicate of Toronto, with the result that this syndicate has purchased all the available trustee shares at par, and in addition thereto have managed to secure from private holders further shares. The fact that Mr. Hastings has also made a considerable investment on his own account in the company's stock speaks for itself and requires no comment. The five claims owned by this company have recently been surveyed by Mr. Wm. Garden, D.L.S., of the firm of Messrs. Garden, Hermon & Barwell, and several additional claims have been acquired by the company.

#### *What The "Mining Record" is doing.*

WE are in daily receipt of letters from all parts of the world seeking for information about British Columbia, and in most cases sending us subscriptions to the *Mining Record*. From Great Britain, France, Germany, Australia and all parts of the United States we have received many letters and only the other day several came from the Transvaal Republic, South Africa. One of the latter told us how the writer and some of his friends had seen and read copies of the *Mining Record* and a number of them had decided to move to British Columbia. The same writer enclosed four shillings for a fresh batch of *Records* to peruse, which, it is needless to say, we sent him at once. Thus the fame of our mining districts is spreading to all parts of the world, and the British Columbia *Mining Record* is doing its share in sending forth the good news about the mines. When people are preparing to leave South Africa for British Columbia it shows that the tide has turned in our favour.

#### *A Promising Mine.*

THE Two Friends, in the Slocan, being operated by a company of Vancouver people, is showing up exceedingly well. The first carload of ore, consisting of twenty tons, sent the other day to the Tacoma smelter, netted \$3,284.69, or \$164.23 per ton. Another carload of similar ore is on the

way to Tacoma, and on the 6th of November a third lot will be shipped. After that it is intended to send weekly shipments of twenty tons each to the smelter, and when the rawhide trail, which is being built, is completed and snow on the ground, the weekly shipments will be increased to several carloads. In fact, with the trail built and the snow on the ground the shipments will only be limited by the number of horses that can be employed in hauling.

The development work on this mine is being carried on in a very thorough manner. By means of tunnels and cross-cuts the company are already in a position to know almost without doubt the exact amount of mineral wealth they have to mine. For instance, they have demonstrated that in one block they have 600 tons which can be mined as fast as the ore can be hauled. They are opening up several other similar blocks and every indication shows that they can go on shipping from three to four carloads per week for months to come. Taking returns of the first carload shipped as a basis of calculation, there is every reason to believe therefore that the output of this mine will not be less than half a million dollars during the year. It will thus be seen that the Two Friends is a good mine, but we may add that there are many others in the Slocan just like it. The ore can be rawhided without any trouble right to the railway track, and this again is another characteristic of a large number of the mines in the Slocan.

The returns of the first carload may be interesting. They are as follows: Nett weight ore, 39,525 pounds; ounces gold, a trace; ounces silver, 281.7; per cent. lead, 37.9; silica, 34; iron, 7. Basis of settlement: Silver, 95 per cent.; lead, 90 per cent. The Two Friends Company are to be congratulated on their success.

#### *A Provincial Mining Association for British Columbia.*

IN our editorial notes we referred to the advisability of British Columbia having a mining association of its own instead of depending upon or being part of an organization outside the borders of the province. We suggest this in no spirit of unfriendliness to the North-West Mining Association, of Spokane, but simply because we think the time has come for us to act independently in the matter. It is right and proper that anything in the shape of legislation or otherwise affecting the mining industry of this province should be passed upon, urged or objected to by an association of our own rather than allow the duty to devolve upon outsiders. There is nothing, however, to prevent the two associations from working together for their mutual benefit.

The usefulness of a provincial association at this time can hardly be over-estimated. We might almost say it is a necessity. By having branches in every mining town of any importance in British Columbia, all working together for the common good, the power such an association would have is plain to be seen. The organizations could be of the simplest kind, so as not to be burdensome to the members and the fees made so light that they would hardly be felt. The main point would be to have a

large membership in every district and mining camp of the province so that when an expression of opinion was required on any subject connected with mining it would be that of the mining community as a whole, and not of any one section of it.

It is almost certain that there will be important legislation affecting mining interests brought forward at the approaching sessions of the Dominion Parliament and Provincial Legislature. It will be the duty of mining men to see that any proposed legislation is for the best interests of the industry and the country generally. This they can best do by means of an organization such as we suggest rather than individually or sectionally. The time is ripe. Who will be the first to start "The Provincial Mining Association of British Columbia?"

#### *The Islands and Mainland.*

THE Channe Mining Company, operating on Valdez, Thurlow and Channe Islands, owns the Bobbie Burns, Hetty Green, Daniel Webster, Poodle Dog, Black Swan, Seattle, Highland, Ester, Joe Jefferson, Tom Moore and Picnic mineral claims, white quartz propositions, carrying copper and iron pyrites, containing gold, silver and copper; the Ingersoll, Nancy Hanks, R. E. Lee, Gert-rude and Gypswick mineral claims, iron ore, carrying gold, silver and copper, and controls the Belmont arsenical, iron ore, and the Olga, a copper proposition. Crown grants have been obtained to the first four above mentioned properties, the requisite amount of development work having been performed on them. The company employs fourteen hands at present. An open cut is now being run in on the Bobbie Burns from the water front on a lead six feet wide and clearly defined. It is intended to sink on this vein. From the character of the rock exposed it is expected that shipments will be made from this lead inside of four weeks. The Bobbie Burns has also a cross-cut tunnel about eighty feet. The Hetty Green has tunnelling 100 feet and shafting forty feet in very promising ore. There is forty feet of shafting in the Daniel Webster on the same vein, which also shows extremely good indications. The Poodle Dog has a tunnel of about eighty feet driving to cross-cut a vein, of which there is an exceptionally favourable showing at the outcrop above. Assays as high as \$89 have been obtained from these mines and a trial shipment to the Tacoma smelter gave returns of \$31.20. The Ingersoll, a property recently acquired, the consideration being 20,000 fully paid up shares of the company, contains two well-mineralized leads about thirty feet apart, one of which has been reached by a cross-cut, and at a depth of twenty feet shows two feet of good looking ore.

On the Bobby Burns, Poodle Dog and Ingersoll claims frame buildings aggregating in value \$2,000, have been erected for the accommodation of the miners working for the company.

The White Pine is a claim now being developed by a company organized in Seattle. The lead has been struck at a depth of seventy-five feet by a cross-cut and the tunnel at last reports was in solid ore. More will be heard from this mine.

The Shoofly is being opened up by the British Columbia Development Company, of Spokane, who have bonded it for \$15,000.



A very important consideration materially improving the value of all these properties is the ease and cheapness with which ore can be shipped. Vessels can land at the dump, and in 400 tons lots, or with an aggregate of 400 tons by joint enterprise of the different companies shipping, freight rates of fifty cents a ton to Tacoma and Everett are offered.

A map of this section of country showing the principal claims has been prepared by Mr. E. A. Cleveland, of Vancouver, Provincial Land Surveyor, and copies can be procured from him at a very reasonable figure.

The Union Steamship Company, of Vancouver, run their steamers twice a week between the mines and Vancouver.

There is an ample supply of timber for mining purposes for many years to come—cedar, hemlock and Douglas fir in abundance.

Numerous streams abound, ranging from 40 to 150 miner's inches at minimum stage; 600 to 800 feet head is usually obtainable on these streams. Power can be developed, sufficient to run air compressors, concentrators and stamp mills.

#### *From Cariboo.*

CARIBOO has gone one step onward during the last year, one of its big hydraulic mines which is owned by the Cariboo Hydraulic Mining Company having turned out its \$120,000 in dust for an interrupted season's work. This was the first hydraulic mine taken up to be worked on a large scale; others were taken up afterwards and are in different stages of development and equipment. Hydraulic mining is "a certain sure thing" when ordinary care and skill are used in leasing, developing and equipping a property, but it is not every man who can afford to wait sometimes two or three or even four years before he can get any dividend from his mine. On the other hand, however, no class of mining is so sure of its regular dividends if only the prospecting has been thoroughly carried out. In this branch of mining there is no vein which may pinch out unexpectedly, an event which not even the best expert can foresee, but there is a deposit of gravel in which the veriest tyro in mining can, by sufficient and careful testing, estimate the amount of gold which he may ultimately recover.

The Cariboo mine, of which I have made mention, has, notwithstanding the immense amount spent in building ditches and in preserving the water supply, been short of water during the present season, a season which will be admitted has been the driest within the memory of even the oldest old timer. To guard against such a similar occurrence and to quadruple the amount of gravel which may be washed, a ditch some seventeen miles long has been surveyed, and work partially begun upon it, to bring on to the ground a supply of water which will be stored in Morehead Lake. In a dry season, therefore, there will be no lack of water, and in an ordinary season 5,000 inches will be always available. I might mention to those who are unfamiliar with the method adopted by hydraulic miners of measuring water, that the 5,000 inches represent approximately a continual flow of about

50,000 gallons per minute. This will give an idea of the immensity of the work undertaken. The above mentioned \$120,000 was taken from the upper gravels and the cappings. Shafts are now being sunk in the pits through the gravel some hundred feet or more to bed-rock, to test the value of the lower deposits. Unless the gravel be altogether different from that found in most of the ancient channels in different parts of the world, its richness should increase from ten to a hundred fold.

Perhaps the next largest undertaking is on the ground owned by the Horsefly Hydraulic Mining Company. On this ground it has been found, since the hydraulic plant has been placed in position, that the gravel has given place to cement. It has therefore been decided to equip the mine with stamps to crush this cement, which, according to various reports, runs from \$2 to \$25 per yard.

Adjoining the Horsefly hydraulic is the property belonging to the Horsefly Gold Mining Company. This company will endeavour to work its unusually rich grounds by the hydraulic elevator. Various other large hydraulic claims in the same neighbourhood have been systematically tested, some of which are in the development stage. Among these properties are those owned by the Maud Company, the Beavermouth Company, the Twenty Mile Creek Company, the Montreal Company, the French Company, which is being energetically developed, the McLaren Company, the Fishback Company, the Victoria Consolidated, as well as numerous other small ventures. I think the actual money in work and equipments amounts to a good deal over one million dollars, the whole of which is chiefly Canadian and partly British money. The Americans have obtained possession of most of our mines in the Kootenays, but we still hold nearly the whole of Cariboo.

Another class of mining which has lately come into prominence is river mining either by dredges or by damming the stream. The latter method is being pursued on the South Fork of the Quesnelle, which river has been leased to an English company which intends to dam the waters of Quesnelle Lake in which there are two arms, the end of each being distant 100 miles from the dam. If this gigantic undertaking be successful, and of this there seems to be no room for doubt, judging from the printed reports of reliable English engineers, a large amount of gold ought to be taken from the exposed bed of the river. Every yard of the Main Quesnelle from the Forks to the Fraser has been taken up and in these leases dredgers are and will be working. The North Fork of the Quesnelle also has been leased to different parties for the same purpose. I have not the opportunity at present to report to you on the operations being carried on in and around Barkerville, on the Cottonwood, on the Willow, on the Fraser and adjacent rivers, but I can assure you that most of the work as far as I knew has been carried on in a thoroughly systematic, efficient and miner-like manner.

Quartz mining is also coming to the front. A brick of thirty-one and a-half ounces was sent down from the Black Jack obtained by the cyanide process. Several abortive attempts have been made during the last twenty years to treat the Cariboo quartz by the old methods. Now, however, that

the cyanide process seems to be peculiarly adapted to the quartz of this section of the province we may ultimately see a strong rivalry between the rock and gravel miners as to which will produce the greatest amount of gold. I think that everyone will agree with me that men who have sunk millions in a mining district 200 miles from a railway must have had very good evidence placed before them of the immense value of the properties on which their money has been expended. That they will reap a rich reward for their enterprise is not only the wish but the belief of the people of British Columbia.

J. M. BUXTON.

**Coal Shipments.**

**F**OLLOWING is the list of foreign coal shipments for the month of October, 1896:

NEW V.C. CO., SHIPPING.		
Date.	Name and Destination.	Tons.
3—	Str. Willapa, Juneau, Alaska	22
4—	ss. Peter Jebson, Pt. Los Angeles	4,654
4—	Str. Tacoma, Port Townsend	34
7—	Ship Elwell, San Francisco	2,290
7—	Str. Rapid Transit, Olympia	151
9—	Str. Sea Lion, Port Townsend	22
9—	Bark Wilna, San Francisco	2,366
11—	Str. Wanderer, Port Townsend	43
11—	Str. R. Holyoke, Port Townsend	60
13—	Str. Willapa, Port Townsend	44
16—	Str. Wanderer, Port Townsend	47
16—	Str. R. Holyoke, Port Townsend	63
17—	Str. Willapa, Juneau, Alaska	25
20—	ss. Peter Jebson, Pt. Los Angeles	4,709
23—	Ship J. B. Brown, San Francisco	2,341
24—	Str. Tyee, Port Townsend	33
24—	Str. R. Holyoke, Port Townsend	34
24—	Str. Fearless, San Francisco	217
26—	Str. Willapa, Port Townsend	50
30—	Str. Willapa, Juneau, Alaska	25
30—	Str. Sea Lion, Port Townsend	25
30—	Str. R. Holyoke, Port Townsend	50
Total		17,310

WELLINGTON SHIPPING.		
Date.	Name and Destination.	Tons.
3—	ss. City of Topeka, Sitka	100
5—	ss. Alki, Vancouver	350
10—	Ship Oriental, San Francisco	2,700
10—	ss. Signal, Astoria	567
12—	ss. Wellington, San Francisco	2,600
15—	ss. Progressist, San Francisco	5,250
19—	ss. City of Topeka, Juneau	100
20—	ss. Excelsior, San Francisco	700
24—	Ship Columbia	2,310
24—	ss. Alki, Mary Island	275
28—	ss. Wellington, San Francisco	2,600
Total		17,552

UNION SHIPPING.		
Date.	Name and Destination.	Tons.
5—	ss. Monmouthshire, Victoria	785
5—	Bark Richard III., San Francisco	1,640
5—	ss. Rapid Transit Port Los Angeles	271
5—	ss. Minneola, Port Los Angeles	3,200
17—	ss. Costa Rica, San Francisco	2,488
17—	ss. Minneola, Port Los Angeles	3,150
Total		11,534

RECAPITULATION.				
	July.	Aug.	Sept.	Oct.
New V.C. Co.	24,986	18,384	14,206	17,310
Wellington	12,769	8,710	24,850	17,552
Union	11,269	6,198	9,565	11,534
Total	49,024	33,292	48,621	46,396

**Mines Around Rossland.**

**A**N assay from the strike on the Mabel gave \$39.80 in gold, silver and copper.

The compressor plant and drills are hard at work on the Monte Christo.

The ledge of the Maud S. is fifty feet wide and assays \$34 in gold, 40 ounces silver and 3 per cent. copper.

The Iron Colt shaft is down thirty-five feet and the ore body is widening as they go down.

On the tunnel of the Consolidated St. Elmo a large body of fine-grained rich-looking ore has been broken into.

Some fine showings are being uncovered by Mr. Moynahan on the West Le Roi and Josie. The ore is identical with that of the Le Roi.

The Homestake compressor and pumping plant is approaching completion.

A strong vein of iron-copper ore is being opened up on the Boulder.

The Le Roi and Crown Point compressor plants are well in hand.

The shaft of the Eric is all in ore.

Ore in the drift from the main shaft of the Josie is averaging \$75 per ton.

The Red Mountain is looking so well that the company has ordered a seven-drill compressor plant.

A magnificent body of ore well streaked with copper has been revealed on the Northern Belle.

No. 2 shaft on the Phoenix is down over thirty feet and shows ten inches of good ore at the bottom.

The Good Hope has struck from fifteen to eighteen inches of pay ore.

The ore in the Nest Egg is changing in character for the better, and is assuming a shipping grade.

The ore from the Alberta taken from the six and a-half foot vein averages \$20.

The Silverine shaft shows thirty inches of clean ore at the bottom.

The ore body on the Mascot has widened to five feet.

A new and promising ledge has been found on the Coluna.

The compressor for the Commander is being erected.

The new hoist for the Nickel Plate is being put in.

The St. Paul has a large, strong ledge, which is turning out well.

A discovery of very rich copper ore is reported from the Emma group.

The ore from No. 2 shaft Iron Mask 100 feet down is of very fine quality.

The San Joaquin is down sixty-one feet in six to eight inches of pay ore.

The Crown grant for the Palo Alto issued last month.

In the Deer Park the shaft is down 100 feet.

Six feet of ore is in sight on the Hattie Brown.

Assays of \$40 have been got from ore recently taken from the Mabel adjoining the City of Spokane.

Two feet of ore in the Southern Belle at a depth of twenty feet assays \$34.85 in gold and silver.

### Rossland Notes.

THE citizens of Rossland are resolved to have the town incorporated without any further delay. The need of certain improvements and the growing importance of the place will not permit of its remaining longer under the care of the Local Government. It has suffered from neglect long enough. Rossland is going ahead with rapid strides. The erection of brick buildings has commenced, the annex to the Allan Hotel being the first on the list. A fine opera house is also being built and the machinery for a large brewery is on the way.

The incoming of the Red Mountain Railway means a new era of advancement for Rossland, and increased activity in the shipment of ore from the mines. It means also that a large portion of the town which hertofore has been mostly occupied by cabins and shacks will be covered with fine buildings. It will not astonish Rosslanders if before the end of the year 1897 the C.P.R. and other transcontinental lines are heading for Rossland. That it is bound to be a great railway centre in the near future is certain.

It looks as if Mr. Corbin is going to have some trouble in getting possession of the land he claims in Rossland. What the outcome will be no one can tell at present, but the uncertainty is not likely to last long as the erection of the railway station and other buildings in its neighbourhood will likely bring matters to a climax.

Around the mines matters have been active as usual. The Mugwump is fast developing into a great mine. The Mayflower is preparing to make large shipments and the Le Roi, which is now shipping about 150 tons daily, is likely to increase this quantity largely in the near future. It may be expected that the Centre Star will make some important moves soon, now that the annual meeting of the company has been held and the board of directors for another year elected.

Mr. Rufus Pope, before his departure for home the other day, deeded to the Big Three Company all of the Mascot claim which was found to cover Eldorado ground. He could hardly have done anything else. The object of Mr. Pope's visit to Rossland will probably be the booming of some more mining properties as soon as he returns home.

There now seems to be some hope that Mr. Heinze will succeed in procuring the necessary capital for the building of the Columbia & Western Railway. The extension of the road to the Kettle River and Boundary Creek districts would open up a vast and valuable mining region, and the enterprise would prove in the end a good investment for those putting their money into it. There is a very general desire to see Mr. Heinze succeed in his efforts to obtain the capital necessary.

The cuttings made in building the Red Mountain Railway disclosed several good veins on adjoining properties and the lucky owners are taking advantage of the discovery. Another unexpected find was made when the workmen were excavating the foundation for the Trail Brewery; they uncovered a fine ledge of iron having every appearance of being valuable.

The purchase of a large number of lots in Rossland by James F. Wardner for a Montreal syndicate was an important event in the history of the

town. It is said that some of the chief officials of the C.P.R. are interested in the deal, and if this should be the case it means that the C.P.R. has its eye on Rossland as an important point on its system. The parties who bought the lots are likely to make a lot of money out of the purchase.

There is great activity in building operations in Rossland, the sound of the hammer and saw being everywhere heard, and it is estimated that the value of the buildings in course of erection will not fall far short of \$125,000.

The C.P.R. has now completed its telegraphic line between Trail and Rossland, which is a great improvement on the telephone system we have had.

DRILL.

### Notes from New Denver.

MORE business has been transacted in connection with the mines around Slocan Lake in the last three months than during any previous three years in its history. The country is simply swarming with people who are familiarly known as experts and others said to represent capital, foreign or otherwise. All kinds of properties are in demand, and last year's predictions as to the enormous richness of the country have been more than verified. Almost all of the good groups have been taken up by monied men, and will be actively developed during the winter.

Those which have been on trial are certainly fulfilling the best hopes which were entertained of them, and the development done on the Enterprise conclusively proves that the veins are true fissures descending to great depth.

This property continues to look as well as ever; the wagon road is all but completed to the mines and ore will be shipped as soon as the snow lies deep enough to permit of rawhiding it to the lake. This wagon road is destined to become the main artery through which the surrounding mines and claims will draw their supplies and take out their ore. A good trail has recently been built to connect with it from the Bondholder, and in consequence development on that group, which is reported improving rapidly, will be much facilitated.

The Neepawa and Baker Fraction claims situated right beside the Enterprise and directly on the wagon road were bonded during September to Dr. Bell-Irving, of Vancouver, for \$30,000. The ore found on this property is extremely high grade and consists of a mixture of fine-grained galena with arsenite, or what is here commonly known as black sulphurets. The upper tunnel has been driven fifty feet with a showing all the way, and a third will be started immediately to expose the ore shoot more effectively.

The Thompson group on Four Mile has also been acquired by the same company on a bond for \$40,000. This is a purely galena proposition, but the ore body is so large that there is said to be enough already in sight to warrant the erection of a concentrator at an early date. Three and a-half miles of trail have recently been built and when the cabins and other accessories are complete, work will commence on a large scale. A foot of clean ore has already been uncovered since the company took hold of the property, and

Four Mile will soon take its place among the other actively producing creeks of the lake.

The dispute pending, regarding the ownership of the Two Friends has not yet been settled, but in the meantime the property continues working satisfactorily. Stopping has commenced, and in addition to the two carloads already shipped there are four more now awaiting transportation to the smelter.

The rich gold properties on Yuill Creek known as the Alpine group are reported bonded for \$60,000, but further particulars are not to hand.

The bond on the Arlington has been thrown up by Mr. Finch and his associates. The second payment, amounting to \$10,000, became due on October 1st, and as machinery would be required before further development could be done to advantage, the indications were not considered sufficiently good to warrant such a large expenditure. While this is no doubt a severe blow to mining in that locality, it is not really so great as one would suppose. In sinking the shaft to a depth of seventy-five feet it is estimated that somewhere in the neighbourhood of \$15,000 worth of ore has been taken out and placed on the dump. This in itself is evidence of vast mineralization, but when we consider that the ore is of a proverbially pockery character, and present in such large quantities on the surface, it is not at all surprising that it should show some signs of weakness on first sinking. However, we cannot accept this as representing the condition of all the mines in the district. The Arlington is absolutely unique as regards the character of the ore deposit, and although a year ago the throwing up of the bond would have been fatal to mining interests in that region, the success which is attending development on the Two Friends, Bondholder and others, need only be referred to in order to restore perfect confidence.

In addition, there are many practical mining men who firmly believe that the Arlington will yet prove itself a bonanza by the opening up of pockets of surprising richness.

On the Galena Farm the success of the Currie is more than upholding the expectations of the bonders. Within three months a splendid wagon road one and three-quarter miles in length has been constructed and four tons of ore sent to the smelter as a trial shipment. The development done so far consists of a seventy-five foot double compartment shaft, from the bottom of which a forty-foot cross-cut has been driven, and drifting continued in both directions along the ledges for a total distance of 110 feet. An inclined winze has also been sunk twenty-seven feet on the vein, so that the property has now been proven to a depth of nearly 100 feet.

An exploratory shaft was started about 400 feet west of the first and several tons of ore taken out in the twenty feet which it was sunk, this being the opening which supplied the ore sent to the smelter.

It is confidently believed at the mine that this is a continuation of the ore shoot met with underground in the drift, and if this is the case it is certainly one of the longest and best in the Slocan. It is the intention of the management to commence work at once on what is to be the main

working shaft of the property. This will be located about 350 feet from the present one and it is to descend vertically to a depth of 500 feet. With the present dip of the vein (somewhere between sixty and seventy degrees) it is estimated that the shaft will cut it at a depth of about 150 feet, and cross-cuts will then be driven at different points to connect the workings with the shaft.

Plans and specifications for a concentrator of about 150 tons daily capacity, to be erected near the mouth of this shaft, are now under consideration and sufficient water power has already been secured for driving all necessary machinery at the mine and working the concentrator. It is proposed to concentrate all the ore taken from the mine, in order to save hand sorting and obtain a more uniform product.

Apart from the tremendous size of the vein there are two interesting and highly gratifying points to be noticed about this property. One is the remarkable similarity of its ore to that of the famous Slocan Star mine, in that it carried considerable quantities of beautiful yellow copper pyrites; and the other is that, unlike some lower lake properties, the zinc blende, which is found at the surface and which in this case is non-argentiferous, disappears with depth and gives place to galena of a better grade than is found above. The development of this property is being watched with much interest, as this is one of the only real sinking propositions in the Slocan.

The country generally is showing every sign of rapid advancement; new boats are being constructed for increased traffic on the lake, trails and wagon roads are being built in all directions and fresh journalistic enterprises are in the field at Sandon and Slocan City, so that there is an air of bustle and excitement all round.

HOWARD WEST.

### *Co-operative Mining.*

(Continued.)

I HAVE dealt so far with co-operation so far as applied to combination of individual efforts or the association of syndicates and joint stock companies with individuals. It has been pointed out and maintained that capital, as usually understood, on a large scale, is not so necessary as supposed for the development of mines. The immense capitalization of companies being formed and in operation is largely normal, not more than one-tenth at the outside being available in actual cash, and the greater part of the cash outlay is for labour. I have suggested the various ways that labour, by combination and co-operation, with, if necessary, the assistance of capital, may enter into the problem as a living, participating factor, and not so much machinery, or provisions or fluxing material, or ore to be smelted, the cost of which is a determinable quantity. If the wealth of our mines is shared by the people of the country and by those who do the actual work of raising it, the benefits to be derived will be infinitely greater and more wide-spread. The danger of the present craze for inflow of foreign capital, to attract and employ which, all efforts are strained, is that sooner or later the producing and profitable mines will all be in the hands of British and foreign syndicates,

the dividends of which will flow regularly out of the country. In other words, the *profits* of the industry will not remain with us, except the profits of promotion, which go into the pockets of a comparatively few. The people of this province will simply be paid for their produce and labour at the market price in competition with the world. If we depended less upon the outside world for assistance and more upon our own efforts and capital, the result would be that we would be richer and better off, and I think it has been pretty clearly demonstrated that this is possible by co-operation of labour, and of labour with capital—not by inflated capitalization—but by honest dollar for dollar paid-up stock, the face value of which represents an amount actually expended in labour or money. At present the profits of mining arise principally out of speculation, not from mining as an industry. This, like real estate and all other forms of speculation, gives rise to fluctuations and eras of boom, succeeded by corresponding depression, the effects of which are long and deeply felt. Few people, even those who for the time being make most money, are benefited by a boom, while they are more or less injuriously affected, and often permanently ruined. Mining in itself is a legitimate business and no more of a "gamble" than farming or manufacturing. The gambling which has always been more or less associated with it in the minds of the public, has been inspired by the manipulation of stocks and the hundred and one devices of the broker, the many evils connected with which may be anticipated from the coming mining boom. Co-operation, or the principle of self-help properly applied, is the antidote to inflation, and where it does not wholly check the evils of speculation, largely minimizes it. It has been an almost invariable experience that those industries, under ordinary conditions which have developed from small beginnings, are successful, while those promoted and started to life on a large scale too often go to the wall. Mining is not exceptional in this respect and depends for ultimate prosperity upon safe business methods.

There is, however, another form of co-operation in addition to those to which I have referred, concerning which a great deal could be said, and from a political point of view is most important, and that is between the Government and the mining industry.

One of the great needs of most mining communities is railway communication and transportation facilities, without which, in fact, all must fail. There is nothing which acts and re-acts upon development so materially and quickly as (1) the rate of freight to and from the mines, and (2) the rate at which goods and ore can be handled. The very life of most camps depends upon these two considerations. Owing, however, to the very special conditions attaching to mining districts in new countries—the sparseness of population, the rough and mountainous character of the exterior, remoteness from regular lines of communication, the cost of labour, etc., the building of railways—the finding of capital—is a very grave problem indeed, and one which presses on the attention of the province of British Columbia at the present time. Railway communication is part and parcel of mining devel-

opment, and in the southern part of British Columbia, is peculiarly so.

The policy of all governments in Canada has been to assist railway companies in some of the following ways: 1. By cash bonuses. 2. By land grants. 3. By guaranteeing bonds, or in all three ways at once. This has been considered good policy—a necessary policy, and, of course, it has resulted in a great many railways being built that would not otherwise have been built, but experience has shown that it is not the *best* policy.

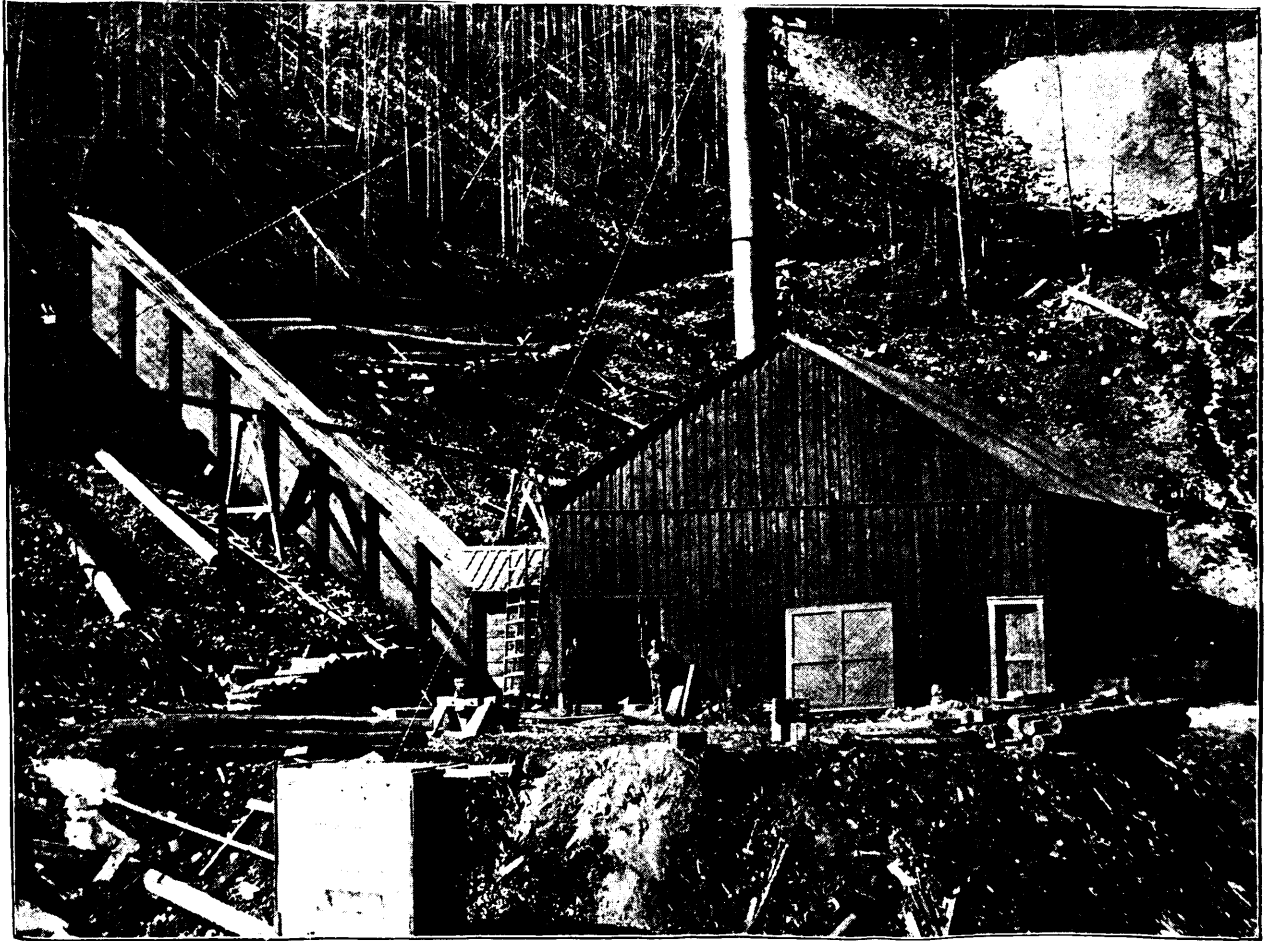
Heretofore no government has retained any business interest in the railways thus assisted or any share of the valuations contained in the lands given as a bonus. This is a business mistake. Where governments do not build railways out and out for themselves, any assistance they give in cash or lands should go as subscription to the stocks of railway companies, figure as assets in their public accounts, and represent ownership and control to that extent. Governments, any more than private individuals, should not for public purposes give away an asset for which nothing is received in return. In other words, it is unsafe and unwise to depart from business methods. Philanthropy is not the business of a government. Assistance given should be on the basis of co-operation in profits as well as expenditure.

There is another principle that should govern in the building of local railways, and that is that the district specially served, opened up and benefitted, should be made to specially contribute—somewhat on the principle of local assessment—which is applied to paying for benefits in the ratio in which they are special.

For instance, Southern Kootenay desires and requires a railway to open up and develop its mines. To a large extent such a railway will benefit the whole of the province, but in a special sense it will be a local benefit as well. It means profit to present and prospective mine owners. It would run through a highly mineralized belt, the richness of which, in all probability, is more than sufficient to pay big profits and build several railways besides. Without a railway these would not be available or profitable, or if profitable, only so under great disadvantages.

Capitalists will not be found to build the railway as a purely railway proposition unaided. The Dominion of Canada and the province of British Columbia will be called upon for assistance—the former for its usual \$3,200 a mile and the latter for money and a land grant. Instead of giving money or guaranteeing bonds outright, the Government should subscribe for stock equivalent to the aid asked and be represented on the board of control. If a land grant be made in addition it should take to itself by legislation the power to levy a royalty on producing mines within a definite railway belt and to retain a proprietary interest in the valuations—timber, quarries, etc., etc.

The application of these two principles of joint stock control in railways and local assessment for benefits will tend to solve satisfactorily and upon a sound, economic basis a problem which has grave concern for this province.



WAR EAGLE COMPRESSOR PLANT, ROSSLAND, B.C.

*From Nelson.*

IN the early part of this year many wild shots were made at the probable output of West Kootenay. Some soaring journalists going for the nonce in the business of the uncalculating and irresponsible prophet, proclaimed aloud that ten millions of dollars would not cover the output. With three-quarters of the year behind us it looks doubtful if half that figure will be reached. We are dealing now, it must be remembered, with the southern riding of West Kootenay, the kingdom ruled over by Capt. Fitzstubb's. This includes the Slocan, Trail Creek, Nelson and the country around Kootenay Lake. Deep in the bosom of the Provincial Assessor repose the returns of all the shipping mines as required by the Assessment Act of last session. There is no reason why these figures should not be absolutely correct, as they are based on the smelter returns, but they are not available to the journalistic eye. Recourse, therefore, has to be made to the Customs House. The collector at Nelson is a courteous official who is always willing to lay all the information, which the regulations permit, at the disposal of the inquisitive scribbler. The result is that some fair estimate of the product of this mining field can be arrived at, though it is well to note that this is possibly only through the courtesy of a Dominion officer, while the Local Provincial Government, which might be supposed to foster its most promising industry, does nothing to help it in this most important matter of publicity. It is only fair to add, however, that the new Provincial Mineralogist, Mr. A. C. Carlyle, is fully alive to the value of the periodical publication of reliable returns. From his position behind the scenes as a government official he has access to the assessment returns, and from them he hopes to be able to compile full returns.

The port of Nelson includes the whole of the district above referred to, but unfortunately does not include Revelstoke, which is still an outpost of New Westminster. A large quantity of Slocan ore finds its way out by this route, and its value can only be estimated. Thanks to private journalistic enterprise, the output by this route is recorded, and as the Slocan ore runs at an average value of \$100 a ton, an estimate of its total value can be arrived at that is not very wide of the mark.

The figures for this year so far are as follows:—

EXPORTS OF MINERALS FROM WEST KOOTENAY.	
Quarter ending 31st March, 1896	\$ 678,820
“ “ 30th June, 1896	468,667
“ “ 30th September, 1896	730,535
	<hr/>
	\$1,878,022
Exported via Revelstoke	500,000
	<hr/>
	\$2,378,022

This is some distance from the 5,000,000, but with both the Nelson and Trail smelters hard at work good progress will be made and the figure of \$1,000,000 should certainly be reached. Had everything gone smoothly and in accordance with the indications apparent at the commencement of the year, very much higher figures would have been reached, possibly the highest notch of ten millions. But the prophets were blind of one eye. They were unable to foresee that the Pilot Bay smelter would shut down early in the spring, that the Trail Creek

smelter would be months overcoming difficulties and arriving at its maximum output, or that delays and shut-downs would occur at Nelson.

The mines themselves are in a better position than ever. They are simply waiting until further facilities of transport are provided, or cheaper reduction of their ore is at hand. Why should mine owners at Trail Creek send their ore out by the laborious wagon, then to be conveyed to distant smelters, while the Red Mountain Railway is nearing completion, and the smelter at Trail is increasing its capacity every day? The interval is occupied in putting the mine into such shape that when the facilities are at hand the output will be enormous. It is much the same in the Slocan. Here the amalgamation of properties and their incorporation into companies provides the capital necessary to build concentrators and put in arial tramways. The old raw-hiding will be known no more and the ore will gently glide, in vastly increased amount, on a wire rope across the mountain slopes. There are three concentrators at work now, in the Slocan, at the Alamo, Slocan Star and Washington mines. At the Noble Five the concentrator building is ready for the machinery, which is on its way in, and at the Ruecau another is in course of construction. Even without the addition of new mines to the list of shippers the output is very largely on the increase. The figures resulting from this are an incontestable proof of the progress of Kootenay.

If the returns from the whole of British Columbia are taken they will show a total fit to rank with the other great mining countries of the world.

The list of the capitalization of the mining companies of British Columbia is at first sight an alarming one, but there are other ways of looking at it which rob it of some of its terrors. In the *Rossland Miner* of recent date the market price of the shares of thirty-two Trail Creek companies is given. These are not all the companies existing in that district but they are the only ones having shares on the market. According to these quotations the sum of \$6,507,000 would buy the lot. The *Le Roi* is not included, as none of its shares are for sale. Putting their value at another \$3,500,000 shows the present market value of all these properties is \$10,000,000, or two million pounds sterling. Having regard to some of the prices paid for mines in other countries, this does not seem such a very out-of-the-way figure. PICK.

*Important Discovery of Tin in British Columbia.*

MR. J. J. MOORE, who has been mining in British Columbia for a good many years, has been employed for some time past in prospecting for gold and other minerals and, while prosecuting his search for hidden treasures, he discovered at the head of Howe Sound a rich deposit of tin, of large extent. To make sure he was right in his surmises, he sent samples of the ore direct to practical tin miners and tin mine owners in Cornwall, England, and has just received word that the specimens submitted to them are tin. This is the first find of the kind in the province, and its importance is not to be under-estimated. When the claim is developed the chances are that a most valuable

property will be unearthed, and, with the close proximity of coal, exceptional shipping facilities, and a large demand for the finished product, it should be of material value in the development of this province.

#### *Notes from the Camps.*

**R**OSSLAND is to have a new opera house at the corner of Spokane Street and Le Roi Avenue. The cost of the building will be about \$10,000.

The Red Mountain Railway, it is expected, will enter Rossland this month.

S. S. Bailey is reported to have sold his interest in the Payne group, Slocan district, for \$80,000 cash. Mr. Bailey paid \$2,000 for the Payne in 1891.

The Idaho, in the Slocan, has paid another dividend of \$18,000, making \$50,000 in all.

Hugh Sutherland, of Hudson's Bay Railway fame, is now operating in the Slocan district. He will find his present employment more profitable than handling railway charters.

Coal Hill, near Kamloops, is at present attracting much attention and numerous rich discoveries are being made. The ore is similar in character to that of the Trail Creek district.

Boundary Creek is immensely rich in mineral. Experts who have visited the district say that with transportation facilities there would not be a better camp in the province. Yet Mr. Heinze could not raise the money to build a railway through this rich country. There must be something rotten in the State of Denmark.

There is complaint that the warehouse accommodation at Penticton is insufficient and that goods have been injured by being allowed to lie exposed on the wharf. The C.P.R. should see to this without delay.

Many of the miners who have been working this summer in Cariboo intend wintering there. They want to be on the spot when next season's work begins. The year 1897 will be a busy one in Cariboo.

The pipe for the Cariboo Gold Fields Company, which has been lying at Ashcroft for some time, is being moved up country as fast as it can be freighted.

The general offices of the Columbia & Western Railway at Trail, recently erected, are now occupied by the chief officials and clerks of the road. Rossland is no longer the headquarters of the company.

During 1896 the North Star mine near Fort Steele, East Kootenay, shipped 5,000 tons of ore. All the district wants is better transportation.

By the 25th of this month it is expected that the town of Trail will have an electric lighting plant in full operation. The smelting company have the matter in hand.

A lot in Rossland bought for \$260 less than a year ago was sold the other day for \$5,250. Yet there is no real estate boom in that town.

It was Kamloops the other day and now it is Nanaimo with a mining excitement. Some rich discoveries have recently been made in the vicinity of the latter and the country immediately west of the town is found to be highly mineralized.

The Nelson smelter, with its new machinery installed, has commenced work again.

English syndicates are now beginning to operate largely in the Trail Creek district. Mr. J. Geale Dickson, of London, having organized one with £300,000 capital, has sent instructions to his agent, Mr. Harold Kingsmill, at Rossland, to begin work at once.

The foundation of the first brick hotel in Rossland has been laid. It will be an annex to the Allan Hotel, 31x100, three storeys high.

It is estimated that over \$150,000 worth of new buildings are in course of erection in Rossland.

The value of the ore shipped from Kootenay during the present year is \$2,280,132.

The Columbia & Kootenay Steam Navigation Company are building a new passenger and freight steamer which, it is expected, will be finished in March. It will be the largest of the fleet.

The second wash-up of the Cariboo hydraulic mine amounted to about \$36,000. This makes a total of \$120,000 for the season, and it is expected that there will be a third wash-up before winter sets in.

Development work on Texada Island is being pushed vigorously and a road from the mines to sea water is being constructed so that ore shipments may be made.

Rossland is again agitating for incorporation, and there is not likely to be any slip this time in accomplishing the object.

Messrs. Govan and North are reported to have allowed their bond on the Prospector group to lapse. If those gentlemen intend pushing business they should only bond such properties as they intend developing. To allow bonds to lapse, unless for very good reasons, looks bad.

Reports about the Pilot Bay Smelter continue, but so far they are mere surmises as nothing is publicly known about the intentions of the proprietors of the works.

Kaslo is determined to have an electric light plant installed at once. The people of the town seem to be in earnest about it, and generally when the people are in earnest they have their way.

The annual meeting of the Centre Star Mining & Smelting Company took place at Butte City, Montana, on October 13th. The following officers were elected for the ensuing year: P. A. Largey, president; Geoffrey Lavell, vice-president; W. G. Benham, secretary; T. H. Hodgens, treasurer; Oliver Durant, general manager. Directors, P. A. Largey, Geoffrey Lavell, Sir Charles Ross, Bart., A. H. Tarbet and Oliver Durant.

There is reason to believe that although Mr. Heinze, when over in England, failed in securing the capital to extend the Columbia & Western Railway the money will be forthcoming before long.

Professor Selwyn, the late head of the Dominion Geological Survey, calculates that the beds of coal near the Crow's Nest Pass cover at least 140 square miles.

The C.P.R., it is said, intend placing a steamer on the Columbia to run above Revelstoke.

The Kaslo waterworks are now under construction and will be pushed to completion, the proceeds



of the bond purchased by Hewitt Bostock, M.P., having been placed to the credit of the city.

A new boat, the *International*, has been placed on Kootenay Lake to run against the *Kokanee* of the C. & K.S.N. Co.

The Mugwump is showing up well, and bids fair to become one of the great mines of the Rossland camp.

There are forty-five shipping mines in the Slovan and this number is likely to be increased to sixty the coming winter. The ores of this district average \$100 per ton.

The Le Roi declared another dividend of \$25,000 on the 21st of October. This brings the total dividends up to \$225,000, and by the 1st of January the mine is expected to be in a position to pay \$50,000 monthly.

The capacity of the Trail smelter is to be largely increased and the new machinery is expected to be in place within ninety days. The capacity of the works will then be 600 tons per day.

#### "As Others See Us."

A RECENT arrival in Victoria is R. W. Wilson, a traveling correspondent of the *Mining & Scientific Press*, published in San Francisco—the oldest mining journal on the American continent. In the interests of that paper Mr. Wilson is making a tour through the mining districts of British Columbia. For a year past he has been visiting the gold mines along the great mother lode of California, and prior to that he has had extensive experience in other gold fields of the United States, the Australian colonies and elsewhere, where British money is invested in mining.

"It is interesting to observe," says Mr. Wilson, "how the present revival in gold mining is world-wide, and how nearly every gold-producing centre is reporting an increased yield. Even to the United Kingdom itself the search for gold has spread. On the Duke of Sutherland's estates in Scotland some prospecting is being done. In Ireland an English syndicate is opening up some quartz ledges at a place where alluvial gold was found in large quantity by the soldiers of Cromwell. In Wales Wm. Pritchard Morgan, M.P., an old Australian miner at Charters Towers in Queensland, is working at a profit, with cheap water power, an enormous low grade ore proposition. With recent doings in South Africa the public is familiar, while into Australia and New Zealand the inflow of British capital is large and steady and the development is continuous and upon the most enlightened lines of modern scientific mining. Even British New Guinea has joined the ranks of producers, a large shipment of placer gold from there having recently reached the mint at Sydney, N.S.W."

"The industrial depression that has so long prevailed over nearly all the world together with the improvement in the various processes for the reduction of refractory ores is increasingly leading investors to place at least some portion of their savings in mining ventures. Perhaps no better evidence of the increased interest that is being taken in gold mining in British Columbia can be found than in the inauguration of such an excellent, high-class journal as the B.C. MINING RECORD, which is eagerly looked for and carefully read by numbers of people who never have seen, and probably never will visit, the Dominion, but are not unlikely in many cases to send their savings there for investment.

"To the great credit of the newspaper press of British Columbia, it may be said that there is not to-day another gold-field in the world where the press as a whole has more conscientiously endeavoured to give the exact facts of the new discoveries without any high-falutin' attempts at a nonsensical boom, which in the long run only retards the prosperity of a district. Facts speak for themselves, and the facts about British Columbia are now being stated by the MINING RECORD and other papers in such a straightforward, matter of fact way that the reader of general mining news turns with a feeling of freshness and relief to what emanates from the Canadian Pacific Coast.

"In California, gold mining is progressing as favourably as its best wisher can desire, but miners are a proverbially restless class and there are many who will next spring find their way to British Columbia. Of my own knowledge I know of several men who are now putting in the winter 'making a stake' to come here in spring. These men are English miners, of whom there are a great many in California, much of the mining speculation in that State being in English hands. Many of the men who went to Alaska last summer will come to British Columbia next spring.

"The laws for the protection of miners are better here than in California, but this fact is not so well-known there as it ought to be. For instance, it is almost universally understood amongst American miners that in coming here and taking out miners' licenses they have necessarily to take an oath of allegiance to the British Crown and forfeit their American citizenship rights. Of course everybody on the ground knows that this is entirely incorrect, but for the benefit of United States miners the MINING RECORD might advantageously point out the liberality—unparalleled by that of any nation in the world—with which Great Britain and her colonies receive into fellowship the alien stranger, without requiring him to sever the ties that bind him to the country of his nationality."

#### Lookout Mountain.

Tunnel on Sovereign eight feet, will strike the vein within twenty-four feet. Shaft is in five feet of \$20 ore.

Diamond drill on Red Point claim cut through one vein six feet wide. Do not know value, but the company put \$10,000 in bank immediately for owner. Ten days ago changed to new position to cut two other veins and are now making ten feet per day through very hard rock.

The Wolverine Company (stocked) have made several changes in their *personnel* and are now surveying for Crown grant, and are working small force of men. It is looking very nicely.

Crown Point, working forty men, have 8,000 tons of pay ore on the dump and will astonish the public shortly.

Two feet of \$30 arunical iron ore was found on Little Joe claim four days ago. A small force of men, working on the adjoining claim—the Western Spry—have two feet of \$10 rock.

The Deadwood Company are putting in a gravity tramway and when it is completed they will ship ore. This mine has the highest grade ore in Trail Creek and, though a small vein, will cut quite a figure.

Trail is growing gradually, there now being fifteen

houses in course of construction. A large brewing company are making arrangements to erect a \$25,000 brewing plant here.

All merchants and business men are doing well here. Our special pride, the Arlington Hotel, and there is none better in B.C., is kept full to overflowing, guests being turned away every day. The smelter is running smoothly and is turning out a largely increased number of tons of matte per day.

A few of the typhoid microbes stopped here while on their way to Rossland and we have had a few cases, no deaths and no new cases. E.S.T.

### HAPPENINGS AT THE MINES.

#### ALBERNI.

Work on the Mountain Rose is going ahead.

A rich lead has lately been found on the Mayflower, an adjoining claim to the Regina. The rock, which is almost solid ore, is composed principally of gold, copper and galena.

On the Ophir claim of the Quadra Company's property, a fine lead has lately been found.

On the Regina three tunnels are being driven, and it is intended to cross-cut them at a distance of 100 feet from the surface. Some fine quartz has been brought down from this claim lately.

#### AINSWORTH.

A ninety-foot upraise has been made to the surface on the Highland, a cross-cut has been run fifty-two feet from the bottom of the winze, the north drift has been extended about twenty-five feet, and men are now working on a contract to extend the south drift 200 feet.

The Little Phil. and the Black Diamond have been opened with a joint tunnel for 400 feet which cuts two ledges.

#### ASHCROFT.

A gold brick from the Cariboo hydraulic mine is a result of the second clean-up this season. It is valued at \$35,741 and is the product of a fourteen-day and twenty-hour run in one pit. This makes \$118,000 so far this season, and hydraulicizing is still going on till the cold weather stops operations.

#### BIG BEND.

W. McBean is now in about twenty feet on his Carnes Creek claim. He got but \$2 in gold from the surface assays, but now has \$28 with a small but strong vein.

The Consolation placer is doing well, having taken out \$52 in two and a-half days.

George Laforme brought down from the Last Chance \$25 worth of gold, the result of three days' work on the rim.

#### BOUNDARY CREEK.

Mr. J. Fisher came down from the Barrow, Skylark Camp, bringing with him several specimens of quartz containing free gold of visible size.

Assays of rock from the new strike on the Lake claim, Skylark Camp, have recently been made, the ore running 172 ounces in silver and \$6.50 in gold to the ton.

The ledge of the Ballarat, in Kimberley Camp, is now proved to be seven feet wide. The ground

has been stripped for thirty feet and an open cut of eight feet has been run.

Specimen pieces of good looking rose quartz, carrying copper pyrites and galena, were sent down from two recently located claims on Lost Creek, the Hamilton and Belvidere.

C. J. McArthur brought down some pretty specimens of quartz carrying free gold from the Denero Grande.

Another prospect upon which there is a big iron capping has been located in Kimberley Camp. The claim is called the Clipper, and lies between the Adirondack and the Atlantic. The surface rock shows besides the iron, quartz and copper sulphides.

The new shaft on the Stenwinder is now down over forty feet, and some good ore has been taken out.

John Christie has discovered, under iron capping, a body of pyrrhotite ore five feet in width between walls. He is now sinking on the ledge and is already down about seven feet.

#### FORT STEELE.

There has been over 200 mineral locations recorded in the Fort Steele district since July 1st, 1896.

A new strike has been made called the Hidden Secret, located by Wellington Kinney and Tom Cyr. Assays average \$200 in gold and silver, on the summit of the new St. Mary's trail to Pilot Bay. The ledge is twenty inches wide and can be traced for some distance.

#### KASLO.

Kootenay now has a direct daily mail to and from all Eastern Canada points. The new arrangement is the result of Mr. Hewitt Bostock's work at Ottawa.

A contract was let at Sandon for poles for the proposed electric lighting plant at that place, the machinery for which is now on the road.

The Silver Bear, a claim lying just below the great Silver Bell, on South Fork, has an excellent showing of high grade concentrating ore and several inches of shipping carbonates.

The K. & S. has found it necessary to put on an extra train.

The Whitewater has shipped four cars of ore from the big carbonate showing, recently uncovered.

#### KAMLOOPS.

Iron Mountain, in Lower Nicola, is now the scene of a great deal of mining activity. The whole mountain is capped with iron, having an appearance very similar to that of Red Mountain at Rossland. Some fine samples of copper sulphide ore have been obtained, and the men owning the claims are extremely sanguine of the results. The whole country in that vicinity is over-run with prospectors.

#### NEW DENVER.

Six men are working on the California under charge of J. McDonald. The tunnel is 154 feet at a depth of 144 feet from the incline. In three weeks last summer, McDonald, without assistance, took out \$3,000 worth of 300 ounce ore from an upper cut on another portion of the claim.

## NELSON.

The Canadian Pacific Mining and Milling Company, of Minneapolis, Minnesota, is making great headway in the development of the group of claims owned by it on Woodbury Creek, and the indications are that at least two of the company's properties will be considerable shippers in the immediate future. This company, which is stocked for \$500,000, is managed by A. D. Westby, and although it has been operating extensively on Woodbury Creek for over two years, it is only within the past few months that it has attracted anything like general attention. The company's properties are almost at the mouth of Woodbury Creek, three miles from Ainsworth, and are admirably situated for economic handling, the workings being just sufficiently above the lake level to afford an easy grade to the concentrator and shipping point on the lake.

**Manitou Tunnel Power Plant.**

This station is located a short distance above the Iron Springs Hotel, at Manitou, Colorado, and consists of a 500 h.p. Pelton wheel direct connected to a General Electric Company's generator. The wheel runs under a head of 600 feet, and is speeded at 600 revolutions.

The power thus generated is carried a distance of eight miles, and runs an air compressor for supplying the drills, operating in what is known as the Strickler tunnel, which is being driven through a spur of Pike's Peak range. This tunnel is 6,400 feet long, and forms a part of the new water works system of Colorado springs. Operations on the tunnel are carried on from both ends, and light as well as power is supplied from the station for the power-house as well as all underground work.

This is believed to be the first instance in which the resources of water-power and electricity have been brought to bear upon a project of this character. The facility it has afforded for the rapid and economical prosecution of the work has been a gratifying surprise to all interested in the enterprise.

The 13-inch main supplying Colorado Springs carries a pressure at the reservoir of 170 lbs., which it is now proposed to utilize, by means of Pelton wheels and electric generators, for lighting the city.

**CORRESPONDENCE.**

*Correspondence on subjects connected with mining affairs in British Columbia invited.*

*We do not hold ourselves responsible for the opinions which may be expressed in this column. No notice will be taken of communications unless accompanied by the full name and address of the writer. Brevity is essential to insure publication.*

**CYANIDE PROCESS BULLION.**

**T**O THE EDITOR:—I see from a paragraph which has appeared in the *Victoria Colonist* of late date, and copied in other papers, that a bar of bullion taken out by the cyanide process has been brought down from Cariboo by the secretary of the Cariboo & Williams Creek Consolidated Mining Co., Ltd., the bar weighing 31.61 ounces in gold and silver, being 607 fine and worth about \$400. Later on in the paragraph it is stated that nearly all the gold and silver is saved at a cost of \$10.00 per ton.

Great credit is due Mr. S. J. Marsh, who has been the means of making arrangements with the Government to lease the reduction works at Barkerville, and also with my company, the Cassel Gold Extracting Co., Ltd., with regard to the patent rights of the process. But I wish to explain one or two errors which, no doubt, have been made unintentionally by

Mr. Hawes or either his statements have been misconstrued by the reporters.

In the first place, with regard to the capacity of the mill, it should be understood that there are not five stamps at the Government Reduction Works; the plant being only an experimental one employing one automatic stamp capable of crushing four tons of material per day when in operation. It is, however, the intention of the company to increase the capacity of the plant.

Now, the difference between one stamp working and five stamps will also make an alteration of considerable importance in the cost of the recovery of the metals. Whereas with one stamp nearly as many men are required to operate the mill as with five stamps, therefore, on the basis of the latter, the cost of milling would be very materially reduced, and I should estimate the total cost of the reduction would not exceed from \$5 to \$5.50 per ton, instead of \$10 as named.

It should also be remembered that in the experiments now being conducted a great deal of data has to be issued to the people sending in ore, which also increases the cost incurred in handling the ores, and a clean-up made after each run before their samples can be put through, this also making an additional charge.

There is another point I might refer to, that is the fineness of the gold bar. In practice in other parts of the world it has been found desirable to refine the precipitate produced from the solution of cyanide containing gold by means of sulphuric acid in lead lined tanks, the acid dissolving the zinc which comes down, to a certain extent, with the gold. These means have not been adopted just yet at Cariboo, but will be later on. With such means the fineness of the bar will be brought up to about 880. A great many parcels of ore have been successfully treated at the Barkerville plant, and this will, no doubt, add to the attention given to quartz mining in Barkerville.

In conclusion, I would like to state that the Cariboo, Williams Creek Consolidated Mining Co., Ltd., have shown a great deal of enterprise in introducing the MacArthur-Forrest process, and the Government of British Columbia have also rendered every assistance in their power.

THE CASSEL GOLD EXTRACTING CO., LTD.,  
Vancouver, B.C. Per W. Pellew Harvey.

**BRITISH CAPITAL IN B.C.**

**T**O THE EDITOR:—I thank you for the August number of THE RECORD, and am making a good and constant use of it in pressing our mining claims on the attention of those who are interested in that sort of question.

I am just writing a few words to say that, judging from all I can gather, there will be much British capital found in Western Canada in the near future. Of this I am deeply convinced. But it is of the greatest importance that *bona fide* mines and really promising claims be presented to those who go or send their money to our mining centres.

We have enough riches in gold, silver, iron, coal, copper and nickel to do an extensive and strictly upright business with all who honestly venture their capital in the development of our resources. Already THE MINING RECORD has spoken out several times on this most important matter and warned all parties of the disastrous effects of dishonest dealings on the part of some prospectors and stock jobbing speculators.

I write thus because of what comes to me in conversation and through a part of the English press.

Let Canada have the name of the highest class goods of all sorts, including high class integrity, and our way is clearly open to the most marked success.

E. ODLUM,  
Liverpool. British Association Buildings.

## Incorporated Mining Companies of B.C.

NAME OF COMPANY.	Capital Stock.	Date of Registration.	Office.
Alpha Milling & Mining Company	120,000	22 May, '89	Victoria
Anglo-American	3,000,000	15 "	'90 Yale
Alberta & British Columbia Exploration Co. Ltd.	£ 20,000	22 April, '91	Victoria
American Development Co.	\$ 100,000	17 Sept. '94	New Denver
Antler Creek Mining Co. Ltd.	1,000,000	10 Feb. '96	Vancouver
Allison Ranch Hydraulic Mng Co.	250,000	1 May, "	N Westminister
Alberni Mountain Rose Gold Mining Co.	250,000	13 Jan. "	Vancouver
Alliance Prospecting Syndicate B.C.	100,000	13 "	"
Alhambra Gold & Copper Mng. Co.	600,000	5 Aug. "	Victoria
Athabasca Gold Mining Co.	\$1,000,000	13 Sept. "	New Westm'str
Alf Gold Mining Co.	1,000,000	21 "	Rossland
Acme	600,000	3 June, "	Victoria
Alberta	1,000,000	28 Sept. "	Spokane, Wash
Anglo-American Gold Mining and Milling Co., Ltd.	1,500,000	10 Oct. "	Rossland
Agnes Hydraulic Mining and Milling Co., Ltd.	200,000	16 "	North Bend
Bellingham Bay Hydraulic Mining Co.	30,000	11 Jan. '95	French Ck WK
Boundary Creek Mining Co.	1,000,000	28 June, "	Budry Fall YD
British American Mining Co.	500,000	1 Aug. "	Rossland
Black Jack Quartz	120,000	18 Feb. '90	Barkerville
Bear Lake Consolidated Mining Co. Ltd.	500,000	18 April, '94	Victoria
B.C. Gold Fields' Exploration & Concessions Co. Ltd.	500,000	13 Feb. '95	Vancouver
Byron N. White Co.	500,000	27 May, '93	Nelson
British Columbia Syndicate, Ltd.	100,000	6 Feb. '96	Rossland
Bunker Hill & Blackwood Mng Co.	500,000	30 April "	Vancouver
B.C. Mining & Development Syn.	2,000,000	15 May, "	Rossland
British Columbia School of Mines.	30,000	11 "	Vancouver
British Lion Mining & Milling Co.	600,000	25 June, "	Rossland
B.C. Gold Mining Co.	1,000,000	25 July, "	Vancouver
Bondholder Mining Co.	1,000,000	1 Aug. "	"
B.C. Consolidated Gold Mining Co.	1,000,000	21 "	Rossland
Badger Tourmaline Consolidated Gold Mining Co.	1,500,000	28 "	"
Beaver Quartz Mining Co.	1,000,000	10 Sept. "	Vancouver
Bean Pot Gold Mining Co.	500,000	23 "	Victoria
Buffalo	500,000	22 "	"
Beaver	750,000	28 May, "	"
Blue Bird	600,000	1 June, "	"
Butte Gold-Copper	1,000,000	6 July, "	Spokane, Wash
Big Valley Creek Gold Mines.	£125,000	18 Aug. "	London, Eng
B.C. Exploring Syndicate.	£20,000	24 Sept. "	"
B.C. Mining Co.	£20,000	24 "	"
B.C. Smelting and Refining Co.	\$2,500,000	2 Oct. "	Jersey City, NJ
Blue Bird Mining Co.	300,000	1 "	Spokane, Wash
Big Three Gold Mining Co.	3,500,000	3 "	"
Boundary Creek Mining and Milling Co., Ltd.	1,500,000	21 "	Greew'd City
Boundary Falls Mining Co., Ltd.	500,000	19 "	Vancouver
Columbia Mining Co. Ltd.	500,000	7 Aug. '90	Ainsworth
Columbia-American Mining Company	500,000	16 "	'92 "
Canadian Northwest Mining Co.	2,000,000	31 Feb. '94	Kaslo
Canadian Pacific Mining & Milling Co.	500,000	9 May, "	Ainsworth
Columbia Mining Co.	1,000,000	6 Sept. "	Yale
Cariboo Gold Fields Ltd.	100,000	26 Feb. '95	Barkerville
Centre Star Mining & Smelting Co.	500,000	16 July, "	Rossland
Columbia Hydraulic Co.	100,000	19 "	Revelstoke
Cariboo Reefs Development Co., Ltd.	£20,000	7 Aug. "	Victoria
Crown Point Mining & Milling Co.	1,000,000	10 "	Rossland
Caledonia Consolidated Mining Co.	\$ 500,000	13 Nov. "	"
Crow's Nest Coal & Mineral Co. Ltd.	2,000,000	25 Feb. '89	Victoria
Cariboo Creek Mining	50,000	19 June, "	Donald
Crow's Bar	25,000	2 July, '90	vancouver
Cataract Hydraulic Co. Ltd.	18,000	31 "	'95 Victoria
Consolidated Alberni Gold Mining Co. Ltd.	\$ 500,000	18 Feb. '96	"
Columbia Mining Co. of Victoria	100,000	26 June, "	"
C. & C. Mining Co.	500,000	2 July "	Rossland
Channe Mining Co.	1,000,000	3 Aug. "	Vancouver
Columbia & Ontario Gold Mining Co.	750,000	13 "	Rossland
Consolidated Sable Creek Mining Co.	1,500,000	19 "	Vancouver
Copper Belle Mining Co.	1,000,000	4 Sept. "	Rossland
Coionna Gold Mining Co.	1,000,000	11 "	"
Commander Mining & Smelting Co.	500,000	16 "	Victoria
Camp Bird Gold Mining Co.	1,000,000	27 "	"
Consol	1,000,000	27 "	"
Crown Point	1,000,000	30 May, "	"
California	2,500,000	26 June, "	Spokane, Wash
Chicago	500,000	25 Sept. "	"
Celtic Queen	750,000	2 Oct. "	"
Cambridge	1,000,000	12 "	Rossland
Canadian	1,000,000	12 "	"
Cottonwood River (B.C.) Alluvial Gold Mining Co., Ltd.	\$65,000	12 Oct. "	England
Duluth & St. Paul Mining Co.	\$2,000,000	18 Feb. '93	Ainsworth
Dixie Mining & Milling Co.	500,000	18 Nov. '95	Rossland
Donald Gold Mining Co.	10,000	13 May, '89	Donald
Delacola Gold Mining Co.	\$1,000,000	21 Aug. '96	Rossland
Delhi Mining & Milling Co.	750,000	13 July, "	Spokane, Wash
Deer Park Mining Co.	1,000,000	24 "	"
Deleware Mining & Milling Co.	1,000,000	3 Sept. "	"
Empire Consolidated Mining Company	500,000	11 Aug. '90	Ainsworth
Eureka Consolidated Mining Co.	500,000	28 June, '95	Rossland
Evening Star Mining Co.	1,000,000	5 Oct. "	"
E. Eootenay Explorat'n Syndicate.	£ 80,000	5 "	'93 East Kootenay
Eric Gold Mining Co.	\$1,000,000	18 June, '96	Rossland
English & French Gold Mining Co.	2,000,000	19 Sept. "	Grand Forks
Electrical Reduction & Refining Co.	25,000	28 "	Rossland
Exchequer Gold Mining Co.	1,000,000	19 "	Nelson
Emu	£10,000	22 June, "	England
Eastern Star Gold Mining Co.	\$ 500,000	30 July, "	Spokane, Wash
Elkhorn Silver Mining Co.	1,000,000	8 Sept. "	"
English-Canadian Gold Mining Co.	1,000,000	17 Oct. "	"
Fraser River Gold Gravels Syndicate, Ltd.	£7,000	7 Feb. '90	Vancouver
Freddie Lee Mining Co.	\$ 500,000	23 Feb. '93	Kaslo
Finch Mining Co. Ltd.	6,000	19 April, '95	Vancouver
French Creek Mining Co.	2,000,000	11 Feb. '96	Revelstoke
43 M. and M. Co. of Cariboo, Ltd.	600,000	8 "	North Bend
Freeburn Gold Mining Co.	500,000	20 April, "	Victoria
Ferguson & Orr Co.	10,000	21 Aug. "	Trail
Fanny Bay Gold Mining Co.	600,000	17 Sept. "	Vancouver
Fairview	1,000,000	12 Aug. "	Seattle, Wash
Gold Queen Mining Co.	400,000	30 Sept. '92	Yale
Good Hope Mining & Milling Co.	500,000	27 May, '95	Rossland
Gold Hill Mining Co.	500,000	14 Oct. "	"
Great Western Mining Co.	1,000,000	20 Dec. "	"
Golden Gate Mining Co. Ltd.	60,000	29 Jan. '96	Vancouver
Georgia Gold Mining Co. Ltd.	1,000,000	14 April, "	Victoria
Golden Cache Mines Co.	500,000	10 July, "	Vancouver
Gold King Mining Co.	1,000,000	1 Aug. "	Rossland
Gold Hill Quartz Mng. Co. Fairview Gold Stream	750,000	10 Sept. "	Victoria
Green Crown Mining & Milling Co.	1,000,000	30 May, "	Cudahy, Wis.
Golden River, Quesnelle, Ltd.	1,000,000	11 June, '95	Spokane, Wash
Grand Prize	£350,000	18 Aug. "	London, Eng
Gibson Mining and Milling Co.	\$1,000,000	19 Sept. "	Spokane, Wash
Horsely Gold Mining Co.	650,000	11 Oct. "	"
High Ore Gold Mining & Smelting Co.	1,000,000	4 Sept. '94	Victoria
Helen Gold Mining Co.	500,000	3 "	'95 Rossland
Hansard Gold & Copper Mining Co.	600,000	11 April, '96	Spokane, Wash
Hume (The John A. Co.)	1,000,000	26 May, "	Nelson
Hinckley & Black Colt Mining Co.	25,000	1 June, "	New Westm'str
Hercules Gold Mining Co.	1,000,000	23 July, "	Kaslo
Hattie Brown Gold Mining Co.	2,000,000	28 Sept. "	Rossland
Hill Top Gold Mining Co.	1,000,000	28 May, "	Spokane, Wash
Idaho Mining & Smelting Co.	1,000,000	18 Sept. "	"
Iron Horse Mining and Milling Co.	500,000	16 July '95	Rossland
Invicta Gold Mines, Ltd.	1,000,000	10 Aug. "	"
Iron Mask Mining Co.	£100,000	13 Jan. '96	Wild Hrs Creek
Islander Gold Quartz Mining & Milling Co. Ltd.	500,000	3 Feb. "	Rossland
Ivanhoe Gold Mining Co.	100,000	11 Nov. '95	Victoria
Independent Mining Co.	1,000,000	3 July, '96	Rossland
Ida Queen Gold Mining Co.	1,000,000	20 "	New Westm'str
Interstate	1,000,000	8 Sept. "	Rossland
Iron Coll Gold Mining Co.	750,000	25 June, "	Spokane, Wash
International Gold and Copper Mining Co., Ltd.	1,000,000	12 Oct. "	Rossland
Jennette Mining Co.	1,000,000	17 "	"
Josephine Mining Co.	500,000	28 Sept. '91	Ainsworth
Josie Gold Mining Co.	700,000	9 Oct. '93	Nelson
Jumbo	700,000	28 Dec. '95	Trail Creek
Kootenay No. 1 Mining Co.	500,000	7 May, '96	Spokane, Wash
Kootenay Smelting & Trading Syndicate, Ltd.	600,000	19 June, '89	Ainsworth
Kootenay Mining & Smelting Co.	£40,000	4 Nov. "	Revelstoke
Kootenay Lake Reduction Co.	\$ 30,000	23 Aug. '92	Pilot Bay
Kootenay & Columbia Prospecting & Mining Co.	250,000	23 "	"
Kootenay Hydraulic & Smelting Co.	40,000	10 April '91	Kaslo
Kootenay Hydraulic Mining Co.	2,300,000	6 Aug. "	Pilot Bay
Kootenay Mining & Milling Co.	500,000	3 May, '95	Waneta W K
Kootenay-London Mining Co.	1,000,000	10 Aug. "	Rossland
Kootenay & Slovan Prospecting and Promoting Co.	1,000,000	19 June, '96	"
Kootenay Salmon Gold Mining Co.	100,000	16 Sept. "	Vancouver
Kofing Solomon's Mines.	600,000	16 "	Rossland
Kootenay Consolidated Mining Co.	500,000	24 "	Vancouver
Koobinoor Gold Mining Co.	1,000,000	21 Aug. "	Everett, Wash
Kootenay & Algoma Gold Mining Co.	1,000,000	5 Oct. "	Spokane, "
Le Roi Mining & Smelting Co.	1,000,000	3 "	Rossland
Lookout Mining & Milling Co.	2,300,000	22 June, '91	Trail
Laura Hydraulic Mining Co.	250,000	1 Aug. '95	Rossland
Lillooet Hydraulic Mining Co.	20,000	6 June, '89	Victoria
Lightning Creek Gold, Gravel and Drainage Co. Ltd.	10,000	21 Aug. "	New Westm'str
London & Rossland (B.C.) Mng. Co.	1,000,000	27 Feb. '96	Vancouver
Larlen Mining & Development Co.	750,000	1 June, '96	Rossland
La Regina Gold Mining Co.	500,000	24 Aug. "	Revelstoke
London Hill Develop. & Mng. Co.	750,000	26 "	"
Lily May Mining & Smelting Co.	150,000	17 Sept. "	Kaslo
Little Jumbo	500,000	13 "	Victoria
Lily May Gold Mining Co.	650,000	28 July "	Seattle, Wash
London & British Columbia Gold Fields, Ltd.	1,000,000	1 Sept. "	Spokane, "
Middle Creek Gold Mining Co.	£200,000	20 Oct. "	England
Main Quesnelle Gold Dredging & Mining Co.	5,000,000	28 May, '90	Victoria
Maud Hydraulic Mining Co.	250,000	15 Feb. '96	Ashcroft
Montreal & British Columbia Prospecting & Promoting Co. Ltd.	25,000	31 Oct. '94	Vancouver
Mineral Hill Gold Mng. Co. Alberni	20,000	19 Nov. "	Vancouver
Mount Adams Mining Co.	750,000	30 May, '96	New Westm'str
Morning Glory Mining Co.	150,000	12 June, '95	New Denver
Mount Mabel Mining & Smelting Co.	500,000	12 Aug. "	Vernon
Mayflower Gold Mining Co.	1,500,000	28 "	New Denver
Monarch	1,000,000	3 June, '96	Spokane, Wash
Monte Cristo Gold Mining Co.	750,000	30 May, "	Northport, "
Morrison	1,000,000	3 June, "	Spokane, "
North Western Gold and Silver Mining Co.	1,000,000	30 May, "	"
Neosho Mining Co.	1,000,000	26 May, '90	Victoria
Northern Belle Mining Co.	50,000	5 Jan. '92	Ainsworth
Nip and Tuck Gold Hydraulic Mining Co. Ltd.	250,000	13 Dec. '93	Kaslo
	35,000	22 Jan. '96	Vancouver

Mining Stocks.

We will in future publish the price of British Columbia mining stocks as quoted at Victoria on the last day of each month, and now give the first of these lists compiled on the 31st October, 1896.

[NOTE—No stocks are listed in the following table unless the property on which they are founded has been fully paid for and the title perfected].

Company Name	Capital	Date	Location
Nest Egg Mining Co	\$ 500,000	31 Jan.	'96 Victoria
Northern Light Gold Mining Co	250,000	28 Sept.	"
Noble Five Consolidated Mining & Milling Co.	1,000,000	2 "	" Spokane, Wash
Nanaimo-Rosland Mining Co.	500,000	3 June.	'95 Nanaimo
O. K. Gold Mining Co.	1,000,000	23 Nov.	" Rosland
Old Ironsides	1,000,000	27 Dec.	" Midway
Ontario Gold Mining Co.	1,000,000	12 June.	'96 Spokane, Wash
Olive Mining & Smelting Co.	20,000,000	10 Sept.	" "
Old Glory Mining Co.	1,000,000	29 "	" Seattle, Wash.
Orphan Boy Gold Mining Co.	700,000	16 Oct.	" Revelstoke
Pacific Bullion Mining Co.	1,000,000	13 Mch.	'89 Wrm Spgs, WK
Paris Belle Gold Mining Co.	800,000	27 May.	'95 Rosland
Phoenix Gold Mining Co.	500,000	3 Sept.	" Deer Park, WK
Poorman Gold	500,000	8 Nov.	" Rosland
Peters Creek Gold Mining Co	25,000	7 Dec.	" Vancouver
Pittsburg & Cariboo Gold Dredging Co.	500	10 April.	'96 Pittsburg, Pa.
Palo Alto Gold Mining Co.	1,000,000	13 May.	" Victoria
Pittsburg Gold Mining Co.	750,000	24 June.	" Rosland
Pacific Consolidated Gold Mng. Co	500,000	17 Aug.	" Sandon, B.C.
Phoenix Consolidated Mining Co.	750,000	15 "	" Nelson
Picton Development Syndicate.	15,000	24 "	" San Francisco
Price Eaton Co.	500,000	19 "	" Spokane, Wash
Portland Gold Mining Co.	600,000	14 Sept.	" Victoria
Quadra Mining & Milling Co.	500,000	14 April.	" Vancouver
Queen Gold & Silver Mining Co.	500,000	17 June.	" "
Quesnelle & Cariboo (B.C.) Gold Fields Exploration Syndicate.	£12,000	24 July.	" Sheffield, Eng
Quesnelle Forks Mining Co.	\$ 600,000		
Revelstoke Mining Co. Ltd.	£40,000	23 Dec.	'89 Revelstoke
Robert E. Lee Mining Co.	\$ 500,000	28 June.	'95 Rosland
Rochester Gold Mining Co.	500,000	11 April.	'96 Spokane, Wash
Rosland Star Gold Mining Co.	500,000	1 June.	" Rosland
Rosland Syndicate.	50,000	10 "	" "
Red Mountain View Gold Mng. Co.	1,000,000	22 "	" "
Rainy Day Gold Mining Co.	600,000	5 Aug.	" "
Rosland Homestake Gold Mng. Co.	1,000,000	14 "	" "
Reco Mining & Milling Co.	1,000,000	18 Sept.	" Sandon
Rambler & Cariboo Consolidated Gold & Silver Mining Co.	1,000,000	20 "	" Victoria
Republic.	750,000	30 May.	" Spokane, Wash
Randolph Gold Mining Co.	750,000	13 July.	" "
Rob Roy Gold Mining Co.	500,000	27 "	" "
Rosland Red Mountain Gold Mining Co.	1,000,000	27 "	" "
Roderick Dhu Gold Mining Co.	1,000,000	12 Oct.	" Rosland
Schafer Gold and Silver Mining Co.	400,000	16 Dec.	'92 Ainsworth
Spokane & Great Northern Mining Co.	5,000,000	2 Feb.	'93 Victoria
Scott Mining Co.	100,000	6 Sept.	'94 Yale
Spokane Ore Co.	5,000,000	22 Aug.	'95 Rosland
St. Elmo Gold Mining Co.	1,000,000	26 "	" Red Mtn, W K
Silverine Gold	500,000	30 Oct.	" Rosland
Salt Spring Island Mining Co.	40,000	6 May.	'89 Victoria
Stevenson Gold & Platinum Hydraulic Mining Co. Ltd.	1,000,000	17 Mch.	'94 Vancouver
Slocan Surprise Co.	225,000	27 Dec.	'94 Kaslo
St. Mary Gold Mining Co.	500,000	11 May.	'96 Spokane, Wash
San Joaquin Gold Mining Co.	1,000,000	9 June.	" New Westminster
San Francisco Gold Mining Co.	1,000,000	30 "	" Rosland
Silver Belle Mining Co.	1,000,000	17 Aug.	" "
Standard Gold Mining Co.	1,000,000	26 "	" Victoria
Seymour Creek Gold Mining Co.	1,000,000	28 "	" Vancouver
Silver King Gold Mining	750,000	19 Sept.	" Spokane, Wash
Seattle Mining and Smelting Co.	6,000,000	5 Oct.	" "
Star Mining and Milling Co.	1,000,000	5 "	" Sandon
Silver Band Mining Co.	250,000	7 "	" Victoria
Slocan Queen Mining & Milling Co	1,000,000	19 "	" Spokane, Wash
Trail Mining Co.	250,000	8 Mch.	'95 Rosland
Texada Lime Co.	20,000	9 July.	'89 Vancouver
Two Friends Mining Co.	750,000	19 Aug.	'96 "
Texada Island Mining & Land Co.	80,000	12 Oct.	" Nanaimo
Virginia Gold Mining Co.	500,000	26 "	'95 Rosland
Vancouver Gold & Silver Exploration & Concessions Co. Ltd.	500,000	18 April.	" Vancouver
Van Anda Copper & Gold Co.	5,000,000	6 May.	'96 Seattle, Wash.
Victoria Mining & Developt. Co.	1,000,000	17 June.	" Victoria
Vancouver & British Columbia General Exploration Co.	£25,000	14 Sept.	" London, Eng.
West Kootenay Mining Co.	\$1,000,000	23 Feb.	'91 Kootenay Lake
Western Consolidated Mng. Co. Ltd	1,000,000	15 Aug.	'92 Ainsworth
War Eagle Gold Mining Co.	500,000	18 Feb.	'95 Rosland
West Le Roi & Josie Consolidated Mining Co.	500,000	28 June.	" "
Willow River Gold Mining Co.	25,000	1 May.	'89 Victoria
Wolverine Gold Mining Co.	500,000	18 "	'96 Trail
West Wellington Coal Co.	500,000	1 Aug.	" Vancouver
Wonderful Group Mining Co.	1,000,000	5 June.	" Spokane, Wash
Young British American Gold Mining Co.	1,000,000	17 Aug.	" Rosland
Yale Gold & Copper Mining Co.	1,000,000	26 "	" "

INCORPORATED UNDER COMPANIES' ACT OF 1862 (Imperial).

The Vancouver Mining Co. Ltd	\$ 56,000	3 April.	'89 Vancouver
The Gordon Hydraulic Mining Co. Ltd	50,000	1 June.	'91 Victoria
The Thunder Hill Mining Co. Ltd.	50,000	10 "	" 41 Govt St Vic
The Port McNeil Coal & Land Co. Ltd.	100,000	10 Nov.	" Nanaimo
The North-western Sampling & Milling Co. Ltd.	100,000	29 Feb.	'92 Nelson
The Vancouver Isl'd Mining Co. Ltd.	100,000	28 Aug.	'95 Wellington
The Omeica Prospecting & Development Co. Ltd.	6,000	2 Mch.	'96 Victoria

Companies.	No. of Shares.	Par Value.	Price.
TRAIL CREEK.			
Alberta	1,000,000	\$ 1 00	\$0 10
Brit. Can. Goldfields	2,500,000	1 00	0 12½
Bluebird	600,000	1 00	0 10
Caladonia Con.	500,000	1 00	0 12
California	2,500,000	1 00	
C. & C.	500,000	1 00	
Centre Star	500,000	1 00	1 50
Colonna	1,000,000	1 00	0 12½
Commander	500,000	1 00	0 25
Crown Point	1,000,000	1 00	0 48
Deer Park	1,000,000	1 00	0 21
Enterprise	1,000,000	1 00	0 20
Evening Star	1,000,000	1 00	0 26
Georgia	1,000,000	1 00	0 25
Gertrude	500,000	1 00	0 12
Grand Prize	1,000,000	1 00	0 07½
Great Western	1,000,000	1 00	0 20
Hattie Brown	1,000,000	1 00	0 10
High Ore	500,000	1 00	0 09
Homestake	1,000,000	1 00	0 17
Idaho	500,000	1 00	
Imperial	1,000,000	1 00	0 10
Iron Horse	1,000,000	1 00	
Iron Mask	500,000	1 00	0 70
Josie	700,000	1 00	0 65
Jumbo	500,000	1 00	0 75
Le Roi	500,000	5 00	8 00
Mayflower	1,000,000	1 00	0 17½
Monita	750,000	1 00	0 25
Monte Cristo	1,000,000	1 00	0 20
Morning Star	1,000,000	1 00	0 12½
Northern Belle	1,000,000	1 00	0 15
Novelty	1,000,000	1 00	0 15
O. K.	1,000,000	1 00	0 30
Palo Alto	1,000,000	1 00	0 10
Phoenix	500,000	1 00	0 12½
Poorman	500,000	1 00	0 09½
Red Mountain View	1,000,000	1 00	0 10
Rosland, Red Mountain	1,000,000	1 00	0 30
St. Elmo	1,000,000	1 00	0 15
St. Paul	1,000,000	1 00	0 10
Silverine	500,000	1 00	0 12½
Southern Cross & W. Con	500,000	1 00	0 20
Trail Mining Co.	2,500	100 00	
Union	600,000	1 00	
Virginia	500,000	1 00	0 25
War Eagle	500,000	1 00	1 70
West Le Roi	500,000	1 00	0 30
White Bear	2,000,000	1 00	
AINSWORTH.			
Dellie	750,000	1 00	0 12½
BOUNDARY.			
Old Ironsides	1,000,000	1 00	0 15
CAMP MCKINSEY.			
Cariboo	800,000	1 00	0 43
NELSON.			
Hall Mines	300,000	£1	9 00
REVELSTOKE.			
Orphan Boy	700,000	1 00	0 10
SLOCAN.			
Alamo	500,000	1 00	
Cumberland	50,000	10 00	
Grey Eagle	750,000	1 00	
Ilder	1,000,000	1 00	0 07½
Kootenay-Columbia	400	100 00	
London	600,000	25	0 25
Minnesota	1,000,000	1 00	
Noble Five Con.	1,200,000	1 00	0 50
Rambler Con.	1,000,000	1 00	
Reco.	1,000,000	1 00	
Slocan Star	1,000,000	50	2 25
Sunshine	50,000	10 00	
Wonderful	1,000,000	1 00	0 12
TEXADA ISLAND.			
Van Anda	5,000,000	1 00	0 10
ALBERNI DISTRICT.			
Consolidated Alberni	1,000,000	1 00	0 33
CARIBOO.			
Cariboo & Williams Creek Con.	500,000	1 00	0 10
Cariboo Gold Fields Ltd	£100,000		
Cariboo Hydraulic	300,000		
Horseshy Hydraulic	200,000		
Horseshy Gold Mining Co	100,000	10 00	1 50
Slough Creek	500,000	1 00	0 50

† Dividends paid to date are as follows: Le Roi, \$250,000; War Eagle, \$187,000; Cariboo, \$93,000; Slocan Star, \$250,000. Alamo, Cumberland, Reco and Noble Five have also paid dividends.

## Notes.

WE call attention to the advertisement of Geo. W. Pennington & Sons, who are the sole manufacturers of the "California" brand of Hammered Steel Shoes and Dies, which are made of a superior quality of high grade steel warranted not to batter up or clip off or break at the shank. These shoes and dies are not cast in the desired shape and then hammer-marked over as some so-called hammered shoes and dies are, but are taken from the ingot of specially selected steel and put in the desired shape under a large steam hammer, after which they are put through certain processes which are controlled by Geo. W. Pennington & Sons, rendering them compact and very dense.

Mr. Geo. W. Pennington, of Geo. W. Pennington & Sons, although a resident of the United States for the past fifteen years, at one time resided in Staffield, England, and while there worked for the widely known firms of Thos. Firth & Sons, and The Jessups, two of the most celebrated steel manufacturers in the world.

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Mr. E. T. Ward is not authorized to collect money or to solicit subscriptions or advertisements for *The British Columbia Mining Record*.

Parties who have paid their subscriptions and failed to receive the *Record* will please notify promptly.

The Business Manager,  
*B.C. Mining Record*,  
Victoria, B.C.

**WANTED**—ACCOUNTANT—A TORONTO gentleman, of more than thirty years' experience as book-keeper and confidential clerk, is open for an engagement in a mercantile house or a manufacturing or mining company; first-class references; communications in the first instance kindly permitted to B. E. Lyster, Columbia Commercial College, Vancouver, with whom references are lodged.

## Agents.

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Windsor Hotel.....	Montreal, Que "
K. T. Takahashi.....	" "
San Francisco News Co.....	San Francisco, Cal "

## Mining Papers on File.

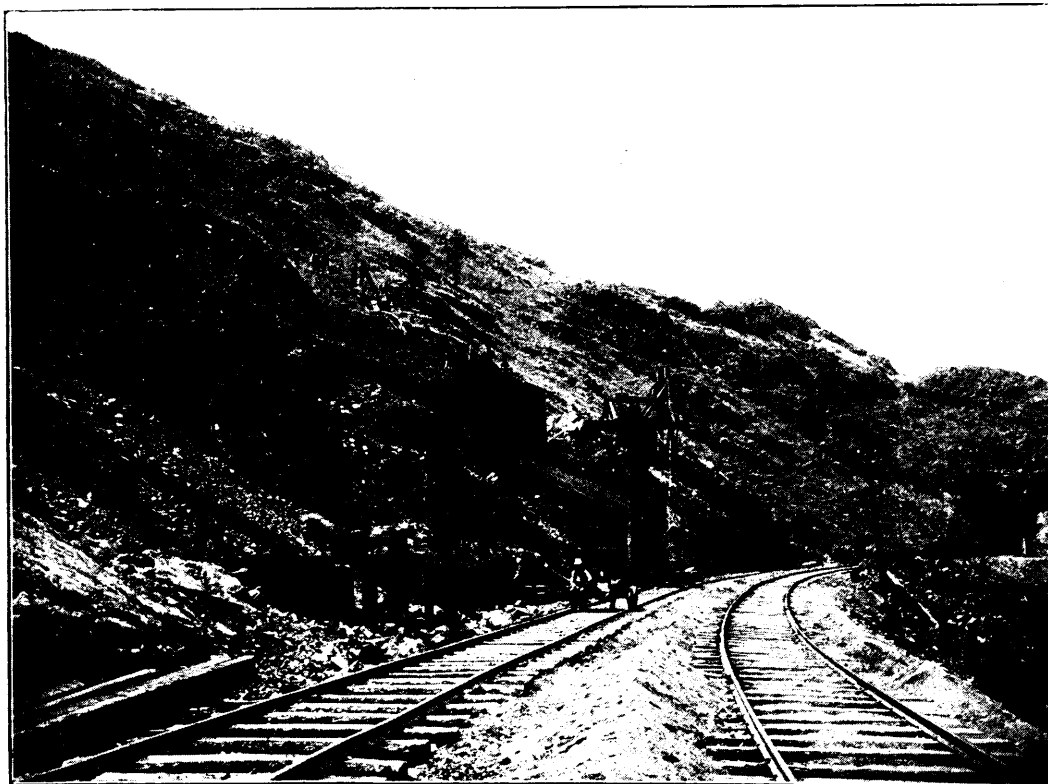
The following papers are kept on file at the offices of the B.C. MINING RECORD for the use of visitors who may wish to consult their columns:

The Mining Journal.....	London, England
The Engineering and Mining Journal.....	New York
The Shareholder.....	London, England
Mining and Scientific Press.....	San Francisco, Cal
Mining and Electrical Review.....	" "
Canadian Electrical News.....	Toronto, Ont
The Commercial.....	Winnipeg, Man
Mine and Quarry.....	Chicago, Ill
Pacific Coast Bullion.....	Los Angeles, Cal
Canadian Lumberman.....	Toronto, Ont
Monetary Times.....	" "
Money and Risks.....	" "
Industrial Canada.....	" "
The Canadian Engineer.....	" "
Western Mining World.....	Butte, Montana
Spokane Miner.....	Spokane, Wash
Inland Sentinel.....	Kamloops, B.C
The Golden Era.....	Golden, B.C
The Prospector.....	Rossland, B.C
The Ledge.....	New Denver, B.C
The Kootenaian.....	Kaslo, B.C
The Paystreak.....	Sandon, B.C
B.C. Mining Journal.....	Ashcroft, B.C
The Advance.....	Midway, B.C
The Miner.....	Nelson, B.C
The News.....	Vernon, B.C
Rossland Miner.....	Rossland, B.C
The Prospector.....	Fort Steele, B.C
The Province.....	Victoria, B.C

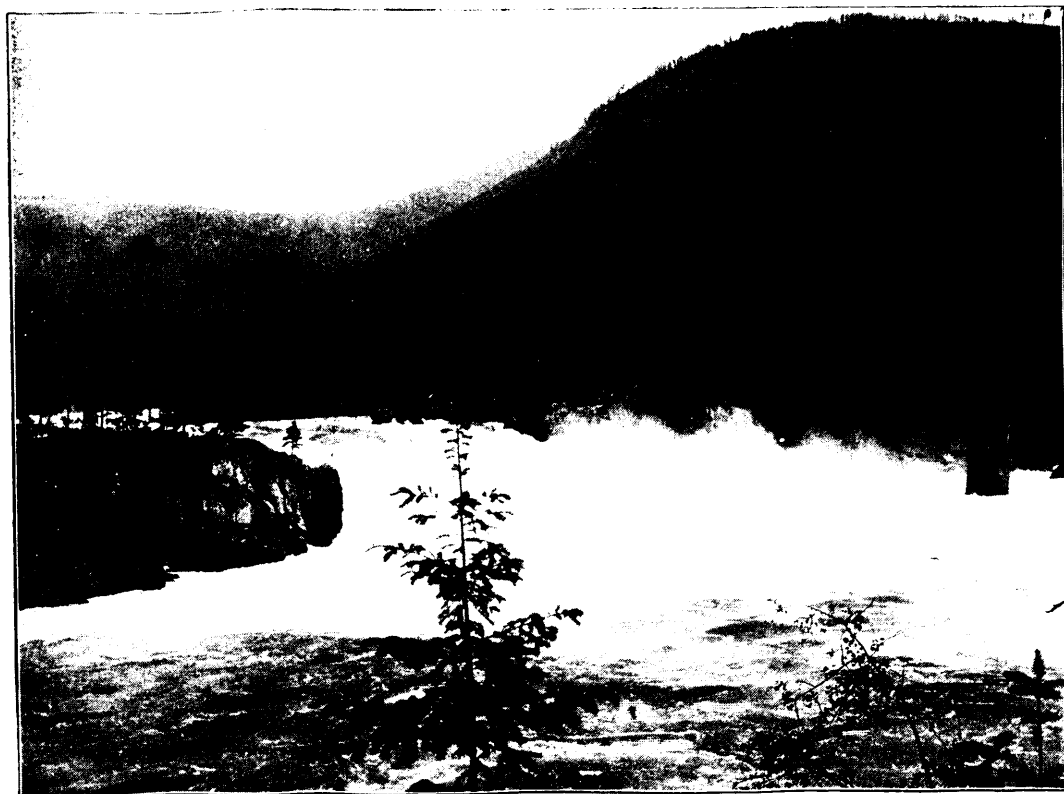
## Catalogues of Mining Machinery and Supplies.

We will be pleased to forward to any subscriber or reader catalogues and printed matter from the following firms:

Joshua Hendy, Machine Works, San Francisco, Cal.	Mining machinery of all kinds.
The Giant Powder Co., San Francisco, Cal.	Explosives.
The Pelton Water Wheel Co., San Francisco, Cal.	Water wheels.
California Wire Works, San Francisco, Cal.	Hallidie rope-way, etc.
Ridson Iron Works, San Francisco, Cal.	Mining machinery of all kinds.
John Taylor & Co., San Francisco, Cal.	Mine and mill supplies, chemicals, etc.
Canadian Rand Drill Co., Montreal and Rossland.	Mining machinery.
Montreal Rolling Mills Co., Montreal.	Mining supplies.
Fried Krupp, Grusonwerk and Montreal.	Mining and mill machinery.



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 James H. Lancaster, New York. Steam shovels, etc., etc.  
 James MacBeth & Co., New York. Electric blasting  
 supplies.  
 Bradley Pulverizer Co., Boston. Griffin mill.  
 The Reliance Oil & Grease Co., Cleveland, O. Valve-oleine.  
 Northey Co., Ltd., Toronto. Pumps for mining.  
 H. W. Petrie, Toronto. Second-hand machinery.  
 Colorado Iron Works, Denver, Col. Milling and smelting  
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 Provincial Mineralogist—W. A. Carlyle.  
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F. Soues	Olinton
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For the Province.—W. S. Gore.  
 Alberni.—Thos. Fletcher, Alberni.  
 Cariboo.—John Bowren, Richfield.  
 Cassiar District.—James Porter, Laketon, Cassiar.  
 Lillooet District.—Frederick Soues, Clinton.  
 East Kootenay District.—J. F. Armstrong, Donald.  
 West Kootenay District.—N. Fitzstubbbs, Nelson.  
 West Kootenay District.—J. D. Graham, Revelstoke.  
 Yale District.—Chas. Lambly, Osoyoos; G. C. Tunstall, Kam-  
 loops.

**Assayers in the Province of British Columbia.**

Public Assayer, H. Carmichael, Victoria.  
 W. Pellew Harvey, Vancouver.  
 J. A. MacFarlane, Vancouver.  
 Frank Dick, assayer, Brandon, B.C.  
 Robbins & Long, Rossland.  
 C. M. Wilson, Sandon.  
 Hill & Co., Sandon.  
 Wm. J. Tretthewey, Kaslo.

**Mining Centres in British Columbia**

—AND—

**HOW TO REACH THEM.**

**ALBERNI.**

Alberni.—Steamboat communication with Victoria and by  
 stage with Nanaimo.  
 Barclay Sound.—Forty miles from Alberni; communica-  
 tion by steamer with Victoria.

**CARIBOO.**

Barkerville.—Two hundred and eighty-five miles from  
 Ashcroft; stage from Ashcroft. See stage lines.

Bonaparte.—Six miles from Ashcroft; stage from Ashcroft.  
 Big Bar.—Stage from Ashcroft.  
 Cinton.—Thirty-two miles from Ashcroft station; stage  
 from Ashcroft.  
 Fort George.—Nearest post office, Quesnelle.  
 Horsefly.—Nearest post office, 150 Mile House; stage from  
 Ashcroft; change at 150-Mile House.  
 Lac La Hache.—One hundred miles from Ashcroft on  
 stage line from Ashcroft to Barkerville.  
 Lillooet.—Weekly stage from Ashcroft.  
 Lightning Creek.—Between Quesnelle and Barkerville, by  
 stage to Stanley.  
 One Hundred Mile House.—Stage from Ashcroft.  
 One Hundred and Fifty Mile House.—Stage from Ashcroft.  
 Quesnelle.—Two hundred and twenty-five miles from Ash-  
 croft; stage from Ashcroft.  
 Quesnelle Fork.—Stage road from Ashcroft.  
 Soda Creek.—Stage from Ashcroft.  
 Stanley.—Stage from Ashcroft.  
 Slough Creek.—Stage from Ashcroft.  
 Tatla Lake.—Stage from Ashcroft, changing at Soda Creek.  
 Willow River.—Stage from Ashcroft.  
 Williams Creek.—At Barkerville.

**CASSIAR.**

Dease Creek.—  
 McDame Creek.—

**COAL CENTRES.**

Crow's Nest Pass.—  
 Nanaimo.—From Victoria, all rail, 73 miles. Steamer  
 from Vancouver.  
 Union.—  
 Wellington.—From Victoria, all rail, 83 miles. Steamer  
 and rail from Vancouver.

**EAST KOOTENAY.**

Cranbrook.—Nearest railway station, Golden. Communi-  
 cation by steamer from Golden to Windermere, thence by  
 stage.  
 Fairmont Springs.—Nearest railway station, Golden.  
 Steamer to Windermere, thence by stage.  
 Fort Steele.—Steamer and road from Golden. Steamer  
 from Jennings, Montana, G.N.R.R.  
 Galbraith Ferry.—Steamer from Golden. Stage in winter.  
 Galena.—Nearest railway station, Golden; thence by  
 steamer. Stage in winter.  
 Golden.—On the main line C.P.R., 475 miles from Van-  
 couver.  
 Moyie River.—From Fort Steele, 25 miles.  
 McMurto District.—Steamer and trail from Golden, 35  
 miles.  
 Perry Creek.—Steamer from Golden to Fort Steele, thence  
 by road.  
 St. Mary's.—From Fort Steele, 20 miles trail.  
 Thunder Hill.—One hundred and fifteen miles from  
 Golden. Steamer in summer, stage in winter.  
 Windermere.—Steamer from Golden. Stage in winter.  
 Wild Horse Creek.—From Fort Steele, two miles trail to  
 Kootenay River.

**WEST KOOTENAY.**

Ainsworth.—Twenty-eight miles from Nelson and twelve  
 from Kaslo. Steamer communication.  
 Albert Canyon.—A station on the C.P.R., 400 miles from  
 Vancouver.  
 Big Bend District.—Fifty miles from Revelstoke by trail  
 and boat.  
 Cariboo Creek.—Steamer from Nakusp, ten miles.  
 Fort Sheppard.—Nearest post office, Trail Creek; commu-  
 nication by rail and steamer from Revelstoke.  
 Illecillewaet.—On the main line C.P.R., 407 miles from  
 Vancouver.  
 Kaslo City.—Thirty-five miles from Nelson; communica-  
 tion by steamer.  
 Lardeau City.—Forty miles from Revelstoke; communi-  
 cation by steamer.  
 Lardo-Duncan.—Steamer from Kaslo to head of lake,  
 thence river trail 40 miles.  
 Naku p.—North-west terminus of Nakusp & Slocan Rail-  
 way, 50 miles from Revelstoke. Steamer communication from  
 Revelstoke tri-weekly.  
 Nelson.—Thirty miles from Robson; is the eastern ter-  
 minus of the Columbia & Kootenay Railway, and also on the  
 Spokane & Northern Railroad. Steamer from Revelstoke.  
 New Denver.—Steamer from Revelstoke and rail from  
 Nakusp; all rail from Kaslo. Distant from Revelstoke, 78  
 miles, from Kaslo, 28 miles.  
 Pilot Bay.—Eighteen miles from Kaslo, thence by steamer.  
 Revelstoke.—On main line C.P.R., 379 miles from Van-  
 couver.



*Rossland*.—Seven miles from Trail Creek by road or stage.

*Sproat's Landing*.—One hundred and sixty miles from Revelstoke, and one and a half miles from Robson.

*Springer Creek and South Sloman Camps*.—From New Denver by steamer, twenty miles.

*Sandon and Coby Creek*.—All rail from Kaslo, 29 miles. Steamer and rail from Revelstoke via Nakusp and Three Forks. Distant from Three Forks, four and a half miles.

*St. Mary's Country*.—Steamer from Kaslo or Nelson to Davie Townsite, thence trail.

*Three Forks*.—Steamer from Revelstoke to Nakusp, thence rail; from Kaslo, all rail. Distant from Revelstoke, 82 miles; from Kaslo, 24 miles.

*Trail*.—Rail from Spokane to Northport, thence steamer. All steamer from Revelstoke, or steamer and rail via Nelson, from Revelstoke, 150 miles; from Nelson, 50 miles.

*Trout Lake City*.—Steamer and stage from Revelstoke.

LILLOOET.

*Bridge River, Cayuse Creek, Fraser River.*

YALE.

*Boundary Creek*.—Nearest railway station on the S. and O.

R., Okanagan Landing, thence by steamer to Penticton and on by stage to Midway.

*Fairview Camp*.—Communication by boat from Okanagan Landing to Penticton, thence by stage.

*Kettle River*.—Steamer from Okanagan Landing to Penticton, thence by stage.

*Midway*.—Rail from Sicamous to Okanagan Landing, steamer Penticton and on by stage.

*Okanagan Mission*.—Rail from Sicamous to Vernon, thence by stage or by steamer from Okanagan Landing to Kelowna, thence by livery.

*Osoyoos*.—Rail to Okanagan Landing, steamer to Penticton, and thence by stage.

*Rock Creek*.—Rail to Okanagan Landing, steamer to Penticton, and thence by stage.

*Yale*.—Nicola Lake Stage from Spence's Bridge and Kamloops, 50 miles.

Any of these points may be reached by rail from Spokane to Marcus, and thence by stage twice a week.

Mail stage leaves Penticton for Midway every Thursday morning.

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Location and Title of Mineral Claims Examined, Abstract Titles Furnished, Assessment Work attended to, Miners' License procured for non-residents, Investments made or investigated, Mining Operations Directed, Options, Leases, Bonds, Escrows, Conveyancing.

I am in the practical part of the Mining Business. My many years' experience in field work, and six years among the Mines and Prospectors of the Kootenay country, gives me a practical knowledge of the work I have undertaken to do. All business entrusted to me will be promptly and efficiently done. Ask your friends in Kaslo about my character.

WILLIAM MEADOWS, KASLO, B.C.

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Wilson Bros.,  
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LLOYD'S AGENCY. HAWAIIAN CONSULATE.

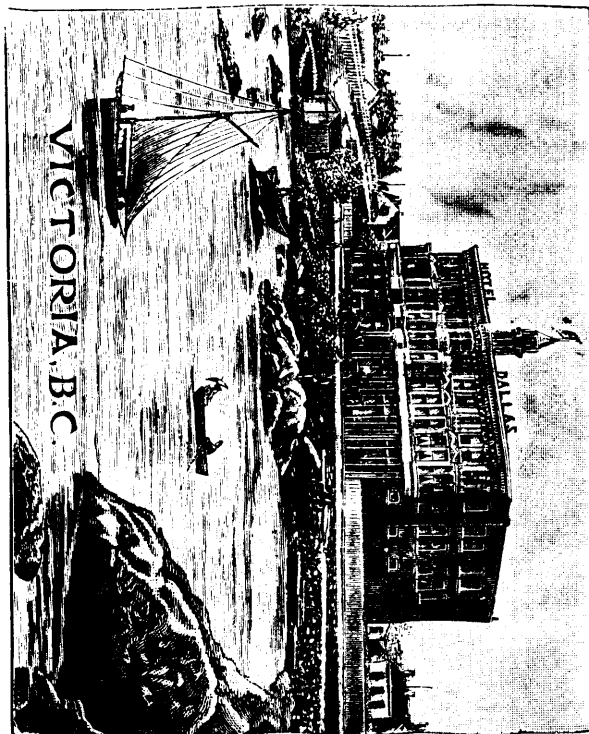
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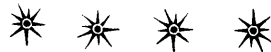
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Special attention given to the mines of Slocan district.

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SAMPLE ROOMS FOR TRAVELLERS.

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TRANSPORTATION COMPANIES.

Canadian Pacific Navigation Co., Ltd.

TIME TABLE NO. 27.

(Taking effect June 21st, 1896.)

VANCOUVER ROUTE.

VICTORIA TO VANCOUVER daily except Monday at 2 o'clock.  
VANCOUVER TO VICTORIA daily except Monday at 13 o'clock or on arrival C.P. Railway No. 1 Train.

NEW WESTMINSTER ROUTE.

LEAVE VICTORIA—For New Westminster, Ladner's Landing and Lulu Island, Sunday at 23 o'clock; Wednesday and Friday at 7 o'clock. Sunday's steamer to New Westminster connects with C.P.R. Train No. 2 going east, Monday.

FOR PLUMBER PASS—Wednesdays and Fridays at 7 o'clock.  
FOR MORESBY AND PENDER ISLANDS—Fridays at 7 o'clock.  
LEAVE NEW WESTMINSTER—For Victoria Monday at 13:15 o'clock. Thursday and Saturday at 7 o'clock.  
FOR PLUMBER PASS—Saturday at 7 o'clock.  
FOR PENDER AND MORESBY ISLANDS—Thursday at 7 o'clock.

FRASER RIVER ROUTE.

Steamer leaves NEW WESTMINSTER for CHILLIWACK and way landings every Tuesday, Thursday and Saturday at 7 o'clock during river navigation.

NORTHERN ROUTE.

Steamships of this Company leave Victoria for Fort Simpson via Vancouver and intermediate ports on the First and Fifteenth of each month. If sufficient inducements offer, will call at points on the West Coast and Queen Charlotte Islands.

BARCLAY SOUND ROUTE.

Steamer MAUDE leaves Victoria for Alberni and Sound ports the 10th, 20th and 30th of each month.  
The Company reserve the right of changing this Time Table at any time without notification.

G. A. CARLETON,  
General Agent.

JOHN IRVING,  
Manager.

UNION STEAMSHIP CO., B.C., LD.

VANCOUVER.

VANCOUVER TO NANAIMO—SS. CUTH leaves C.P.R. Wharf daily (Sundays excepted) at 1:15 p.m. Cargo at Union S.S. Co's Wharf at 11 a.m.

NANAIMO TO VANCOUVER—SS. CUTH leaves daily (Sundays excepted) at 8 a.m.

NORTHERN SETTLEMENTS.

SS. COMOX leaves U. S.S. Wharf every Monday for Port Neville at 11 a.m., Bute Inlet every six weeks, calling at all way ports. Will proceed to any part of the Coast when inducement offers.

MOODYVILLE & NORTH VANCOUVER FERRY.

Leave MOODYVILLE—7, 8:30, 11:45 a.m.; 2:30, 5 p.m.

Leave VANCOUVER—8, 10:15 a.m.; 1:15, 3:30, 6 p.m.

Late trip Saturday and Sunday.

Leave MOODYVILLE—7 p.m. Leave Vancouver 7:30 p.m.

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H. DARLING,

Manager.

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Freight, Express and Teaming of every description promptly attended to. Dealer in Coal and Wood.  
Sale and Boarding Stables: Victoria Street.

The Columbia & Kootenay Steam Navigation Co., Ltd.

TIME TABLE NO. 10.

In effect June 8th, 1896.

ARROWHEAD-TRAIL ROUTE, STEAMER "NAKUSP."

South bound; read down. North bound; read up.  
Mon. Wed. Fri. 7 p.m. De ARROWHEAD Ar 11:30 a.m. Wed. Fri. Sun.  
" " " 11 p.m. Ar/ NAKUSP (De 7:30 a.m.) " " "  
" " " 12 m. De) (Ar 6 a.m.) " " "  
Tues. Thurs. Sat. 9 a.m. Ar/ ROBSON (De 8:30 p.m.) Tues. Thurs. Sat.  
" " " 12 noon De) (Ar 8 p.m.) " " "  
" " " 2 p.m. Ar TRAIL De 4:30 p.m. " " "

Connections at Arrowhead with C.P.R. to and from Revelstoke and all points east and west; at Nakusp with Nakusp & Slocan R. to and from Slocan points; at Robson with C. & K. R. to and from Nelson and Kootenay Lake points; at Trail with C. & W. R. to and from Rossland; and with Trail with str. "Trail" to and from Waneta, Northport and Spokane.

TRAIL-NORTHPORT ROUTE, STEAMER "TRAIL."

Daily except Sun. 8 a.m. De TRAIL Ar 4:30 p.m. Daily except Sun.  
9 a.m. Ar WANETA De 3 p.m. Daily except Sun.  
10 a.m. Ar NORTHPORT De 1 p.m.

Connections at Northport with S.F. & N.R. to and from Spokane and way points; at Trail with C. & W. R. to and from Rossland, and with Str. "Nakusp" to and from Robson, Nakusp and Revelstoke.

KOOTENAY LAKE ROUTE, STEAMER "KOKANEY."

Daily except Sun. 4:00 p.m. De NELSON Ar 9:30 a.m. Daily except Sun.  
8 p.m. Ar KASLO De 5:30 a.m.

Saturday, June 6th and every second Saturday following, steamer leaves Kaslo at 10 p.m. for Bonner's Ferry; returning leaves Bonner's Ferry Sun. at noon. Connections at Nelson with C. & K. R. to and from Robson, Trail, Rossland, Nakusp, Revelstoke and C.P.R. points; at Nelson with N. & F.S.R. to and from Spokane and way points; at Kaslo with K. & S. R. to and from Slocan points; at Bonner's Ferry with G.N.R.

The right is reserved to change this schedule at any time without notice.  
For tickets, rates, etc., apply at Company's office, Nelson.

T. ALLAN,  
SECRETARY.

J. W. TROUP,  
MANAGER, Nelson, B.C.

Columbia & Western Railway Co.

Time Table, in effect July 1st, 1896.

No. 2 Passenger, daily except Sunday; leaves Rossland 7 a.m., arrives Trail 7:45 a.m.  
No. 4 Passenger, daily; leaves Rossland 3 p.m., arrives Trail 4 p.m.  
No. 6 Passenger, Sunday only; leaves Rossland 8:30 a.m., arrives Trail 9:15 a.m.  
No. 3 Passenger, daily except Sunday; leaves Trail 10:30 a.m., arrives Rossland 11:30 a.m.  
No. 5 Passenger, Sunday only; leaves Trail 11 a.m., arrives Rossland 11:45 a.m.  
No. 1 Passenger, daily; leaves Trail 5 p.m., arrives Rossland 5:45 p.m.

All trains run on Pacific standard time. Connections at Trail with Columbia River & Kootenay Steam Navigation Co's. steamboats, Spokane Falls & Northern Ry. via Northport, Canadian Pacific Railway via Revelstoke

KASLO & SLOCAN RAILWAY.

TIME CARD NO. 1.

To take effect Wednesday, Nov. 20, 1896. Trains run on Pacific standard time.

Going west	Daily	Going east
Leave 8:00 a.m.	Kaslo	Arrive 8:50 p.m.
" 8:36 "	South Fork	" 3:15 "
" 9:36 "	Sproule's	" 2:15 "
" 9:51 "	Whitewater	" 2:00 "
" 10:03 "	Beet Lake	" 1:48 "
" 10:18 "	McGuigan	" 1:33 "
" 10:30 "	Bailey's	" 1:21 "
" 10:39 "	Junction	" 1:12 "
Arrive 10:50 "	Sandon	Leave 1:00 "

For rates and information, apply at Company's offices.

ROBT. IRVING, Traffic Manager.

R. W. BRYAN, Superintendent.

SPOKANE FALLS & NORTHERN RAILWAY.  
NELSON & FORT SHEPPARD RAILWAY.

Daily (except Sunday) between Spokane and Nelson, B.C.  
Leave 8:40 a.m. Nelson Arrive 5:00 p.m.  
" 7:00 a.m. Spokane " 6:15 p.m.  
Passengers for Rossland and the Trail Creek mines connect at Northport with stages and steamer daily.  
Close connection at Nelson with steamers for Kaslo and all Kootenay points.  
Passengers for Kettle River and Boundary Creek connect at Marcus with stage daily.