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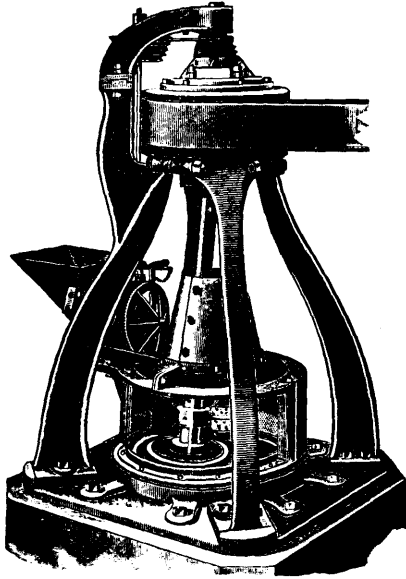
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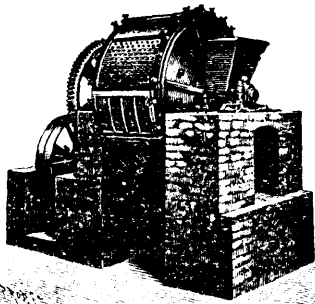
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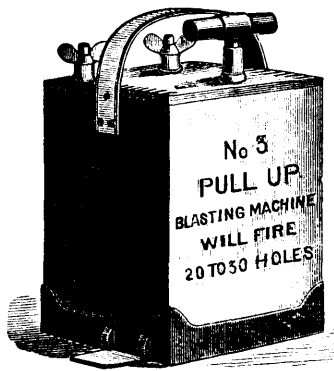
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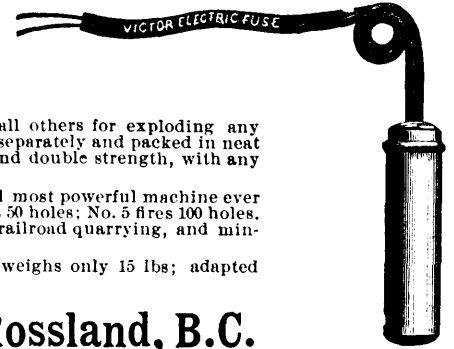
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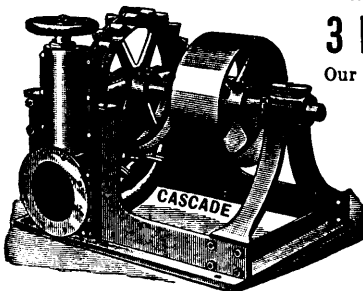
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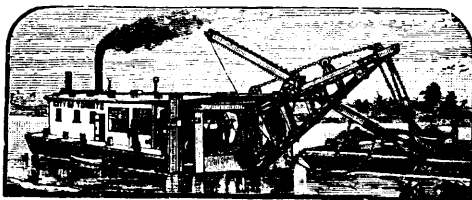
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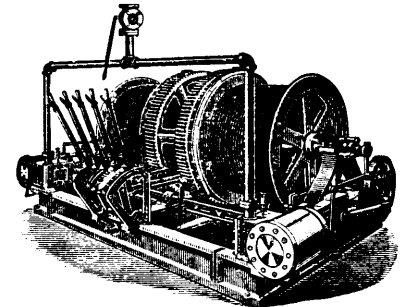
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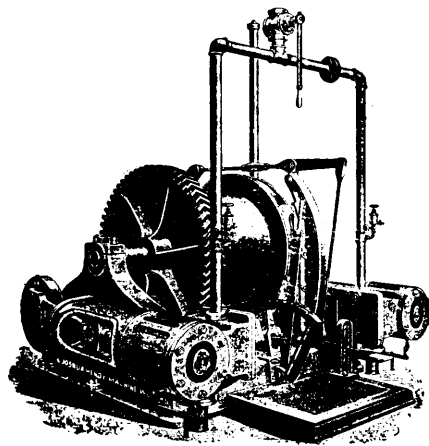
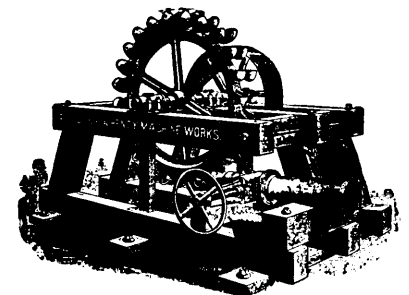
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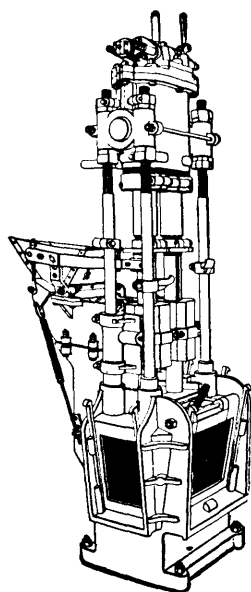
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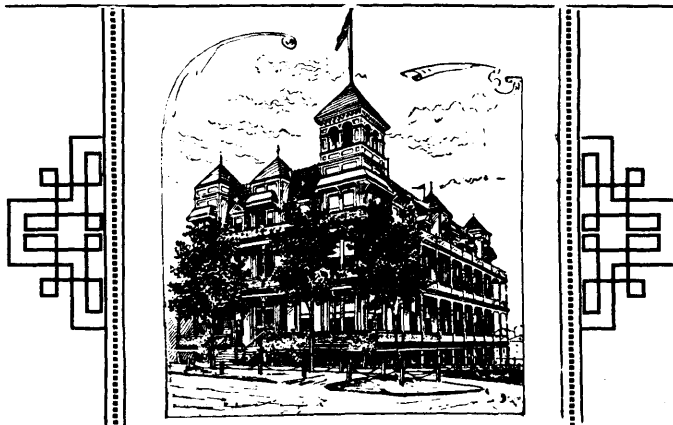
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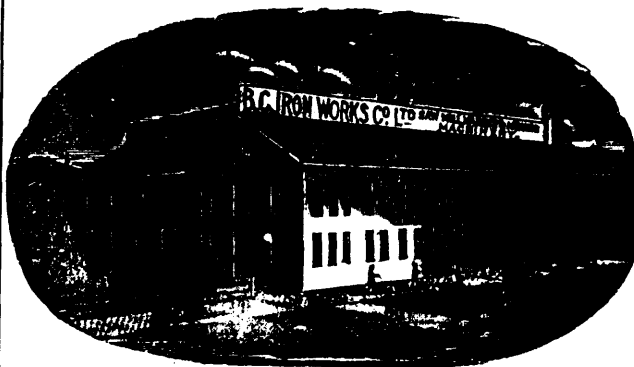
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EDITORIAL NOTES.

It is generally understood that the Dominion Government favoured the granting of aid to a railway through the rich Boundary district to Penticton.

Indeed there is every probability that the subsidy would have been given and the road built this year.

But a few British Columbians saw fit to checkmate the whole business and thus injure not only a most important section of the province but the interests of the country at large.

The people of the Coast have a just cause when they demand a direct railway route to the Kootenay. But the people of the Coast do not believe in a dog-in-the-manger policy and would never consent to blocking railway enterprises in other parts of the province in order to facilitate their own particular project.

Their cause is a just one and they know that sooner or later the Coast-Kootenay Railway will be built. They are prepared to push their claims on the Government to this end, but not at the expense of another enterprise.

Yet the promoters of the Vancouver, Victoria & Eastern saw fit to block the Penticton road until finding there was little hope for them, they ended by agreeing to sell out their claim to their rivals for a paltry sum of \$55,000.00.

This agreement, it is said, was signed one evening and repudiated the next morning. Probably on second thought the enormity of the transaction appalled the parties to it and caused them to draw back.

But the evil had been done and the Minister of Railways announced that no charter would be granted this season to either the Penticton road or the Vancouver, Victoria & Eastern.

In taking this course we think the Minister of Railways acted hastily and without due consideration of the facts of the case.

Because a few company promoters got together and while engaged in charter-mongering pursued disreputable tactics is no reason why a most important section of the country and a deserving class of people should be made to suffer for the sins of a few and be deprived of much needed public improvement.

We trust the Minister of Railways will reconsider his decision and that he will arrange for the construction of the road to Penticton without delay.

In this connection the British Columbia Board of Trade at Victoria took a wise, a proper, and a timely step when they forwarded a resolution to the Minister of Railways asking him to grant the aid necessary to secure the construction of the road to Penticton and that the Coast-Kootenay line could remain for future consideration. It showed clearly that the Coast people are not in sympathy with the dog-in-the-manger policy of the few men who put themselves forward as representing at Ottawa the interests of the Pacific Coast.

We do not desire to criticize the actions of Dr. Milne while at Ottawa because he is not here to defend himself. Besides, he may have an entirely different version of the story to tell which may in a measure exonerate him from blame. We hope so. But on his return the people of British Columbia will certainly expect a public statement of the fullest description from him explaining the whole unsavoury matter from first to last.

No matter whether the case we have been discussing turns out to be a cleaner business than the newspaper reports indicate, enough remains to show that there is something decidedly rotten in the state of Denmark in the manner of granting railway charters at the present time.

Indeed the traffic in charters of all kinds going on year in and year out has become a huge scandal which the Government without delay should put a stop to.

If we were to search the Statute Books of the Dominion and of the various provinces we would be amazed at the vast number of charters granted which have never been acted on. There they lie, dead letters, examples of the greed and folly of mankind.

Men with no capital behind them will go before the Legislature or Parliament and ask for a charter involving the expenditure of millions of money. The effrontery of these men generally procured for them the charter, which, after costing the country both valuable time and money, is never more heard of.

Is it not about time to put a stop to this sort of thing and oblige men applying for charters to show that they have something behind them to ensure the performance of the work?

We have on several occasions shown in the pages of the RECORD the danger to the public interest which trafficking in charters (especially railway charters) may at any time become, and now the postponement of the Penticton Railway through the greed of charter grabbers is a case in point.

It is to be hoped that this scandal with which unfortunately the name of British Columbia is connected may serve to clear the air in such matters in the future.

In another page of this issue will be found extracts from the speech of Senator McInnes on the subject of establishing a Canadian mint. We trust the Senator will continue the good work he is engaged in.

Why Canada, which is fast becoming a very large producer of gold and silver, should send her bullion abroad to be minted is one of the problems in this country difficult to solve.

The erection of a mint would not be a costly affair compared with the convenience and profit it would be to the country. If any stupid old laws or customs intervene brush them aside and let us have our own Canadian national mint. England, we feel sure, would not grudge us the minting of our own precious metals.

When the announcement came over the wires that mining machinery would be placed on the free list it was like a sound of glad tidings to our mining men in this province. But alas! their joy was of short duration.

In a very short time came word that all the principal machinery used in working the mines would be subject to a duty of twenty-five per cent. Think of it! Twenty-five per cent. on articles which even in ordinary cases cost a great deal of money. Why! it is prohibitive.

We have the pleasure of knowing that we are now worse off in this respect under a Liberal Free Trade Government than we were under the protective principles of the Conservatives.

Under their law until Mr. Fielding changed it, there was a chance for the miner to get his machinery in free of duty so long as it was not manufactured in Canada. All it required was for the Department of Customs to see to the proper interpretation and carrying out of the law—a thing which unfortunately the Department of Customs never did.

But now no hope is left. Twenty-five per cent. is the law.

A small duty to even up on freight charges would not have been objected to, but twenty-five per cent.! It looks like a direct stab at our mining industry, where we expected friendly encouragement.

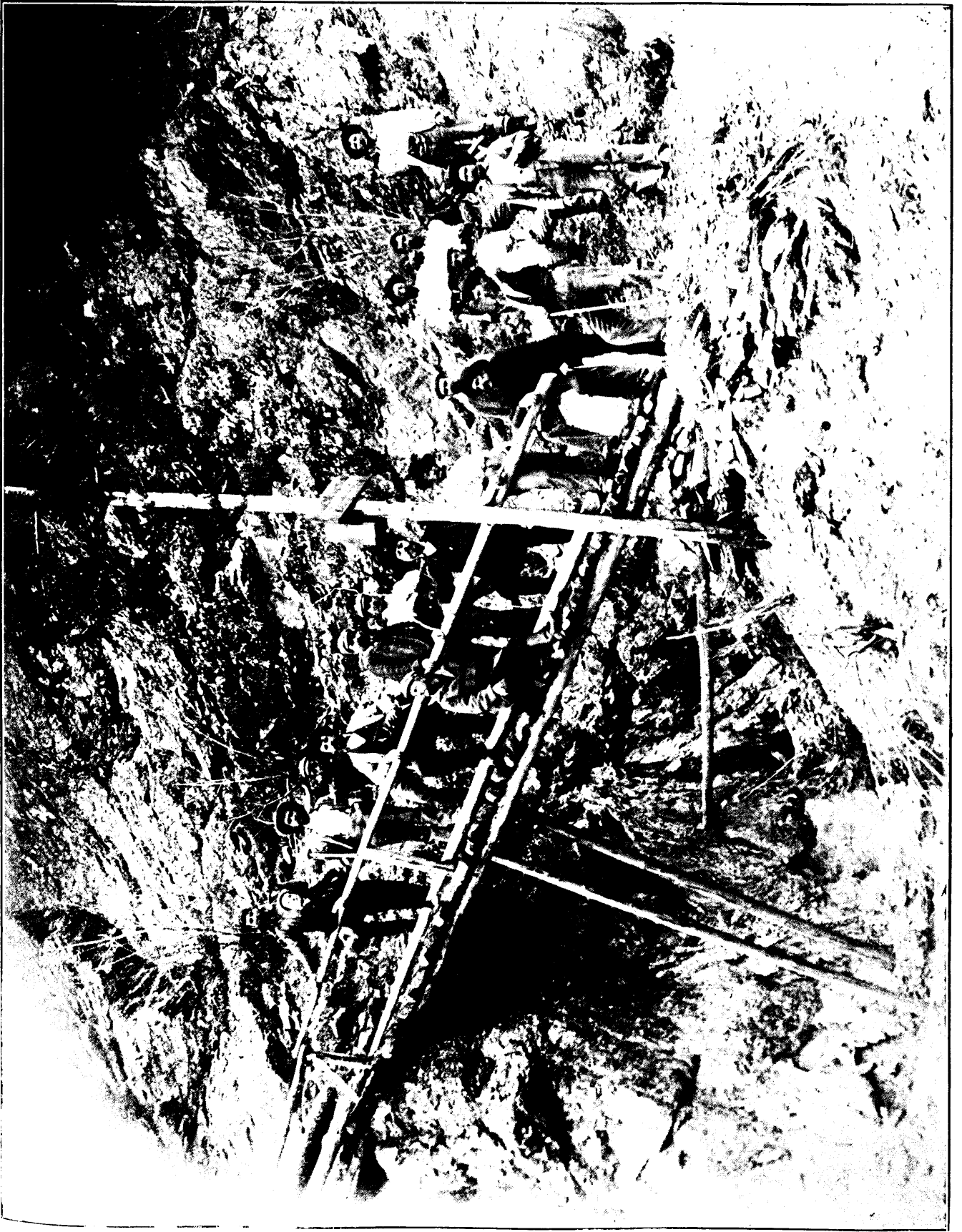
If the first announcement in regard to free mining machinery was authorized by the Government it was a cruel turn over to come so suddenly upon us with what is almost a prohibitive tariff.

We are not fighting the battle of any one class of machinery men against another. So far as the machine makers are concerned we want to see fair play and justice rendered to all and have no desire to give preference to any.

We think if Mr. Fielding had studied the question out more closely and not listened to the tales of interested parties he would have come to a different decision.

It is rather exasperating to find that the part of the Dominion from which the Minister himself hails has been well looked after. It may have been accidental and not intentional of course, but it is a curious fact that on Mr. Fielding's free list, coal mining machinery occupies a very prominent place. The coal mines of the maritime provinces must be cared for.

The day may come, however, when the Government at Ottawa will find it to their advantage to pay



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as much attention to the people of the Pacific Coast as they now do to those of the Atlantic.

Our position on the tariff so far as it affects mining machinery is this: We hold that the men who are developing and operating mines in this province should have the privilege of procuring the very best machinery obtainable without having to pay any excessive charges in the shape of customs duty. There have been a number of cases where machinery was bought at great expense and erected at the mine only to prove a failure when operated. The machinery in such cases had to be taken out and a different make substituted at heavy cost. The mine owner, in order to be successful, should be able to get the best machinery whether made in Canada, United States or elsewhere. Canadian machine makers stand well in the Kootenay, but there are some kinds of machinery made in the United States with which Canada cannot yet compete in excellence. In this case why should the mine owner be taxed twenty-five per cent.

We would be in favour of a small duty on machinery to even up freight charges which are large owing to the long haul from Canadian centres, but outside of this the manufacturers should be able to fight their own battles through the excellence of the machinery they produce.

The Crow's Nest Pass Railway is now an assured fact and we have the word of the Vice-President of the Canadian Pacific that the road will be completed to the mountains this summer and that next year trains will be run over it to Kootenay Lake.

The building of this road means cheap fuel and the erection of smelters at different parts within the limits of the province. This will bring about increased activity in our mines and will bring about a large immigration into British Columbia.

But to read a number of the Eastern Canadian newspapers one would think that the whole benefit to be derived from the road would be enjoyed by this province. The Toronto Board of Trade even went so far as to say that British Columbia ought to bear one-half the cost of building the line.

Now let us correct our Ontario friends on this point. So far as cheap fuel is concerned, we acknowledge the building of the line will be of great benefit to us. Let it stop short at the coal mines and run from there to Nelson and there would be some reason for saddling British Columbia with the cost of building. But as it is projected it will be a short line to the East and will bring in the supplies from the merchants and manufacturers of Eastern Canada, shutting out our trade centres from participation in

the commerce of the Kootenay. It will, moreover, bring in the beef, mutton, butter, wheat, oats and other grain from the prairies of the Northwest, thus opening up a home market for their produce and making them prosperous.

The opening of the Crow's Nest Pass Railway will be the greatest factor in making the vigorous immigration policy of Hon. Mr. Sifton a success. In fact the plums of the road will go to Eastern Canada and to the Northwestern territories rather than to British Columbia. So we trust we will hear no more from Ontario papers about who should bear the cost.

But if the people of Eastern Canada think that we in British Columbia will stand idly by and see our trade taken from us they are greatly mistaken. We will never rest until we have the direct line from the Coast to Kootenay.

So Mr. Selevor and his partners after perambulating through our Coast cities trying to find out who would make them a present of \$150,000 have at last decided to settle in Seattle. Probably Seattle knows its own business, but we think that Victoria had a very fortunate escape.

While we are not in favour at the present time of levying an export duty on ores we think the Government have acted wisely in taking power to impose such a duty should circumstances necessitate it.

If Americans owning and operating mines in British Columbia see fit to ignore the claims of eligible smelter sites within the province and start in to erect smelting works on the other side of the boundary they must be taught that while Canadians will stand a good deal it is unwise to test their temper too far.

The power in the hands of the Government to impose an export duty if necessary will probably stop work on the smelter at Northport and other kindred schemes. In the meantime mine owners if it is to their advantage may make use of American smelters.

We are pleased to hear that the Pilot Bay smelter is shortly to re-open. It will have all the work it can undertake and probably if it had not been for its close connection with the Blue Bell mine it would have been in operation some time ago and running full blast at the present time.

PREVENTION OF ACCIDENTS IN MINES.

IN your April issue I called attention to the need of action on the part of the Legislature in connection with this very important subject. Since then, I am glad to say, that an Act has been passed by which—with an efficient inspector—the percentage of accidents ought, very greatly, to be reduced. There is, however, room for improving its efficiency very much

and as, in section 26 of the Act, power is given to the Lieutenant-Governor-in-Council "to make such rules for the safety of mines in addition to those... laid down as may be deemed advisable for the protection of the miners," it is to be hoped that steps will, at once, be taken to make the Act still more complete than it is, by enlarging the general rules.

Sections 8 and 9 give the inspector ample power in dealing with the working of any mine "until it is made to conform to the provisions of the Act," but I do not think the inspector has any power to prevent:

(a.) Hoisting men at an excessive and dangerous speed.

(b.) The untamping of shots that have missed fire.

(c.) The use of single link coupling chains between hoisting ropes and cages.

(d.) The splicing of hoisting ropes used in raising and lowering employees.

(e.) The overloading of safety valves of steam boilers.

Nor has the inspector power to enforce:—

(f.) The fencing of the moving parts of machinery.

(g.) The fencing of openings into shafts, at intermediate levels, and other dangerous places in mines.

Practical men will readily realize the dangers that may be averted by extending the general rules, as above suggested.

The inspector does not appear to have power to prevent any dangerous practices or enforce any improved methods that are "outside the provisions of the Act," and five or six weeks, at least, must elapse before the powers given under section 26 can be operative. In that time much ruin may be wrought.

Another important omission in the Act may be noticed. It should have provided that a copy of the general rules, with the inspector's name and address, be posted—in some conspicuous place—at each mine, so that the employees may know when the Act is being complied with and acquaint the inspector of any infraction thereof. J. D. KENDALL.

Hot Springs Camp.

THE mountains are alive with prospectors, several very rich strikes having been made near the headwaters of Coffee and Woodbury Creeks. Assays are being reported daily, running high in the hundreds in both silver and gold.

The No. 1 mine is making regular shipments of concentrates besides an occasional shipment of carbonates and high grade sorted ore, the latter running from \$300 to \$700 per ton.

On the Neosho considerable quantities of good grade ore are being taken out and sacked. Shipments will soon commence and a large force of miners be put on to work the lower levels.

A plant of machinery has been put in to work the Mamie and Lady of the Lake. Both will be shipping in a few days.

The work being done now on the Charleston is fast developing it, so that soon it will be added to the list of shippers.

The plant of machinery on the Little Donald is doing good work; lots of ore is being taken out. Two barge loads of seventy-five tons each were shipped the first two weeks from the Donald and Black Diamond.

The Tariff workings are all showing plenty of good grade ore, no stoping being done, but development is pushed day and night right along.

The new machinery on the Mile Point is all working smoothly. They are now sinking and drifting. The headings are all showing good ore and plenty of it.

The Albion, Maestro and Jeff Davis, No. 4, Noble Three and Star are all pushing their development and are opening up very well.

The grading is being done for the flume on Cedar Creek to supply and run the concentrator for the Highland mine.

Eighteen inches of clean ore were encountered in the Illinois tunnel the past week, when the foot wall of the main vein was reached. Seven feet have been driven since through good concentrating ore with no signs of the hanging wall yet. The tunnel is being driven on a cross vein and has had two feet or more of ore for the last seventy-five feet. From present indications the Illinois will soon be a mine.

The breast of the No. 3 tunnel on the Twin shows ten inches of clean ore and about twenty-six inches of nice concentrating ore. The numerous other workings are all showing up well. The second payment on the \$35,000 bond was made on the 14th.

The Ellen has several inches of clean ore and several feet of good concentrating ore. A contract has been let to continue the tunnel another fifty feet.

A 100-foot contract has been let to drive a tunnel on the Liberty group, situated on the South Fork of Woodbury Creek.

There is talk of a custom concentrator being erected near the Little Phil, on the Swamp Angel, power to be taken from Krao Creek. It would be a paying investment. F.

Christina Lake.

A NEW country now being much prospected is that surrounding Christina Lake, in the extreme south-easterly part of the Kettle River mining division of the Yale district. Prior to the present season comparatively few locations had been made around the lake, but this summer prospectors to a number variously estimated at between 500 and 1,000 have swarmed in until all the country in the immediate vicinity of the lake, and up its tributary creeks has become much frequented by diligent searchers for mineral deposits. Hundreds of locations have already been made, possibly over a thousand, and many more will yet be made, for not only is the country little known, but it is rough, timbered and mountainous, so that it will take a long time to examine it thoroughly. The creeks flowing into the lake from an easterly or a north-easterly direction are Sutherland, Baker, McRae and Swinner Creeks. Hardy's Creek comes in from the north; Troy Creek from the northwest; and Lake Creek, Sandnar Creek and others come from a direction more or less westerly.

Some good locations have been made on Sutherland Creek, commencing near its mouth and working back for some distance. On Baker Creek the principal locations are about three miles from the lake. One group has been located in a cañon and to reach the exposed vein one party of prospectors has to go down by means of a rope ladder hung over a precipitous bluff. They claim that they have to descend in this manner 200 feet to their tunnel, but the depth appears less to the eye.

McRae Creek has also had notice, numerous locations having been made on it. At the head of this creek is the only pass yet discovered giving a grade

suitable for a railway, so it is thought that when the railway is brought westward from the Kootenay country it will of necessity be *via* McRae Pass. Prospectors have also already been at work for several miles above the northern end of the lake; in fact they have gone back from the lake in every direction that appeared to be promising for new finds.

The trend of the leads on the eastern side of the lake seems to be generally northeast and southwest. The ore throughout the district appears to be low grade, though seemingly occurring in large bodies. The highest assay returns yet made public were obtained from quartz carrying gold, copper and silver, found on the west side of the lake, about a mile below Sandnar Creek. There appears to be a lot of iron in the district and silver is present in all the ledges yet tested. Before the season closes much will have been ascertained relative to the value and prospects of this new country, which now gives promise of showing extensive deposits of low grade ores.

Camp McKinney.

A RECENT visitor to Camp McKinney states that the Cariboo Company's mine is continuing to look well. Additions to the plant have lately been made, but more machinery is required to secure even better results than the profitable returns now obtained. Mr. Douglas, who is in charge of the plant, and who has had eighteen years' practical experience in Mexico, Southern California and elsewhere, is stated to have a very high opinion of the mine. About fifteen men are employed on the mine and the output of pay ore is steady and continuous.

The Minnehaha, with Major Ainslie McGraw in charge, is working fourteen men. The shaft is now down sixty feet, but it is slow work at that depth with only a hand windlass for hoisting purposes. A horse whim will soon be provided, which will lessen the labour of hoisting up rock and baling water. The ore appears to be similar in character to that obtained in the Cariboo mine. The prospects of the Minnehaha are good, but it is unlikely that machinery will be placed upon the mine until after it is reasonably certain that there is an ample supply of payable ore available. The buildings for the accommodation of the men are commodious and comfortable. A residence for the manager is now being erected.

The Fontenoy, owned by Mr. H. Cameron, is about a mile from the Cariboo. One shaft is down eighty-three feet and another thirty feet. There are also several tunnels and crosscuts. The ore is reported to run high and the property appears to give much promise of good returns.

Satisfactory progress is also being made on Mr. Sidley's Anarchist claim, upon which there seem to be three ledges, giving big bodies of quartz. A ditch about half a mile in length is being run in from the North Fork of Rock Creek, from which a strong pressure of water will be obtained. From six to eight men have been employed on the Anarchist. The Aloha is an adjoining claim apparently having a continuation of the same ledges, but no work has yet been done on this claim.

It was not found convenient to visit the Victoria, so this and other good properties had to be passed by. The visitor was struck with the indications of permanence that characterized Camp McKinney, which already has from forty to fifty men regularly on its pay rolls and which will later employ a much larger number.

Notes from Kamloops.

REGARDING the progress of mining in our own camp there has been no cessation in development since my last. Present indications point to the realization of our anticipations, and a prosperous camp will result from the mineral development that has been inaugurated in this section. The camp to-day presents a healthy, progressive appearance, brought about principally by the gradual disappearance of the tin horns who are now being replaced by miners and mining men, among whom are those who have gained prominence in other mining camps for their knowledge of what constitutes a mine. The advent of this class cannot be over estimated. The average miner or prospector is seldom found with sufficient means at his disposal to thoroughly prospect his finds, much less to develop them sufficiently to place them on paying basis. For this reason mining camps must look to the enterprise of mining men of means and practical experience for its ultimate development. Although this camp offers exceptional advantages for economic mining it will be found to be no great exception to the rule: it requires money to develop a prospect into a mine. So far, however, it is gratifying to be able to state that mining men are steadily putting in their appearance and are making good use of their opportunities.

During the past month a number of important transfers have been made and a great deal of mining development has taken place, and while it has laid to rest a number of imaginary fortunes, the record shows that new discoveries are made daily, through a system of trenching in favoured localities. This system has led to the exposure of leads not visible on the surface, as in the case of the Jubilee (No. 5), located by J. Buxton and others, situated to the south of the Bonnie Etta, which has an excellent showing of gold and copper ore at the bottom of a twenty-foot shaft. On the Jubilee a small stringer was met two feet below the surface which an eight-foot shaft has since developed into a four-foot vein of gold and copper ore.

The claim known as Gold from the Grass Roots, owned by O. S. Batcheler and O. Whitaker, has passed into the hands of L. W. Nestelle, a mining expert from Fairhaven, Wash, who represents Dickenson Bros. & Co., of that place, the consideration being \$2,300. Assisted by four men a systematic process of prospecting was instituted, with the result that a vein varying in thickness from two to four feet was reached in twenty feet that gave on assay an average across the face of \$42 in gold and about twelve per cent. in copper.

The Pedro, which is down about forty feet in the immediate proximity of the former, has struck the same vein running through it.

The Mountain claim, located by Ben Savage, has been bonded to H. Stevenson, late of England, now of Rossland, and F. P. Power, of the latter place, for \$5,000. These same gentlemen have also taken over the Garfield and Little Ethel, of Jas. H. Russell, and work is being pushed on these three propositions. Active development work is also in progress on the Gold Cup, Iron Duke and Little Smuggler, held by John Hepburn and others. A. H. Craven, in the interest of the company in England which he represents has a staff of men on the Breedon and Copper Cent. The Bonanza of A. G. McDonald and Wm. Ford (on which work has been in continuous pro-

gress for the past two months) can to-day be placed among the leading and most promising claims on the hill. The shaft is down forty-five feet and the owners, who are practical miners, intend to cross-cut the vein in fifty feet. A fine lot of ore is now on the dump, and this mine will no doubt be among the first shippers.

W. Thos. Newman is now opening the Jesse James. Geo. B. Guthrie has commenced work on the Crail. The Isabel, owned by J. L. Brown, is showing up splendidly. The Kimberley Company's tunnel on the Charlotte is now in about sixty feet. This is calculated to tap the vein at a hundred foot level. The Despatcher, situated a little east of the Kimberley group, assays from samples taken four feet below the surface 114 ounces in silver and traces of gold. The Norma is showing strong indications of becoming a mine.

A. G. Thynne, of Rankin & Thynne, Vancouver mining brokers, has secured a bond on the Browne for \$3,000; \$300 cash, \$100 to be expended in work, the remaining \$2,600 in ninety days. Two shafts are being sunk simultaneously on the Preliminary (one of the Joko Lake Mining Company group) with such satisfactory results as to justify preparations for operations on an extensive scale. Work has also been resumed on the Python, the pioneer of the camp.

No doubt the most important mining transactions of the month were those in connection with the transfer of the Iron Cap and the Desmond to Patsy Clark, (president of the War Eagle Mining Company, of Rossland, B.C.) the consideration being \$20,000. It will be remembered that the Iron Cap was only purchased a few weeks previous to this deal from the original locators for \$5,000 by a local combination composed of F. P. Carey one half, J. H. Morrison one quarter, M. D. Mahoney one eighth, Alex. Grant one sixteenth, and Dr. Lambert one sixteenth. The deal, which was consummated through W. H. Taylor, on behalf of Patsy Clark, practically amounts to a bond for one year in the sum of \$20,000, payments being regulated making \$5,000 payable on the 15th of July next, \$2,500 on the 18th of October, \$2,500 in January, 1898, and the balance, \$10,000, on or before the 27th of May, 1898. After the first payment of \$5,000, however, Mr. Clark has the privilege of shipping ore. In addition Mr. Taylor has secured for his chief bonds on the two fractions surrounding the Iron Cap and Desmond, the latter itself a fraction, viz., the Fragment, of Dr. M. S. Wade; the McLeod, of J. H. Russell and J. L. Brown, for \$2,500 each. These salient facts tell a striking story which cannot but inspire confidence, because men like Patsy Clark, W. H. Taylor, L. W. Nestelle, H. Stevenson and Parks, A. H. Craver and J. Marrash, are not apt to make mining investments unless thoroughly convinced that they are safe. They are men of wide experience who have visited the camp and from what they see they have been induced to give it a trial. The appearance of these men is important, because they are either in possession of capital themselves or are backed by those who have it, hence it is fair to say that the Coal Hill Camp is now about to be placed on a solid basis.

We were visited during the month by a number of men high in mining circles. Among them were Julius H. Saussman, the official mining expert of the Canadian Pacific Railway; J. Marrash, representing the New Gold Field Company, London, England;

Patsy Clark, president of the War Eagle Mining Company, Rossland, B.C.; Napoleon Wells, mining expert, New York, U. S. A.; the Hon. Thomas Mayne Daly and W. Pellew Harvey, mining engineer and assayer, Vancouver, B.C., all men of wide mining experience, who have without exception expressed themselves in highly favourable terms of the showing at this stage of the camp's development. Now all that remains is the application of capital to enable us to see what lies beneath the surface.

JOHN F. SMITH.

New Denver Notes.

THINGS generally are beginning to resume their normal aspect after the temporary inflation at Slocan City, the summer, with its fine weather, is full upon us and the towns present a quiet appearance after the animated spring, owing to the annual exodus of all sorts and conditions of men to the mountains. While Slocan City is for the moment in the descendent, the busy little burg situated at the mouth of Four Mile Creek is decidedly the reverse. Lots have gone up to an unprecedented figure and new buildings are being erected as fast as lumber can be obtained. The cause of this is not far to seek, beginning with the Two Friends failure, those who pinned their faith to the Springer Creek country are again woefully chagrined at the turn affairs have taken in respect to the Skylark, Ranger and Chapeau, claims originally under bond to the Hall Mines Co., of Nelson, but now unfortunately relinquished. This is rendered the more aggravating by the certain knowledge that they are all looking exceedingly well, and on the surface it appears to be merely another instance exemplifying conspicuously the iniquity of demanding initial payments. At Silverton, on the other hand, a reported immense strike of ore on the Galena Farm, in conjunction with the fact that the Thompson, Fisher Maiden, Vancouver and Wakefield are all doing well, has given an additional stimulus to investors in that section. It is worthy of notice that no satisfactory explanation has yet been given as to why the Alpha, a property that has shipped over a thousand tons of high grade ore in the past, should remain inactive for so long a period; it is all the more remarkable when we take into consideration the fact that rich ore has only recently been found in large quantities just below it.

The course which will be ultimately pursued by the directors of the Bondholder Mining Co. has not yet been determined upon, another payment is now due, but in the meantime the property remains idle.

Hugh Sutherland is again in the Slocan, presumably with the intention of either restarting or terminating definitely work on the Silver Nugget, a property which he has on Eight Mile under bond.

The heavy rains of last week are responsible for considerable damage to the Ten Mile waggon road, which will have to be repaired before active shipping operations can again take place.

The B.C. Association of Mining Engineers held their summer meeting here last week, and everything considered it was a decided success. With proper management this is destined to become a very important society, in fact the leading technical society in B.C., and everything possible should be done to encourage it.

HOWARD WEST.



QUEEN GOLD AND SILVER MINE, YALE CREEK, B.C.



REVELSTOKE, B.C.—LOOKING WEST.

Main Kettle River.

THE Main Kettle River and its West Fork and other tributaries have this season been visited by numerous prospectors, who have been and still are scattered over a large extent of country. From Rock Creek up the river for well nigh a hundred miles prospectors have searched the country for mineral deposits. At James Creek one of the most promising claims is the Crown Point, which is one of a group of three held under a working bond by the Prospecting Syndicate of British Columbia, Limited. There is a fine surface showing of ore on the Crown Point, and at 25 feet down it had improved in both appearance and value.

Many claims have been located on the West Fork and some are on ledges containing a deal of ore. Assay returns, though, seem to indicate that much of the ore is low grade. Canyon Creek is another tributary which has received the attention of prospectors. The Currie group of five claims, situated on this creek, was recently bought by Messrs. Carmody, Fell and Leahy, who, it is understood, are backed by Eastern moneyed men.

Prospectors have made their way across to the Main Kettle River from the head waters of Boundary Creek. They report that a good trail could be cut through without much difficulty and that an easy grade for a waggon road could be found. The distance from Greenwood to opposite Canyon Creek should not exceed 25 miles, or at most 30 miles. An effort will be made to get a pack trail cut through before the fine weather goes.

Boundary Creek.

ALTHOUGH Boundary Creek is not experiencing anything like a boom, there are now more prospectors out in the hills and more men on the pay rolls than at any previous time in the history of the district. As a consequence new finds are being made and several properties are now entering upon the stage at which they may fairly lay claim to be called mines. The indications are that before the snow flies this year it will have been unmistakably demonstrated that there are at least a dozen producing mines in the district with a favourable prospect of later developments proving the existence here of at least double that number.

Taking the Boundary Creek mining camps in alphabetical order, one of the most important comes first. Central Camp has within its limits some valuable properties and can show an amount of development work proportionately large. Just now the No. 7, owned by the Boundary Mines Company, of New York, attracts most notice. The manager, Mr. F. Keffer, M.E., of Anaconda, claims that his estimate of \$350,000 worth of ore between the surface and the 139-foot level along a distance of 700 feet, is a conservative one, and the result of careful calculation. This leaves out of account ore recently met with in new workings beyond the limit just given.

Copper Camp, with its big showings of ore, said to be low grade, is not at present having anything like the attention it appears to deserve. On the contrary its near neighbour, Deadwood Camp, possesses one of the most noticed mines of the district, the Mother Lode, owned by the same proprietary as the No. 7. With an ore body, proved by tunnelling to be 185 feet wide, it is naturally regarded as a valuable prop-

erty. A winze is now being sunk from the floor of the tunnel to ascertain whether the ore lives down. On the Sunset claim in the same camp a 250-foot tunnel is being driven, with the object of cutting the ledge.

Little or nothing is heard up Boundary Creek of Graham's Camp, but Greenwood Camp is now arousing interest by reason of the presence in the district of Messrs. Jay P. Graves, of Spokane, and H. White, who are arranging for an early resumption of work on the Old Ironsides and the adjoining claim, the Knob Hill. Both claims should, under favourable working conditions, give a good account of themselves. It is also understood that Messrs. Farrell & Migeon, of Butte, Mont., will shortly resume work on the Stenwinder, in the same camp.

Kimberly Camp is still young and is a little farther away than some of those better known. Still some good work is being done, with encouraging prospects for the future. Long Lake Camp is coming well to the fore. The Prospecting Syndicate of British Columbia, Ltd., is making satisfactory progress on the Jewel and Denero Grande, extending the drifts, and has commenced work on the North Star, also held under bond.

Messrs. Thomet & Wood are getting some pay ore out of the Lakeview, and Messrs. Cameron & Emerson are arranging to put a tunnel in about 70 or 80 feet to cut the ledge on the Lakeside. The British-Canadian Gold Fields E.I. & D. Co. will shortly commence work on the Ethiopia.

In Providence Camp the Boundary Creek Mining and Milling Co., of Greenwood, is now developing three of its claims, viz., the D.A., G.A.R. and O.B., a vein of about two feet of good ore being opened up by a shaft on the G.A.R., and the O.B. quartz vein gives promise of improving with depth. Some good assay returns in copper, up to 16.3 per cent, have been obtained lately from ore taken by Mr. Bielnburg from his Anaconda claim. Work is still in progress at the Skylark claim in Skylark Camp. There is not much being done at present on the Republic Mining Company's claims in Smith's Camp, work having been temporarily suspended on two of the trio—the Republic, Last Chance and None Such. Mr. J. C. Haas has met with ore on the Golconda assaying up to \$35.13 in gold and has stripped the ledge for over 400 feet along the surface.

A mining plant, consisting of boiler, hoist, pumps and two drills, is expected to arrive shortly for the R. Bell, in Summit Camp, which claim is owned by the Klough Gold and Copper Mining Company, of Salt Lake City, Utah. Another claim in the same locality which is thought highly of is the B.C., from which some excellent ore was got lately. Last on the list, but by no means least, is the Wellington Camp, in which are the Winnipeg and Golden Crown among other claims. Messrs. Honey & Beacher, of North Dakota, are now organizing a company to further develop the former, whilst the latter is being opened up with gratifying results by the Brandon and Golden Crown Mining Company, of Rossland. There are now seven known leads on this valuable property.

There remain three items of interest to add: First, the second payment under the bond on the Jewel was made a few days ago, Messrs. L. Bosshart and F. Dittmer having each received \$3,000 on this account. Next, the final payment of about \$3,900, making \$13,800 in all, on the No. 7 was made on the 14th

inst; and last, Mr. W. A. Carlyle, Ma.E., Provincial Mineralogist, is now examining the Boundary Creek district for the purpose of reporting thereon, and of describing the principal mining properties in it. His report will be made without delay and since it will deal with a district about which little that is official has been published it is awaited with more than ordinary interest.

Around Revelstoke.

THE rush into the Lardeau District is fairly under way. The waggon road has been completed into Ferguson and the steamers on the Arm and the teams on the trail are taxed to their utmost capacity to keep pace with the traffic. Ferguson is rapidly going ahead. Lack of lumber has hitherto prevented much building, but now that a sawmill has gone in there lots of work in that line is being rushed forward. The tent population is large and continually on the increase, but a few weeks from now will see hotel accommodation in Ferguson sufficient to handle the business. The Horne-Payne people are clearing off the ground at the west end of the town for their concentrator.

The Winnipeg Mining Co., represented by Mr. R. Jamieson, intend to do some extensive work on their property, which is an extension of the Silver Cup, this season. Development work is also going on on the Pool, Glengarry, Big Five and other noted properties round Ferguson. Mr. Jos. Young, of Rossland and Spokane, recently acquired the Omaha, an extension of the Silver Cup, for the sum of \$50,000. The claim was located on May 25th and assays from the surface went as high as 4,200 ounces in silver. Mr. J. M. Robinson, of Rossland, has men running a 100-foot tunnel on the vein and another on the Glenside for a Brandon company, who own these properties.

Besides all other work going on round this rising camp there are big shifts of men on all the Horne-Payne Company's mines, the Broadview, Silver Cup, True Fissure, Old Sonoma and Sunshine.

Very rich strikes have been recently reported from Fish Creek and its tributaries.

Communication with the Big Bend country has fairly commenced and if, as is reported, the Lytton is going to be put on between Revelstoke and Laporte, considerable development may be expected in that district this season. It is full of prospectors and a good many fresh locations have already been made. At Carne's Creek the Roseberry, which the Carne's Creek Company are developing is showing up most satisfactorily. The French Creek Company, a Chicago syndicate, are shipping in an immense quantity of machinery and stores to their placer claim on French Creek, and they will commence extensive hydraulic operations as soon as they get things into shape up there.

Round Revelstoke itself a good deal of prospecting is being done, and some locations are being made. The look of the formation has attracted the attention of some of our miners, and there is of course no assignable reason why the hills in our immediate vicinity should not contain as rich mineral wealth as any others.

At the date of writing Capt. John Grant, of the Waverley mine on the North Fork of the Illecillewaet, is expected to arrive in a few days, when it is supposed active development will commence at once

on the property, which has made magnificent showings as far as development has gone.

The Lanark at Lawrie still continues to contribute her daily car load of concentrates to the mineral product of the province.

Among other matters of interest Dr. Brett of Banff, in partnership with Mr. D. H. Macpherson, a son of the late Hon. D. Macpherson, of Toronto, has bought out the Halcyon Hot Springs on Arrow Lake and intends to turn it into a popular watering place and summer resort. Mr. W. M. Brown, of the Columbia House, owns another beautiful property with hot springs a little further south on the lake, which he also intends to develop into a summer resort for Kootenay. These spots, so easily accessible, will become the holiday grounds of the whole mining country before long.

The *Herald* announces the preparation of a Diamond Jubilee souvenir in the shape of an illustrated guide book to North Kootenay. No expense is to be spared to make this production worthy of this wonderful country, and the book will be most valuable in bringing the Lardeau, Big Bend, Illecillewaet, Fish Creek and other districts tributary to Revelstoke before the outside world.

Vernon.

SINCE sending in my notes for the Jubilee number things have been very quiet indeed, owing to want of capital principally, to carry on development work; still a fairly large number of claims have been recorded in every direction.

Some very promising stuff has been brought in from the Three Tramps claim to the south of the city, and the owners report a very extensive ledge of richly mineralized quartz.

The Blue Jay is turning out very satisfactorily, the proprietors have two gangs working night and day.

The Bon Diable owners have now opened up a very extensive ledge of richly mineralized quartz. They have traced the ledge for over 2,000 yards, and their prospects appear brighter than ever.

A gang of four men are steadily at work on the Silver Star, and the surface prospects show an abundance of kidney galena. In one shaft the men have come across a solid lump of galena that one man could not lift, and the proprietors have every reason to be satisfied with the results of their work.

The Morning Glory are busy making preparations for their stamp mills that are expected to arrive in a few days. In the meantime work is proceeding on the Sarah claim with satisfactory results.

The Ruby Gold Mining Company have not yet concluded their arrangements with reference to the offers made to them, and very little work has been done on the property in consequence.

There are no reports from Camp Hewitt, but work is steadily advancing, and the company have every confidence in the property.

A large number of prospectors came into Vernon the other day in the interests of a powerful syndicate in the States. These men have been sent out in various directions, so we may have some important news to report on their return.

There is no movement in stocks to report.

I advised you some time ago of the sale of the Monashee mine for \$30,000 to Captain T. Molyneux, who will return from England in the early part of August to commence work on a large scale.

Without rain the prospects for a good harvest are becoming questionable. This will make the third year that the crops have been anything but satisfactory.

F. ADRIAN MEYER.

Rossland Notes.

DURING the past few weeks a change of tone has become evident throughout the camp. Real estate and rents have steadied or are dropping; the stock market is practically dead; the days of the boom, when everything went just because it was at Rossland, are past; conservative investigation is taking the place of excited investment, and there are abundant evidences that the camp is entering upon that unpleasant but necessary transition period that lies between a boom and the settled routine business of permanent production.

The discussion of the causes of this new condition of things is of little value. The stage is a normal one in the history of mining development, though in the present case it has arrived earlier than was expected, and the questions of most importance in connection with it, are first, how far the new state is permanent, and how far merely a stage of growth, and secondly, what are the new conditions of work and business most likely to be evolved.

Strange as it may seem, there are still doubters who question the permanence of the Rossland camp, but there are few, if any, practical men acquainted with the neighbourhood who take that stand. Without going into an elaborate statement of the case, I think it will be conceded that there are solid grounds for believing in the permanence of the camp and for regarding the present reaction as merely temporary.

The modifications that will be produced are more difficult to foreshadow, but one of these will undoubtedly be the more general appointment of experienced practical men as managers. Too often the managership has been the reward of influence or holdings. It seemed to be the opinion that anyone was competent to look after the initial development, and a superficial acquaintance with terms was too often taken as implying a knowledge and application of the conditions defined. The result is that the cost of work has been much higher than it ought to be, and the examples of thorough, practical workmanlike mining are fewer than should be the case.

In the market for mining property there is a marked tendency to concentrate the business in the hands of a few of the more firmly established men. The golden days of the curbstome broker are over, and the small buyer of mining claims has vanished as an individual. The market for a thoroughly sound proposition is as ready as ever, but it must now be a legitimate business proposal, where there is some reasonable proportion between the value of the ground and the price asked. Perhaps the two most noticeable features of the exchange market now are the almost total absence of stock transfers and the number of propositions for the reorganization and consolidation of companies that have exhausted their financial strength.

Two important deals of this sort, the sales of the Homestake group and of the Monte Cristo, have lately been closed.

The first was negotiated by D. M. Linnard, who, during his visit to London last winter, succeeded in organizing a company to take over the Homestake

group, consisting of the Homestake, L. E. Lee, Gopher and Maid of Erin. The claims cover about a mile of ground in the South Belt, and have always been considered as promising properties. This deal represents the consolidation of three companies, the Homestake, Gopher and R. E. Lee, under one management. Stockholders in the existing companies can get either shares in the new company or cash on the basis of twelve and a-half cents per share. The usual thirty days' notice required by the company law for the ratification of such a sale has been given and final negotiations will be closed down at its expiry in the first week of July. The new company is said to be a very strong one and to have a treasury fund of \$125,000 after paying for the property.

The Monte Cristo was taken over in the same way by a Montreal Syndicate and will continue work under the direction of the Colonna's manager.

After a lingering struggle for existence the Rossland Stock Exchange finally expired a few weeks ago. The whole movement seems to have been ill advised, as the volume of business did not justify such an institution, but once having been started it is a matter of great regret that it was allowed to drop so easily as such an action is bound to have a prejudicial influence on the standing of Rossland properties in the eastern and foreign market.

The closing of the City of Spokane mine has also had at least a temporarily hurtful influence. This property was bought last summer by the Lillooet, Fraser River & Cariboo Gold Fields Co., for something over \$47,000 cash. The price paid and the standing of the Lillooet Company at once gave it rank as one of the prominent and promising claims of the camp and both the handling of the property and the action of the company have called forth many severely condemnatory criticisms.

The Deer Park has shut down owing to lack of funds. This has been caused by the action of some of those who were let in on "the ground floor" sloughing their stock and so destroying the market value of the treasury. Nothing definite is known as to future plans, but there is a possibility of its being taken over by an American syndicate, whose agent was recently in Rossland.

A great deal of unpleasant comment has been caused by the recent disclosures regarding the O.K. Warner, the late manager, claimed to have two hundred thousand dollars worth of ore in sight and a large amount of stock was sold on the strength of this claim. The present management is looking vainly for this body and the stockholders are beginning to clamour for the dividends that have failed to materialize. Mr. Goodhue has been appointed manager and a thorough investigation is promised. In the meantime the exploitation of the mine will be continued and the mill for the present run as a custom mill.

The Centre Star, which was closed down for a short time for repairs to its machinery has begun work again. An unusually good showing was lately uncovered on this property near the side line and close to the corner post of the War Eagle and Iron Mask. It is proposed to sink a shaft at this point to connect with the present workings.

The machinery for the proposed Le Roi smelter has been ordered but the location is not yet decided on.

The largest bond ever taken for a single prospect in this province was recently taken by the Hall Exploration Company, of London, on the Black Cock, on Wild Horse. Only one year's assessment work has been done but the showing is an exceptional one. The ledge is strong and shows from four to eight feet of mixed galena and iron pyrites, that carries a fair silver value and from \$20 to \$60 per ton in gold. The price is \$70,000—\$3,000 down, \$35,000 in five months and the balance in a year.

C. S. Drummond, representative of the Duncan Syndicate, of London, England, is at present in Rossland. Besides operating largely in mines in this province, this syndicate controls the Fauvel process of treating refractory ores, and Mr. Drummond is arranging for shipments of Rossland ores to the company's smelter at Brentford, England, with a view to test the applicability of the process.

D. M. WATTERS.

Trail Notes.

TRAIL, in common with Rossland, is suffering from a reactionary movement, though not, perhaps, in as marked a degree.

Continual improvements, mainly in the detail of the handling of the ores and matte, are being effected. The electric power plant is now completed and working satisfactorily. Concrete floors have been laid down in the calcining rooms, and the new refinery is at last in successful operation. No details can be obtained regarding the process used except the vague general statement that it is an electrolytic one. It is said to embody a number of improvements and modifications by Mr. Bellinger, the superintendent, and it is intended to keep the process a secret. The first refined bullion was turned out last week.

Work on Lookout Mountain has not yet produced what the shippers expected in that section. The Toker, which has been closed down for some time, has not yet resumed operations. The Red Point is still advancing toward the ore body revealed by the diamond drill, and is now having the workings surveyed. The Norway, owned by the Bruce Mining Co., is again starting up, and work is progressing steadily on the claims of the Canadian Mutual Co.

An option was recently given on the Pug mine, near Waneta, but details could not be learned.

Waneta and neighbourhood is beginning to attract a good deal of favourable notice. The control of the Copper Giant group on the west bank of the Columbia, nearly opposite, has recently been offered by the management to an American syndicate, and there is every reason to believe it will be taken up. The claims in question have always been thought well of and good management with the necessary financial backing should make them producing properties.

A new section of apparently unusual richness has recently been discovered on Fish Creek, about 8 miles east of Waneta, and between the Pen d' Oreille River and the international line. A claim there, the Gold Cup, was recently purchased by Smith & Whiteman, of Rossland, who, within a week, succeeded in getting a bond of \$10,000 for one-third interest.

The bond on the much talked of Aaron's group in Waterloo has been thrown up by the Horne-Payne syndicate, which seems to be concentrating its work in the Lardeau, Trout Lake and Illecillewaet divisions.

Work is progressing slowly on the Trail and Robson railroad. The failure of Heinze and his associates to get the expected government subsidy for the road from Robson to Penticton has led to rumour that this branch, which would be part of the main system, will be completed as a narrow gauge instead of standard as originally planned. Such an action would be a matter of much regret.

The action of Dr. Milne and his supporters in blocking the Heinze grant and the consequent delay of the Government in aiding the extension of the Columbia and Western Railroad into the Boundary country has caused a great deal of bitter feeling and called for some caustic comments. Trail is a point that is vitally interested in the matter, and a mass meeting of her citizens, at which Hon. D. W. Higgins officiated as chairman, has just passed the following vigorous set of resolutions:

"WHEREAS, Disgraceful and dishonourable methods have been adopted by irresponsible and impecunious parties now at Ottawa to defeat the bill for the construction of the Columbia and Western line of railway from the Columbia river to Penticton; and

"WHEREAS, The completion of said line, 38 miles of which are now under construction and operation, while insuring the opening of vast mineral deposits in and about the Boundary country that are at present inaccessible, would conduce to the prosperity and development of British Columbia and the advancement of the Dominion as a whole. Be it, therefore

"Resolved, That the citizens of Trail view with indignation and alarm the efforts being put forth to defeat said project, and that we tender the Government at Ottawa our support and sympathy in its expressed determination to resist the efforts of the handful of corrupt lobbyists to defeat this great project.

"Resolved, That copies of this preamble and resolution be telegraphed the Hon. Mr. Blair and Hewitt Bostock, Esq., our representative at Ottawa."

D. M. WATTERS.

Cowichan District.

COWICHAN District, under which designation is included the various sub-divisions known respectively as Chemainus, Somenos, Comiaken, Quamichan, Cowichan and Shawnigan, should, when its numerous resources and attractions are properly known and developed, become one of the richest and most permanently prosperous sections of British Columbia, and in order to show that this assertion is not unfounded a brief description of its mineral, timber and agricultural wealth together with its sporting attractions will, I think, convince the most skeptical.

Taking these sources of wealth in the order above named, I will say that the Cowichan District, taken as a whole, is underlaid by coal, the outcrops of which may be seen in many different places. This coal will furnish the necessary fuel for the smelters and reduction works which will in the near future be established to treat the wealth in gold and silver carrying copper and lead ores found both in Cowichan and the country contiguous thereto.

Commencing at the Sansum Narrows, near Maple Bay, and running in a westerly direction, a zone of eruptive dioritic rocks traversed by numerous dykes of trachyte and rhyolite breaks through the coal mea-

tures a little to the north of the centre of the district and probably extends to Alberni on the west coast of Vancouver Island.

This zone is very highly mineralized. Rich copper and lead ores (chalcopyrite and galenas) carrying both gold and silver are found in the numerous veins traversing this zone. The gangue matter of these veins is quartz and schists in varying proportions together with calcite and gypsum, etc. The general trend of the veins is about ten degrees north of magnetic west. A great many claims have been staked out on these ledges and a description of some of them may be of interest.

On the Sansum Narrows the property known as the Sansum Copper Mine has been bonded to an English syndicate, who have lately been putting in the development work called for by the bond. There are two shafts sunk, one of ninety feet with cross-cut at bottom thirty feet long and the second sixty feet deep. This latter follows the ore shute which has well defined walls about four feet thick and some excellent ore which is chalcopyrite has been taken out. There are several other veins on this property which are worthy of exploration. Close by, adjoining an Indian reserve are three claims staked on a very rich copper outcrop "covellite" carrying \$4 in gold besides a silver value from a surface sample.

On Nasatchie Point near Genoa saw mill is a copper galena vein, and on May 26th, 1897, the first free gold found in Cowichan was struck in this ledge. The gold is in fairly large, shotty lumps disseminated through the quartz and galena and is easily visible to the naked eye. A local syndicate has taken a bond on a half interest in this claim and are at present engaged on development work.

About a mile distant and on the same mountain—Iscnaillim—is an immense outcrop of dark coloured smoky quartz mineralized with iron pyrites from which assays up to \$10 in gold have been obtained.

On the Maple Bay Mountains are some very promising prospects staked out, mostly by Nanaimo parties, and one of the best samples of bornite I have seen in British Columbia came from one of their claims. Westerly across a small divide we strike the Quamichan Mountains, about 1,200 feet altitude. It would puzzle an experienced prospector to stake out a claim on this hill without encroaching on some other man's claim. Not much development work has been done so far here, but from surface values and indications as found on the Rupert, Wolverine, Two Deer, Black Bear and others I think these mountains will furnish a goodly share of the gold bearing chalcopyrites and galenas contributed by Cowichan District. Several mining deals have been made on these claims and others are under offer.

Mount Sicor, about 3,000 feet altitude, a mile further west, has been of the most interest to prospectors lately. The discovery on the Tenora mineral claim, in which an English capitalist holds a large interest, of an ore shute thirty feet wide and over 150 feet long at the surface and capped by about a foot of the typical iron capping, is the cause of the present excitement. The ore is a chalcopyrite. From an assay from samples taken from the surface with a pick it runs \$17.50 in gold, 5 ounces silver to the ton and 10 per cent. copper. On this mountain are also some immense quartz ledges, one of them over 100 feet

wide, and development work is being vigorously prosecuted on most of these veins, and an assay of \$32 in gold to the ton has been obtained from one of them.

The country contiguous to and depending on Cowichan as a shipping point is also highly mineralized and at Cowichan Lake placer claims are being worked; free gold has been found in the rocks, and many highly promising claims will be opened up shortly.

On the adjacent island of Salt Spring, Cowichan people have located and are developing many promising claims.

British Columbia is well known for its wealth in timber, but if one particular district is more favoured than another in the value and abundance of this commodity it is certainly Cowichan and neighbourhood, and when the lumbering trade has sufficiently improved to warrant the systematic exploitation of this source of wealth Cowichan will be one of the largest shippers of lumber in the whole province. Already there are signs that the reaction has begun. The Chemainus mill has been working night and day for some time past to fill the export orders they have on hand. Messrs. Boyd & Co., who own the Genoa saw mill on Cowichan Bay, have given out large contracts for the getting out of some of the magnificent timber found round Cowichan Lake. This company have also a gang of men at work clearing out the Cowichan River from the lake to the mouth preparatory to running their logs down to the salt water this fall when, I understand, they intend working their mill to its full capacity. These mills just mentioned are two large exporting mills which have lately been almost rebuilt and are furnished with all the latest and best machinery. There are two other saw mills in the district that cater for the local trade which is of no small dimensions.

Of the agricultural resources of this part it is not necessary to say much, as the district has a very high reputation and the products of the farms command the highest prices in our markets, especially as regards hay and butter. Cowichan has always been foremost in initiating any movement for the benefit of the farmer. It was, I believe, the first district in British Columbia to organize an Agricultural Association and show. It was also Cowichan people who first suggested to the sheep breeders on Vancouver and adjacent islands the necessity of combining together. The result was the formation of that very successful society known as the Vancouver Island Flockmasters' Association and one of the first co-operative creameries in the province was started here. Our farmers have for the past few years been developing a large acreage to fruit trees and will reap the benefit of this enterprise in the near future.

The attractions Cowichan offers to sportsmen are so well known that they do not need much comment. The rivers, bays and lakes teem with salmon trout and other fish and in the backwoods and on the mountains deer, bear, elk and panthers are to be found. Two varieties of grouse, pheasants, geese ducks, snipe, teal, widgeon, etc are some of the feathered game that are plentiful in this neighbourhood.

Cowichan Lake is a very favourite resort for tourists and has a world wide reputation for the variety and abundance of its game.

Vancouver Notes.

TRADE is still very dull in Vancouver just now and money unusually tight. A reaction has set in and there is a considerable want of confidence. This is doubtless caused by the fact that when the excitement in mining stocks was at its height merchants took more money from their legitimate business for investment in stocks than they could afford to, expecting a rapid advance in the price of their shares, which did not take place.

In every instance, with the exception of the Golden Cache, stocks have tumbled, and there are few men in Vancouver to-day who can boast that they made money in the late flurry, but this is not the fault of the mines. It takes patience, hard work and abundant capital to work them, but eventually the majority of those claims prominently spoken of on the seaboard will be made to pay dividends, and some of them will become big "winners." Many of the mining engineers in Vancouver who hail from the old camps of the world tell us that it will take from five to ten years to get the seaboard mines on a good paying basis, but there are a great many discouraged already because we have not a dozen mines paying dividends within a radius of 200 miles from the mercantile centres. If we have not the mines we have scores of claims which have been proved to a moral certainty to be of immense prospective value; and the man would be a pessimist indeed to say that there would not be enough mines among them to make us prosperous. There is little doubt that within the next five years the Phillips Arm district will be a busy mining centre.

The Grant Goven syndicate, wealthy and shrewd capitalists, have not only invested \$150,000 in prospects purchased from the Channe Company, but have bought out, at a big figure, the real estate and good will of the Shoal Bay Trading Company. The Channe Company received a portion of the large sum paid down for their claims in cash and the rest in guaranteed stock of the parent company. Their agent is now in England negotiating for the sale of this stock, and on his return the Channe Company will be enabled to pay ten cents per share on the stock of the company besides retaining substantial capital and valuable assets in the shape of very promising mining claims. The Channe Company have started a townsite on Bickley Bay, known as Channetown, and in conjunction with the Northern Supply Company, are actively engaged in creating a big supply station for Vancouver and Victoria shippers. Among those who are devoting their energies and capital to make Phillips Arm a favourably known and important district are Mr. Cobbledick, of Swansea; Col. Forsyth, of Chicago; Mr. Willis, of the Channe Company; Mr. J. M. Kinnon, of the Golden Cache, and Grant Govan, of London, England. The mineral wealth of Phillips Arm district is vast, it is easy of access, there is abundant wood and water, and it is a model mining country.

In a recent interview Dr. Montague said that Lilloet is a district of one mine—the Golden Cache. Perhaps this is true, but there are numerous other prospects that are looking as favourable now as did the Golden Cache in its earliest stages of development. There is no doubt that the Alpha Bell contains the identical ledge which has made the Golden Cache famous, but the Alpha Bell is not developed. However, very rich surface rock has been assayed,

and, now, men are engaged stripping the veins on almost perpendicular cliffs. On the 12th a gang of men will be started driving a deep tunnel. The prospects of the Alpha Bell are as bright as the Golden Cache, and the company will have the advantage of the experience of the Golden Cache company. There are many other magnificent prospects throughout this vast district. One particularly mentioned is the Big Horn which assays \$88 and \$117 on the surface. The company are to work the mine with an arastra and pay expenses as they proceed with the work. The Golden Cache machinery for their mill is all on the ground. Crushing will commence the 1st of August.

In Harrison Lake country, Westminster, there are enough prospects to make British Columbia famous without help from other districts, but space will only permit two of the most famous being mentioned—the Providence and the Fire Mountain. The Providence, better known as the Trethewey claim, is sending twenty-five tons of rock to the smelter this week, and the owner, Mr. Trethewey, has wagered a suit of clothes with a prominent mining man that the shipment will give gross returns of \$100 per ton. The Fire Mountain claim is of extraordinary promise; the vein runs, vertically, down the mountain, and has been exposed some 150 feet by stripping off the surface. It is several feet wide, and a true fissure. This is said to be proved from the fact that a "chimney" has been met with heavily charged with coarse gold. This "blow out" shows that the mineral is "in place." In the centre of the vein is an eighteen-inch pay streak running about \$400 to the ton in free gold. The rock of this pay streak is the richest ever seen in Vancouver from a true fissure. The gold is coarse and visible to the eye, being peppered over the rock.

The Fire Mountain Company are working at a fourteen-mile trail, from the head of Harrison Lake to their mines. A mill is on the way from Chicago, and before many months crushing will be commenced. A contract has been let for a tunnel to be driven in on the vein. A series of tunnels will be driven storied up for stoping. A large amount of cash is in hand from the sale of stock and the mine will be actively worked.

From the Okanagan country the news is meagre, it being farther away than the other districts mentioned, but Fairview Camp continues to be highly spoken of. The mill for the Tin Horn mine will be up very soon. The Tin Horn is a proved property, the engineers of the company claiming \$100,000 in sight. In a talk with one of the owners here it was stated that all the stock necessary for the development of the mine had been sold, that they were confident of the wealth of the mine, and they did not care to sell any more stock. The Tin Horn company will pay dividends beyond the shadow of a doubt. Everyone who has bought stock at twenty-five cents and has waited patiently for results will be richly rewarded. The vast deposit of ore was in sight and 109 assays from 1,400 feet of the vein have been made, showing the average to be within a few dollars of \$100.

The Albion mine, on Bowman Island, close to Vancouver's doors, owned by the Albion Gold Mine Co., has got its owners into financial difficulties, owing, it is said, to indiscretion in the management in the way of expenses, and has been sold for about \$400 by the sheriff. The claims of the workmen alone

were \$1,000. The prospect is reported very promising. Reports still come from Lynne Creek, across the Inlet from Vancouver, of rich strikes in gold and copper ore, running, in some instances, from \$10 to \$62, chiefly copper. The big excitement over the alleged fabulously rich find on Takush Harbour is quite over. Some \$2,000 were spent by different parties in investigating in a hurry. The strike did not prove as rich as reported, but it is said will bear development.

GOODMAN.

A Canadian Mint.

SPEECH OF SENATOR MCINNES.

HON. MR. MCINNES (B.C.) rose to move: "That in the opinion of this House, it is both desirable and expedient that the Government should, at the earliest possible date, establish a mint in Canada, for the purpose of coining all the gold, silver and copper currency necessary to meet the commercial requirements of the country."

He said: "I am sorry that the advocacy of such an important question as the establishment of a Canadian mint, has not fallen to the lot of some one better qualified and more familiar with the monetary institutions of this and other countries than I am. I am fully aware of the fact that many of my hon. colleagues in this chamber, are, or have been, presidents, vice-presidents, directors and managers of banking institutions, and many others who are not, or who have not been directly connected with banks, have had long and varied business experience, I therefore know and feel that my audience this afternoon is a most critical one. However, having twice within the last nine years, called the attention of this branch of Parliament—a branch, in my judgment, better qualified to consider a question of this kind, than the Commons—to this subject, I shall again endeavour to present such data, yes, such incontrovertible evidence, as, I believe, will convince every hon. gentleman of the urgent necessity of at once carrying out the object of the resolution before the House. Each year makes it not only more apparent and desirable, but also more imperative, that the Government should establish such an institution in our country. I propose, in the first place, to lay before you such facts as will put it beyond all doubt, beyond all cavil, that a mint can be established and operated at a direct profit, that it can be made a paying institution, a source of considerable revenue, and not a drain on the treasury as some people suppose. In the second place, I will show that there is no country in the world with an equal population, or of anything like the same commercial importance, or producing the precious metals in such quantities—to say nothing of our illimitable resources and possibilities—but has its own mint and coins its own money. By reference to the report of the director of the mint of the United States for 1896, page 26, hon. gentlemen will find, though the coinage of silver has been greatly restricted for the last few years in that country, that the net seigniorage or profit on silver alone was last year no less than \$2,503,056. And the net profit on silver since 1878 has amounted to the enormous sum of \$78,145,603. So far, I have been unable to get accurate returns showing the profit made on the coinage of nickel and copper, but we all know they are much greater than on silver, and must have amounted to several millions during the period I have

just named. The foregoing figures will give some idea of the immense profits made on the coinage of silver and the profitable use to which our neighbours to the south of us have put the principal portion of their silver bullion. Now, I will take hon. gentlemen a little nearer home and show what our Government has done in the matter of buying silver bullion and copper, and having it coined in England. I have here a detailed statement furnished by the Finance Department, covering a period of fifteen years from 1881 to 1896, showing the amount of silver and copper coined in England and the profit made thereon, and I have no doubt the figures given will surprise hon. gentlemen just as much as they surprised your humble servant when he first saw them.

AMOUNT OF SILVER AND COPPER COINAGE SINCE 1881.

Year.	Silver.	Copper.	Total.	Total Profits.
	\$	\$	\$	\$ cts.
1882....	650,000	20,000	670,000	110,321 94
1883....	500,000	20,000	520,000	69,364 20
1884....	300,000	20,900	320,900	65,695 66
1885....	130,000	25,000	155,000	33,007 70
1886....	185,000	15,000	200,000	55,150 11
1887....	260,000	15,000	275,000	82,194 17
1888....	180,000	40,000	220,000	75,826 08
1889....	186,585	Nil.	186,585	53,774 33
1890....	155,000	10,000	165,000	49,763 26
1891....	100,000	10,000	110,000	34,821 88
1892....	398,000	16,525	414,525	132,517 08
1893....	160,000	10,000	170,000	67,924 40
1894....	144,529	20,000	164,529	83,454 60
1895....	Nil.	12,000	12,000	8,678 33
1896....	140,000	10,000	150,000	76,608 22
	3,462,114	242,525	3,705,639	998,101 92

"Nearly one million dollars net profit. These figures show that our Government has made an annual net profit of \$66,540, for the last fifteen years in having its silver and copper coined in England, notwithstanding we had to pay the royal mint three per cent. for coining our silver, and a Birmingham manufacturing firm ten per cent. for coining our copper. We paid the royal mint \$103,863 and the Birmingham manufacturing firm \$24,252 or a total of \$128,115 for coining our silver and copper for the last fifteen years, an annual average of \$8,540 for work which, I submit, ought to have been done here at home and which, if done here, would have been to the manifest advantage of Canada, as I will show later on. The gold product of Canada has been over \$73,000,000 in the last thirty-eight years. Of this large amount the Pacific province contributed over \$61,000,000, Nova Scotia over \$11,000,000, Ontario, Quebec and the Territories the balance. Nearly all of this immense amount of bullion has been shipped out of the country—principally to the United States—at a loss of over five per cent. to the producer. I believe you will all agree with me when I say that the principal portion of that gold should have been coined and retained by us for the purpose of developing and enriching Canada instead of a foreign country. Since I gave notice of this motion I have been frequently asked what seigniorage or profit is made on the coining of gold. There is practically no profit made on the coining of gold in either England or the United States, other than enough to cover all expense in connection with mintage, the degree of fineness of the gold coin of both countries being almost identically the same. The profits made by the mints of those two countries are not derived from the mintage

of gold, but from the coinage of silver, nickel and copper. As to the cost and operation of a mint, I find there is a general impression abroad that it would involve the expenditure of a very large amount of money. That impression is an erroneous one. A New England firm that manufactures all the machinery and dies for the United States mints has offered to supply all the plant necessary to mint two million pieces annually, for \$25,000. Add to that, say \$50,000 for a suitable building, and the total cost need not exceed \$75,000 to establish a first-class modern mint capable of coining all the gold, silver, nickel and copper currency necessary to meet all the commercial requirements of this country for many years to come, and the annual cost of operating such an institution should not exceed \$8,000 or \$9,000 or more than we now pay annually for minting our silver and copper in England. We once had a mint in Canada. Immediately before the union of the two Crown colonies—Vancouver and British Columbia—in 1867, a mint was established in New Westminster, and I am credibly informed that the entire cost of building and plant did not exceed \$20,000. After striking off a few \$2.50, \$5, \$10 and \$20 gold pieces, the mint was ordered to be closed by the late Sir James Douglas, who became the Governor of the United Colonies, and for no other or better reason, it is alleged, than it would be the means of allaying the intense jealousy that existed between the rival cities of Victoria and New Westminster. To the courtesy of Mr. Courtney, Deputy Minister of Finance, and Mr. Toller, the head of the Currency Department, I am indebted for a great deal of valuable information bearing on the subject under consideration. Among other things, they informed me there is about \$10,000,000 in gold in the Dominion Treasury, nearly every dollar of which is United States coin. As hon. gentlemen know, the Government is required to keep in the treasury, at all times, twenty-five per cent. in gold and guaranteed securities, of which fifteen per cent. must be gold, against all Dominion notes issued up to \$20,000,000. Over that amount dollar for dollar in gold must be kept on deposit. Again, from the same source of information I learn our chartered banks have in their vaults over \$8,000,000 in gold, all of which is practically United States gold coin. In round numbers, between the Government and chartered banks, we have nearly \$20,000,000 in foreign gold coin. I ask, is this creditable to Canada? Is it creditable to the Government and people of a great gold and silver producing country? How much longer is this humiliating condition of affairs to continue? How much longer are we to be dependent on a foreign country for a gold currency? How much longer is a national spirit, a national sentiment to be checked or suppressed? How much longer withhold a Canadian gold currency which would be a token of our growing importance, and an evidence of our national prosperity? I ask, yes, I appeal to hon. gentlemen to assist in having this \$20,000,000 of foreign coin, replaced by a beautiful gold coin, on the one side of which there would be the profile of our venerable and beloved sovereign, and on the other our national emblems, the beaver and the maple leaf. Why, I ask, has our Government made the United States gold currency a legal tender? Was it to avoid the trivial expense of coining our own gold bullion? If so, let us be logical and go one step further and make the United States greenbacks a legal tender also, and

thereby avoid the trouble and expense of manufacturing Dominion notes. The entire cost in connection with the Government currency is in the neighbourhood of \$100,000 annually. To effect a saving in the cost of printing our paper currency, we have taken the note-printing contract from a Canadian firm and given it to a foreign company. The decision of the Government was based on sound economic principles, and, I am satisfied, will meet with the approval of the tax-payers generally. If the economy could have been effected by transferring the contract from a foreign corporation to a Canadian company, the transaction would have met with universal approval. It is just such a course I ask the Government to pursue in dealing with the coin in circulation, to transfer the coinage from foreign countries to Canada, and I have shown by facts and figures which cannot be controverted, that the policy which I advocate will not only establish a new industry in Canada, giving employment to our own people, but will result in an actual financial gain to the Dominion. There are two mints in Australia. The Sydney mint was established forty-three years ago, and the one in Melbourne about fifteen years later. India has also two, one in Calcutta and one in Bombay. All four are branches of the Royal Mint. The right of coinage has not been conferred on those self-governing colonies, and before a mint can be established permission must first be obtained from the Imperial Government. Canada is in a totally different position in this regard. Section 91 of the British North America Act gives us absolute control over currency and coinage. We have taken full advantage of the currency, but not of the coinage privilege. A couple of questions of detail have been frequently asked me within the last few weeks, namely, Where would you have the mint, and what would be the denomination of the coins? My answer to the first is that the mint should be in that part of our country producing the principal portions of the metals to be coined, namely British Columbia, unless some very good reason can be given to the contrary. If not in the Pacific province, then I unhesitatingly say it should be in Ottawa. My answer to the second question is this, taking everything into consideration, our gold coin should be precisely the same as that of the United States in degree of fineness and size, and, consequently, of exactly the same intrinsic value. The denominations I suggest are \$2.50, \$5.00 and \$10, as being the most convenient. Such coins would doubtless circulate just as freely as do those of the United States. However, as I have said, these are matters of detail and give me little or no concern at present. What I am anxious about is to have a mint somewhere in Canada, the question of its location can be subsequently determined. The following is a statement showing the per capita amount of gold, silver, and paper currency in circulation in the thirty-four principal countries in the world:—

AMOUNT OF GOLD, SILVER AND PAPER CURRENCY
IN CIRCULATION—PER CAPITA—IN THE PRINCIPAL COUNTRIES OF THE WORLD.

	Gold.	Silver.	Paper.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
United States.....	9 35	8 78	5 90	24 03
United Kingdom.....	14 86	3 10	2 84	20 80
France.....	20 10	12 82	2 55	35 47
Germany.....	12 91	3 96	2 41	19 28



HALCYON HOT SPRINGS HOTEL. ARROW LAKES - COLUMBIA RIVER, B.C.

Belgium.....	7 98	9 05	11 51	28 49
Italy.....	3 25	1 26	5 45	9 96
Switzerland.....	5 53	0 70	4 77	10 80
Greece.....	0 23	0 68	6 45	7 36
Spain.....	2 14	2 74	5 72	10 60
Portugal.....	1 00	1 45	11 11	14 16
Roumania.....	7 15	1 96	2 19	11 30
Servia.....	0 65	0 74	1 30	2 69
Austria-Hungary.....	3 76	1 46	4 59	9 81
Netherlands.....	5 58	11 71	6 77	24 06
Norway.....	3 75	1 00	1 90	6 65
Sweden.....	1 77	1 02	.....	2 79
Denmark.....	7 17	2 35	2 00	11 52
Russia.....	3 88	0 35	3 70	7 93
Turkey.....	2 27	1 82	.....	4 09
Australia.....	26 53	1 43	.....	27 96
Egypt.....	18 47	0 74	.....	19 21
Mexico.....	0 30	7 70	0 32	8 41
Central American States.....	0 09	2 14	1 43	3 66
South American States.....	1 11	0 97	15 28	17 36
Japan.....	1 81	1 99	.....	3 80
India.....	.....	3 21	0 12	3 33
China.....	.....	2 08	.....	2 08
Strait Settlements.....	.....	63 68	.....	63 68
Canada.....	2 76	1 03	6 03	9 82
Cuba.....	8 33	0 83	.....	9 16
Hayti.....	4 00	4 50	4 10	12 60
Bulgaria.....	0 24	2 06	.....	2 30
Siam.....	0 12	38 66	.....	38 78
Hawaii.....	40 00	10 00	.....	50 00

"An analysis of the foregoing details shows that twenty-three out of the thirty-four countries have paper currency, and I am sorry to see that Canada stands sixth on the list. The countries that have a larger paper currency per capita are the South American States, \$15.28; Portugal, \$11.71; Belgium, \$11.51; Netherlands, \$6.77; Greece, \$6.45; while Canada has \$6.03. Eleven countries have no paper currency; three have no gold; all have silver. Only nine have less silver than Canada, fourteen have less gold, and twenty-eight have less paper. Australia has nine times as much gold per capita. Great Britain has more than five times as much gold and three times as much silver. France has over seven times as much gold and over twelve times as much silver. Germany has nearly five times as much gold, and nearly four times as much silver. The United States has nearly four times as much gold, and eight times as much silver. Per capita Canada stands only twentieth on the list as to the amount of money in circulation, having, between gold, silver and paper, only \$9.82. We have nearly twice as much paper currency as gold and silver combined. We have not a quarter the amount of silver coin we should have. I know that the managers of the British Columbia banks complain bitterly that they cannot get anything like the amount of Canadian silver they require and apply for, especially fifty cent pieces, and the consequence is that they have to send to Seattle and Portland for United States silver. The aggregate amount of gold, silver and paper currency in the thirty-four countries under review, is as follows:—Gold, \$4,143,700,000; silver, \$4,236,900,000; paper, \$2,558,000,000, making a grand total of \$10,928,600,000. Of that amount Great Britain has \$584,000,000 in gold, \$121,700,000 in silver, and \$111,800,000 in paper, a total of \$817,500,000. France, \$772,000,000 in gold; \$492,200,000 in silver, and \$78,000,000 in paper, a total of \$1,342,200,000. Germany, \$675,000,000 in gold; \$207,000,000 in silver and \$126,100,000 in paper, a total of \$1,008,100,000. The United States, \$672,200,000 in gold; \$631,400,000 in silver and \$424,400,000 in paper, total \$1,728,000,000. By these figures it will be seen that the four countries just named have about one-half of the money of the

world. I will now call your attention, hon. gentlemen, to this fact, that since I first placed this notice on the order paper, I have had dozens of communications, letters and resolutions, passed by the different boards of trade from Victoria, B.C., to Sydney, in Cape Breton, sent me. Over forty-two of the boards of trade have expressed themselves, with only three exceptions, in unqualified approval of the establishment of a Canadian mint." * * * *

New Act Regulating Mining Companies in Ontario.

A CORRESPONDENT has sent the following sections of an Act passed at the last session of the Ontario Legislature, which it will be well for managers of British Columbia companies to read carefully. This kind of legislation will have a good effect and need not be feared by companies having good properties to offer, and a determination to act honestly by their shareholders. Those having nothing to show but regiments of presidents, directors, bankers, solicitors, and gorgeous expectations, will, we hope, be promptly restrained from swindling the eastern public and bringing discredit on the mines of this province. Enough has been said and written to put the entire population of Canada on its guard against the transparent schemes of fake company promoters, yet there are many who can still be taken in, and it is well that they should have statutory protection.

"Sections 9 and 10 of the Act respecting the Incorporation and Regulation of Mining Companies of 1897."

"Section 9—No extra-provincial mining, milling, reduction or development company having its head office elsewhere than in this province, shall, either directly or indirectly, sell or otherwise dispose of within this province any of its shares, stock, stock-certificate or other securities by whatsoever name known, unless and until it shall have received from the Lieutenant-Governor-in-Council a license authorizing it to sell and dispose of its shares and other securities, and any person who in contravention of this section acts for an unlicensed company shall, on conviction thereof, be liable to a fine of \$20 per day for every day while he so acted, and, in case the fine be not paid, shall in the discretion of the court be imprisoned for a period not exceeding three months.

"Section 10—No license shall be issued to an extra-provincial mining, milling, reduction and development company having its head office elsewhere than within this province until the company shall have satisfied the Director of the Bureau of Mines that it has been duly incorporated and that it possesses the real estate, property and assets and that it is carrying on its operations on a scale and in a manner to command the confidence of the public, and for this purpose the director shall have the power to require of the company such sworn documentary and other evidence as he shall deem to be requisite in the premises, and upon a report that he is satisfied that the company is one which may be licensed under this section and upon this recommendation of the Provincial Secretary, the Lieutenant-Governor-in-Council may direct the issue of a license upon such terms and conditions as to him shall seem proper, and he may summarily revoke and annul such license for any cause that to him shall appear to be sufficient."

A Large Nugget of Platinum.

INTERESTING FACTS RELATIVE TO
THE SUPPLY AND CONSUMPTION
OF THIS RARE METAL.

A RECENT shipment of crude platinum, consigned to Baker & Company, the platinum refiners of Newark, N.J., contained a nugget which is believed to be the largest ever exhibited in this country. It was found somewhere between the waters of the Andaguca and San Juan, in Colombia, South America.

The nugget illustrated herewith is, as usual, of irregular form, measures approximately three by two and three-quarter inches, and weighs nearly two pounds. It is now on exhibition at the New York office of the above firm, 121 Liberty Street, where it is attracting the attention of metallurgists and the admiration of all who are interested in mineralogical curiosities.

It may be of interest to the general reader to learn that platinum ore is a most complex mixture of mineralogical species and includes not only a number of heavy reguline ingredients such as platinum, iridium, osmiridium, palladium, rhodium and gold, but also certain non-metallic species, notably chrome iron ore, magnetic oxide of iron, zircon, corundum and frequently diamonds.

Because of its complex composition the ore has received the surname of "polyxine".

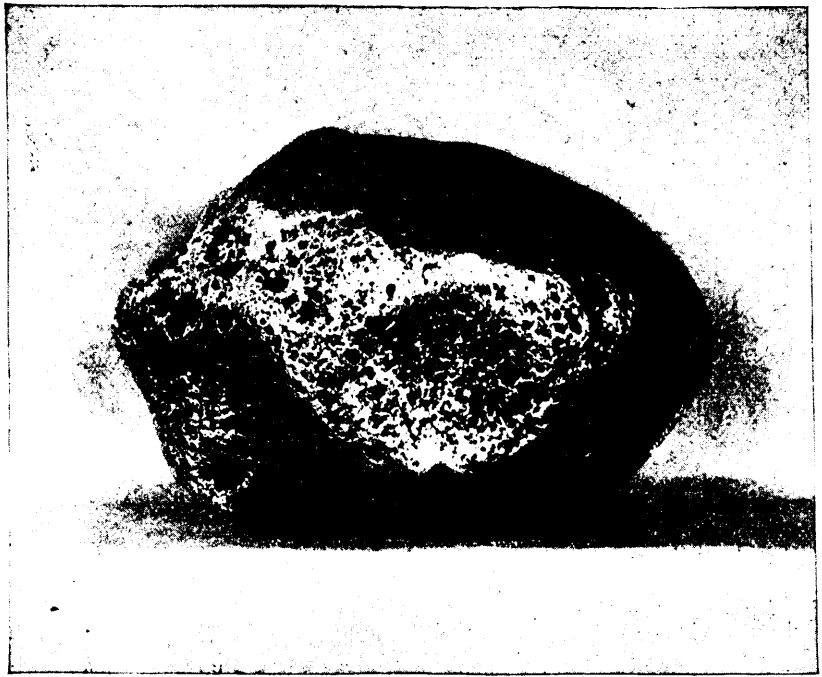
The heavy reguline ingredients are rarely found except in the form of small detached granules, the most notable exception to this rule being a nugget of Russian ore now in the Demidoff cabinet in St. Petersburg, weighing between seven and eight kilograms. The average yield of metallic platinum from the ore varies between fifty and eighty per cent.

Platinum was first discovered in a Spanish mine of South America early in the sixteenth century, from which source it received its name, "platina del Pinto", (little silver from the River Pinto).

The ore is now found in various parts of the world but the richest deposits are those of the Ural Mountains, which have been worked under the supervision of the Russian Government since 1828.

The platinum of commerce is obtained entirely from alluvial deposits at depths varying from six to forty feet. The sand and gravel of former river beds are subjected to a series of screenings and washings to effect the separation of the ore, most of this labour in Russia being done by women. The yield of the ore per ton of sand seldom exceeds six grams. Sand yielding less than three grams per ton is rarely worked with profit. All Russian ore pays a Government tax of three per cent. in the form of the ore mined and any person possessed of the ore without a license is subject to imprisonment and confiscation of the metal.

Platinum occupies a unique position among metals. When pure and in compact form it is tin white in colour. It is the heaviest and has the highest fusing point of any metal in commercial use unalloyed. Its specific gravity is 21.5; it is therefore twice as heavy as silver and nearly three times heavier than



cast iron. A temperature of eighteen hundred degrees centigrade or three thousand three hundred degrees Fahrenheit is necessary to fuse the metal, hence it is unaffected by temperatures attained in the hottest of blast furnaces. This valued property has led to the extensive use of the metal in such furnaces as an important part of an instrument for measuring temperatures.

Platinum ranks fourth as a conductor of heat and sixth as a conductor of electricity among metals. It expands and contracts, under variations of temperature, less than any other metal, and because of this fact its high fusing point and non-oxidability platinum is the only metal that can be successfully sealed into glass vacuum apparatus.

Platinum is almost as soft as copper and ductile as gold. It can easily be rolled into sheets so thin that a thousand of them piled on top of each other would not exceed an inch in height. It is daily drawn into the form of wire not exceeding one-thousandth part of an inch in diameter.

For use as "spider lines" in optical instruments platinum is drawn by a special process to diameters as small as sixty-millionth of an inch. Such wires are nearly invisible to the unaided eye. A strand of it of sufficient length to encircle the earth at the equator would only weigh forty-six ounces.

Platinum is not attacked by any single ordinary acid and is not changed by air, water or steam at any temperature. Because of its many peculiar qualities it is one of the most valued metals made available to man's wants, and notwithstanding its excessive cost, the present market price being fourteen dollars per ounce, its yearly consumption is rapidly increasing.

Its rate of consumption may, in a sense, be regarded as an accurate index of the progress of civilization. Eminent statisticians have been wont to measure such progress in terms of pounds of iron consumed per capita; but it should not be forgotten that the consumption of iron, aside from an abundance of the ore has been and must continue to be dependent upon the cheapness and quality of the product. To the chemist must be accredited prim-

arily much of the marvellous advance in this field. But the chemist would be practically helpless in much of his work without the aid of platinum. In the words of Liebig, the eminent German chemist: "Without platinum it would be impossible in many cases, to make the analysis of a mineral. The mineral must be dissolved and it must be first rendered soluble, or prepared for solution. Now vessels of glass, of porcelain and of all non-metallic substances are destroyed by the means we employ for that purpose. Crucibles of gold and silver would melt at high temperatures, but platinum is cheaper than gold, harder and more durable than silver, infusible at all temperatures of our furnaces, and is left intact by acids and alkaline carbonates. Platinum unites all valuable properties of gold and of porcelain, resisting the action of heat and of almost all chemical agents. Without platinum the composition of most minerals would have yet remained unknown."

Platinum is pre-eminently the metal of the chemist, both in analytical and industrial operations. No chemical laboratory is complete without a varied assortment of platinum apparatus and fortunes are annually invested in platinum retorts for the commercial concentration of oil of vitrol. Chemical operations alone consumed until within a few years the bulk of the metal produced.

The dental and electrical industries which have progressed so rapidly within recent years are said at the present time to consume, in the United States alone, more than half of the world's supply of platinum. In the manufacture of artificial teeth platinum pins are used to fasten the porcelain teeth to the supporting plate during the process of baking the porcelain. Platinum is the only metal available for this purpose because of the high temperatures required. It is also used in the form of thin foil for taking the impression of cavities in natural teeth, which are to be subsequently filled with baked porcelain and still more extensively in the form of muffles to protect the baking porcelain from direct contact with the fire or the products of combustion which would discolour the porcelain. The consumption of platinum in the dental industry of this country for 1897 will probably be greater than ever before in a single year.

Platinum has played a most important part in the development of the incandescent lamp. It was early used as the light giving body of the lamp but subsequently yielded this position to carbon because of the latter's higher electrical resistance, higher fusion point and lessened cost. Although now occupying a less prominent position in the modern lamp it is nevertheless considered as essential in the construction of a successful lamp. Many devices have been tried to avoid its use but without commercial success.

Metal conductors are required to convey electric energy through the glass walls of the incandescent lamp to the light giving carbon filament within. Since the maintenance of a vacuum within the lamp bulb is essential to the life of the lamp, it can be readily understood that the leading-in wires sealed into the glass must have a higher fusing point than glass; must unite closely with it, hence must not oxidize at high temperatures, and last, and an important feature, the metal must expand and contract under variations in temperature so nearly at the same rate as the glass in which it is imbedded as to insure freedom from crackage of the latter and consequent

leakage of air into the lamp. Here again platinum proves to be the only metal that fulfils all of these essential requirements and hence its continued and increasing use in spite of its high cost which a limited supply enforces. Radical changes in the construction of incandescent lamps have reduced the consumption of platinum per lamp enormously, but on the other hand the production of lamps has increased in greater proportion so that now the aggregate consumption in this industry is greater than ever before.

The telephone, telegraph and in fact almost all of the electrical industries are yearly making heavier demands upon the limited supply of the metal. Physicians require it in cauteries and surgical instruments where extreme cleanliness is important. Platinum is less used in jewellery than formerly. Some of its salts, however, continue in favour as superior to anything else for producing dead black surface effects upon silverware.

In photography the present fad for "platinotypes" illustrates a comparatively recent demand for certain salts of platinum. Platinum salts are also used by many photographers in preference to gold salts in toning silver prints. The platinotype is a special favourite because of the simplicity of the process of production, the artistic effects produced and the permanency of the picture.

To enumerate the many and varied uses of platinum and its salts would extend this article beyond reasonable limits. Suffice it to add that the latest application of its peculiar properties is due to Roentgen's discovery that certain invisible rays of energy when allowed to fall upon one of the double salts of platinum (barium-platino-cyanide) renders the same luminous, so that a screen of paper covered with this salt and exposed to the action of Roentgen rays serves for the production thereon of a shadow picture of many objects of variable density which may be interposed between the screen and the source of the Roentgen rays. Metallic platinum is also a most important factor in the construction of Roentgen ray apparatus, both as a means of conveying electric energy into the vacuum chamber and as a source of excitation of the X or Roentgen rays. Thus in this most recent development of the agencies for anatomical and physical research, platinum plays a most important part, one which largely enhances its utility and value to mankind.

Points for Mine Owners.

PERHAPS we ought not to call it greed; rather let us say it is credulity, born of hysteria and "boom," that impels so many persons possessed of mining properties in Canada to ask prices for them so high as to be out of all reason. People who are guilty of this sort of folly are not alone injuring themselves, but they are doing harm to the country, for they disgust and frighten away the intelligent, *bona fide* investors—the very class that should be welcomed and treated with discretion. Several instances have come to our ears of the kind of mistake we here condemn, on the part of both prospectors and secondary owners of mineral properties in Ontario and British Columbia, and the boomsters lost chances by them, too. But here is the latest instance. It is related by a gentleman from Manchester, Mr. W. V. Ridley, to a contemporary: For a prospect on Texada Island, B.C., giving indication of a vein of low-

grade ore likely to average in the vicinity of \$7 to the ton, traceable for a distance of about fifty feet and about eighteen inches wide, he instructed his agent to offer the owner \$1,000. This offer was afterwards increased to \$1,500, and that price Mr. Ridley felt was quite as much as, if not in excess of, what he was warranted in recommending his principals to pay. Ridley's astonishment was great when the owner of the claim stated that he would not sell for a cent less than \$6,000, and this was for a claim upon which not even the assessment work had been done and no assay of the ore obtained. Such over-valuation or such grasping as this vexes investors and drives away capital.

Another thing we would commend to the attention of our mining friends in Canada, especially those who are floating companies, or telling the public by means of inflated figures, of the marvellous profits that are to ensue from investment in shares of concerns already, perhaps, in the producing stage. Did it ever occur to these eager gentlemen that a capitalist might wish to have something more than a list of names of directors and the assurances of a glib manager with a ready pen, before he would put money into a mining scheme? It is rare enough to see, in the advertisements of mining companies of recent origin, the report of a competent and known mining expert. But it is still more rare to see the statistics of such enterprises vouched for by a competent and known auditor. In England all limited companies, mining or other, submit annually or oftener, statements of their affairs certified by auditors. This means that some measure of protection is given to the public by having these companies' accounts certified by responsible officers, who are paid enough to secure proper work, and whose certificate has value. This eminently proper formality is wondrously neglected by our modern mining companies, and it is not well that it should be the case.—*Monetary Times*.

Alberni Notes.

THE contract for the new Government road from Alberni to China Creek has been let to Mr. Hilton Drinkwater of Alberni, and the work of construction will be commenced at once.

Work on the Alberni Consolidated has been recommenced and the ore now on the dump will be shipped to Victoria and the work of mining has commenced already. A quantity of supplies has been taken into the mine.

Mr. Will Bevilockway returned last evening from Alberni where he has been putting assessment work on a claim of his on Cowichan trail.

The Minnesota has again started up and is being energetically worked.

The work on the prospecting tunnel on the Duke of York has been finished and the mine is temporarily closed down. The reports from the prospect work on the gravel beds are said to be hardly as encouraging as was expected.

The picnic on Jubilee day was a very great success. The morning opened cloudy and thick, but after a few minutes' rain the weather cleared and a delightful day ensued. There were bicycle and foot races and a general picnic during the day and an excellent concert, to which the entire population turned out, in the evening. It will be a long time before Albernians forget their Jubilee celebration.

* * * * *

Advices received from Alberni state that the town is rather quiet at present and but little business is going on. There are almost no prospectors in the mountains and there have so far been no reports of finds in the belt. From the canal, however, reports of great activity are continually coming in. The number of prospectors along the coast is said to be several hundred, many of which never go as high as Alberni, buying their supplies at the posts near the mouth of the Alberni canal and at Clayoquot, which is at present the centre of most active developments. On Anderson Lake and Uchuklesit also all is looking well and sales are quite frequent and satisfactorily large. Assessment work is being done on dozens of claims all along the coast, and a few months will develop a much greater knowledge of the deposits in this western end of the coast copper belt.

In and near Alberni work is still progressing on some of the most important claims. The Regina group and the Westwood Bros' claims are again reported still improving. The Mountain Rose, on which the ledge was cross-cut recently, is stopped working for a short time. The cutting shows two feet of fine ore, however, and further development will be commenced as soon as possible. The Minnesota is still temporarily closed down pending the return of Superintendent Loveridge from Victoria, where he has been consulting the owners.

Tenders for the new road at Alberni closed yesterday and will be forwarded to Victoria to be let. There are reported to be five tenderers.

The entire population of Alberni will celebrate the Diamond Jubilee by a picnic and excursion as reported last week. Preparations have been made for a very delightful excursion to Sprout Lake and a picnic will also be held near Alberni.—*Nanaimo Free Press*.

Boundary Creek.

I MUST faintly confess that things are by no means particularly lively with us here in Boundary Creek at the present time. Notwithstanding that several somewhat important deals have taken place during the past month. The fact of the matter is that many of the best, or, perhaps, I should say the claims of the district with the largest surface showings, are in the hands of men like Messrs. Midgeon and Farrell, of Butte, who have capital invested in mineral claims and mines in almost every camp of promise or prominence in the West. Investors or speculators of this class, whichever you wish to call them, neither care, nor can they afford to prosecute beyond a certain stage the development of their properties in outlying districts until the opportunity of returns being obtained therefrom is at least within measureable distance. In other words, when the question of transportation is satisfactorily settled, even to the point that construction work for a railroad is commenced, there will be no reason to complain of lack of enterprise on the part of claim owners in Boundary.

On the other hand, however, our local company, the Boundary Creek Mining and Milling Company, the Boundary Mines Company, the Brandon and Golden Crown Mining Company, the Prospecting Syndicate of British Columbia, represented by Mr. Leslie Hill, the Republic Mining Company, and other corporations, are pegging away with commendable zeal, and although we have not lately been startled by news of phenomenal strikes, the reports

from all the properties undergoing development have been without exception of an entirely satisfactory and encouraging character. I am very glad to note, by the way, that Mr. Carlyle, the Provincial Mineralogist, is now visiting Boundary, and his report, when published—for he has already intimated his belief in the great mining potentialities of the district from what he has seen thus far—will, let us pray, have a salutary stirring effect upon Mr. Heinze or other railway potentates who could be easily mentioned, apparently sadly needing something to stimulate them to action.

But I referred to deals. The great Winnipeg which has been spoken of on more than one occasion by mining men of repute as a likely rival to the Rosland Le Roi, has been acquired by what we are told is a "strong" company. McIntosh, the original owner, retains, I believe, a half interest in the property, and obtained \$25,000 in addition to stock for the other moiety interest. Lucky man. McIntosh, by occupation formerly a railroad hand, knowing two years ago about as much about ore as the man in the moon, he made his fortunate find purely by a fluke, the rich vein of pyrrhotite on the ground being disclosed by an over-topped tree. Some of this were actually assayed \$2,000 to the ton in gold on the surface. The Winnipeg will undoubtedly be a great dividend-payer in the course of time, but it is questionable whether the Golden Crown, the adjoining property, will not be the more valuable mine of the two—possibly it is the finest prospect in the camp. I hope next month to speak very fully of the Golden Crown.

Of other deals, the bonding of the North Star, in Long Lake Camp for \$12,000 by Mr. Leslie Hill, and the purchase of the Old Ironsides, in Greenwood Camp for \$150,000 by a syndicate of Quebec and Spokane capitalists are the most noteworthy. Last year a hundred-foot tunnel was driven in on the ledge of the North Star with, unfortunately, far from pleasing results, at the completion of the work, the claim, to men of ordinary understanding, looking absolutely "cultus." Mr. Hill evidently holds a different opinion, and work was resumed at the property under his direction on the 1st of June. Work is also to be started forthwith on the Old Ironsides.

The West Fork of Kettle River has been the scene of much prospecting activity since the spring, but from what I can gather nothing of extraordinary value has been discovered as yet in that neighbourhood up to the present. "The country is badly broken up," one old prospector told me, "and little seams of galena 'frozen' as tight as you please are occasionally met with." However, I heard to-day that some quartz had been brought in from the West Fork which assayed over \$20 in gold from average samples, besides containing good silver values. The finder further stated that his ledge was nine feet wide and could be traced for fully a thousand feet. I happen to know the man well, and his word is to be trusted, hence who knows good things may come out of, I mean may be found up, Kettle River yet.

Greenwood, B.C.

H. M. L.

Texada Mines.

TEXADA ISLAND is indeed a veritable wonderland. By the steamer M Baude the owners of the Nutcracker claim on Texada Island received a number of specimens from their claim, which in richness and apparent permanency eclipse anything yet re-

ceived from the far-famed Texada. The specimens were taken from the bottom of the shaft being sunk by Messrs. McCloskie & McDonald. The depth is about twenty-two feet, and the ledge opened out for four feet wide. The specimens contain flake and wire gold in great profusion and richness. The gold is of a very bright colour, resembling the Australian gold in appearance and fineness. The specimens also give evidence of being rich in silver. Experts pronounce it the most valuable of the many developments of Texada Island, inasmuch as the gold is in solid rock, and not in the surface crevasses, the same as the Lorndale and other claims. They have only sunk the foot-wall, and although the ledge has opened four feet it has not yet reached the hanging wall. The lucky owners of this claim are Mrs. Edwin Gough and Roberts Evans, and J. W. Stirtan.

The Van Anda Copper Queen shaft is taking out taking out some fine rich variegated copper ore, which should, from all appearances, run high in value. The Raven mine has now got a well defined vein of payable ore, and will soon be making regular shipments. The Kirk Lake gold mines have been making extensive clearings for plant site and erecting new buildings, and it is expected to be shortly in full swing, with stamp mill, etc. The Surprise mine is very busy erecting hoist plant, and will sink to the 250-foot level. The Silver Tip mine shipped 100 sacks of ore on the steamer *Comox* on Thursday, and the Victoria-Texada mine shipped 100 sacks of ore on the steamer *Maude* to Victoria. Ores like these from any other new camp would bring a plethora of capitalists to it.

A Minnesota syndicate has an agent here, with instructions to bond or purchase ten or twelve additional claims at once and they will commence operations next month in several sections of the island. The above is the result of an expert's visit here in May, and his return with samples and report. The developments now under way show some remarkably rich copper ores, all carrying more or less precious metals. Some prospects show up well, and if British capitalists don't keep their weather eye open, "Brother Jonathan" will, to his own benefit.

It is reported that four claims are bonded for \$60,000 to a north of England mining firm. A notable fact is that all veins so far have improved most remarkably at 100 feet depth, and the general outlook is that the island will ere long be a busy hive of workmen, as soon as a little more development work is done.

Golden Cache Notes.

DEVELOPMENT is being energetically pushed by the Golden Cache Mines Co., L'd. On the Golden Eagle ledge the main gallery is in 94 feet 6 inches; No. 1 east tunnel 15 feet 6 inches; No. 1 west tunnel, 11 feet 6 inches; No. 2 west tunnel, 23 feet 3 inches. First shaft from floor of tunnel, 10 feet 6 inches; incline shaft, 20 feet. Westerly drive from centre to main gallery, 37 feet 6 inches. Easterly drive from side of main gallery, 35 feet; all in ore showing free gold.

The Ruby ledge averaging 6 to 10 feet wide, is stripped for 100 feet, and the continuation of the Golden Eagle, on the Golden Stripe, has been stripped for 300 feet, showing a magnificent ledge of free milling quartz. It is estimated that there are now

from forty to fifty tons of ore in sight, a very high percentage of which is millable.

The machinery is all on the ground and will be in working order about August 1st. It was purchased from the Wm. Hamilton Manufacturing Company, of Vancouver.

The contract for an inclined tramway 2,221 feet in length has been let to T. W. Paterson, of the V. & S. Ry., Victoria. It will be a three-rail tramway, two feet gauge.

A Jubilee Souvenir.

THE Revelstoke *Herald* has now in course of preparation a handsomely illustrated souvenir edition devoted to North Kootenay. Arrangements have been made at large expense to secure the best available skill in both the literary and art department.

The *Herald's* Jubilee Souvenir will not be a mere pamphlet, but an interesting, comprehensive, artistic work, prepared without regard to cost, and intended to equal any similar production ever brought out in Canada. We have no doubt the enterprise of the *Herald* proprietors will be handsomely rewarded, and that the Jubilee Souvenir will have a wide sale.

Mineral Exhibit for Seattle.

THE Seattle Chamber of Commerce is sending out a circular requesting claim owners in British Columbia to forward samples of ore for a Permanent Mineral Exhibit at their rooms. The object is to place before visitors samples of ore from the various mines on the Coast, both in British Columbia and United States territory, so that owners of claims may be brought in touch with investors. We have much pleasure in drawing attention to this move on the part of our neighbours across the line, and hope that owners of mining property will respond, both in their own interest and that of the country at large.

The Member for Yale-Cariboo.

YALE-CARIBOO has reason to congratulate itself on the attitude of its member, Mr. Hewitt Bostock, M.P., during the late session at Ottawa. Speaking only at times when his words were likely to carry effect, his speeches were invariably to the point and were listened to with interest and respect. But it was not so much from his desk in the House of Commons as in the splendid work he did through the different departments and in the committees that he served the interests of his constituents. Painstaking and earnest in his work, with no axes of his own to grind, it will be found on his return that every trust confided to him by the people of Yale-Cariboo has been thoroughly attended to and as far as lay in his power brought to a satisfactory issue. There is no question that the putting through of the Crow's Nest Railway at this session is largely due to the efforts of Mr. Bostock. Personally it is well known that he was opposed to granting the charter to the C.P.R. and favoured the Government undertaking the task. But when he found that the Government, in the interests of the country, could not enter into any better arrangements than the one contemplated with the C.P.R. he at once threw his own feeling to one side and entered heartily into the work of the committee in order to get the bill through this year.

In the same way although he knew that the promoters of the Penticton road were on the most friendly terms with the C.P.R. yet he saw that if the Boundary country was to get railway transportation this season it would have to be through the Heinze charter. So again he turned in and worked. Whatever he considered best for the interests of his constituents he considered it his duty to give his attention to, no matter what his private feelings might be. If there were more members of Parliament of Mr. Hewitt Bostock's stripe it would be a good deal better for the whole country.

A Valuable Work.

WE are just in receipt of advance sheets of Vol. 5 of *The Mineral Industry*, compiled by Richard P. Rothwell, editor of the *Engineering and Mining Journal*, of New York. We regret that the limits of space will not permit of an extended notice of this most valuable work.

The labour of collecting and classifying the mineral production of the United States has been enormous, yet the returns from every mine and quarry, great or small within the vast limits of the Union, have been carefully obtained and noted. The list comprises seventy-one non-metallic products and ten metals, and covers the years 1895 and 1896. The value of the principal items for these years, omitting figures below \$1,000, were:—

	NON-METALLIC.	
	1895.	1896.
Common Clay	\$ 60,100,000	\$ 65,000,000
Coal, anthracite.....	80,250,000	88,105,000
" bituminous.....	123,897,000	115,827,000
Lime.....	30,000,000	30,000,000
Natural Gas.....	12,000,000	10,000,000
Petroleum (crude).....	47,624,000	56,923,000
Building Stone.....	26,269,000	27,219,000
	METALS.	
Copper.....	40,616,000	49,729,000
Gold.....	46,830,000	58,660,000
Iron (pig).....	108,632,000	91,577,000
Lead.....	10,132,000	10,381,000
Silver.....	30,254,000	37,723,000

Total production of minerals... \$732,941,000 \$751,732,000

The work, which is published annually, may be obtained from The Scientific Publishing Company, 253 Broadway, New York.

The Penticton Road.

IT is not surprising that the people of Southern Kootenay are agitated over the action of the Government in deciding not to go on with the road to Penticton. It would be rather surprising if they were not. The disappointment of mining men who have been toiling hard and expending their means on the almost certain expectation of having a railroad this summer to take their ore to market must be very great. The action of the Government amounts almost to an injustice to those people in the face of the well-known fact that the authorities were favourable and that there was every probability of the road being built this season. We trust the agitation will be kept up until the Government begins to see that we in British Columbia are in dead earnest on the subject. There seems to be something almost petty in the manner in which the Minister of Railways abandoned his well-known favourable intentions toward the road. Because a lot of charter-mongers and greedy

lobbyists are discovered in a discreditable plot in connection with this road and another Mr. Blair, it would seem from the accounts so far to hand, suddenly threw out both bills, the Penticton and the other, thus depriving a large section of country and a great number of deserving people of a much needed public improvement on which their very success depends. It is a case of punishing the innocent for the guilty.

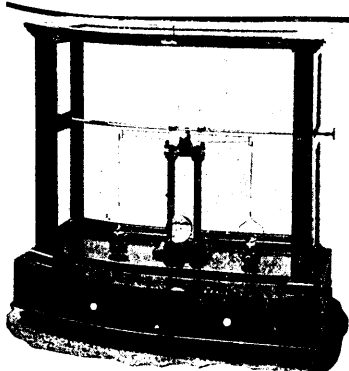
New Map of Rossland.

WITH regard to the latest map issued by J. A. Kirk, P.L.S., we cannot do better than quote from the notice of it which appears in the *Rosslander* of June 2nd:—

"When J. A. Kirk, P.L.S., issued his map of Rossland mining district a little more than a year ago, it was at once recognized as the best that had yet been published. The same may be said of his second, which was put on sale last week. The locations of all the surveyed claims are taken from the official records and consequently are correct. The position of those unsurveyed has mostly been got from actually visiting the post of the claims, so that it seems next to impossible to have a more correct record of the mineral claims of the area represented by the map. This area extends from the international boundary to the centre of sections 21, 22, 23 and 24, or about four and a-half miles north of Rossland, and from the Columbia River to Record Mountain, three and a-half miles west of Rossland. An index with reference figures to the section lines facilitates the location of any desired mineral claim. Kirk's map is indispensable to any one who is at all interested in the mines around Rossland."

A Pleasant Feature of the Celebration.

A PLEASING feature in connection with the Jubilee celebration in Victoria and one that was generally noticed by strangers was the promptness and attention of the hack drivers. Particularly was this the case with the Victoria Transfer Company, whose drivers are noted for their civility and carefulness. We have heard of no cases of overcharging, and in fact the Transfer people put themselves often to much trouble and inconvenience without extra charge to meet the demands made upon them. Parties visiting Victoria or desiring baggage moved can place themselves in the hands of the Victoria Transfer Company with perfect confidence. The company and its manner of conducting business is a credit to the city of Victoria.



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Lead	1 00
Copper	2 00
Gold and Silver	1 50
Silver and Lead	2 00
Copper, Silver and Gold	3 00
Iron	3 00

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Mining Stocks.

Prepared by A. W. More & Co., Mining Brokers, Victoria, B.C., June 28, '97

Companies.	Capital.	Par Value.	Price.
TRAIL CREEK.			
Alberta	1,000,000	\$ 1 00	\$0 10
B.C. Gold King	1,000,000	1 00	0 10
Beaver	750,000	1 00	0 10
Big Three	3,500,000	1 00	0 10
Bluebird	600,000	1 00	0 10
Bruce	1,000,000	1 00	0 10
Butte	1,000,000	1 00	0 03
Caledonia Con	500,000	1 00	0 05
California	2,500,000	1 00	0 15
Camp Bird	1,000,000	1 00	0 05
C. & C.	500,000	1 00	—
Celtic Queen	750,000	1 00	0 05
Centre Star	500,000	1 00	—
Colonna	1,000,000	1 00	0 24
Commander	500,000	1 00	0 20
Deer Park	1,000,000	1 00	0 14
Della Colla	1,000,000	1 00	0 03
Delaware	1,000,000	1 00	0 12
Eastern Star	500,000	1 00	0 20
Enterprise	1,000,000	1 00	0 20
Eric	1,000,000	1 00	0 03½
Evening Star	1,000,000	1 00	0 10
Georgia	1,500,000	1 00	0 15
Gertrude	500,000	1 00	0 10
Golden Drip	500,000	1 00	0 15
Golden Queen	1,000,000	1 00	—
Great Western	1,000,000	1 00	0 20
Hattie Brown	1,000,000	1 00	0 10
Helen	600,000	1 00	0 04
High Ore	500,000	1 00	0 05
Homestake	1,000,000	1 00	0 07½
Idaho	500,000	1 00	—
Imperial	1,000,000	1 00	0 08
Iron Horse	1,000,000	1 00	0 20
Iron Mask	500,000	1 00	0 44
I.X.L.	1,000,000	1 00	0 10
Josie	700,000	1 00	0 38
Jumbo	500,000	1 00	0 51
Knight Templar	500,000	1 00	0 05
Kootenay-London	1,000,000	1 00	0 10
Le Roi	2,500,000	5 00	8 00
Lilly May	1,000,000	1 00	0 20
Mabel	1,000,000	1 00	0 15
Mayflower	1,000,000	1 00	0 14
Monita	750,000	1 00	0 19
Monte Cristo	1,000,000	1 00	0 15
Morning Star	1,000,000	1 00	0 09
Nest Egg	500,000	1 00	0 10
Northern Belle	1,000,000	1 00	0 10
Novelty	1,000,000	1 00	0 09
O. K.	1,000,000	1 00	0 08
Palo Alto	1,000,000	1 00	0 05
Phoenix	500,000	1 00	0 10
Poorman	500,000	1 00	0 11
R. E. Lee	2,000,000	1 00	0 15
Red Mountain View	1,000,000	1 00	0 11
Red Point	1,000,000	1 00	0 10
Rossland, Red Mountain	1,000,000	1 00	0 25
St. Elmo	1,000,000	1 00	0 08
St. Paul	1,000,000	1 00	0 12½
Silverine	500,000	1 00	0 06
Southern Cross & W. Con	500,000	1 00	0 20
Trail Mining Co	250,000	100 00	—
Union	600,000	1 00	—
Virginia	500,000	1 00	0 12
War Eagle Consolidated	2,000,000	1 00	0 00
West Le Roi	500,000	1 00	0 20
White Bear	2,000,000	1 00	0 19
AINSWORTH, NELSON AND SLOCAN.			
Argo	100,000	0 10	0 10
Athabasca	1,000,000	1 00	0 25
Bondholder	1,000,000	1 00	0 10
Alamo	500,000	1 00	—
Cumberland	500,000	10 00	—
Dardanelles	1,000,000	1 00	0 22
Dellie	750,000	1 00	0 12
Eldon	1,000,000	1 00	0 05
Elise	1,000,000	1 00	0 07
Ellen	1,000,000	1 00	0 07½
Elkhorn	1,000,000	1 00	0 10
Exchequer	1,000,000	1 00	0 10
Goodenough	800,000	1 00	0 25

COMPANIES.	Capital.	Par Value.	Price.
Gibson	650,000	1 00	0 17½
Grey Eagle	750,000	1 00	—
Hall Mines	300,000	£1	—
Idler	1,000,000	1 00	0 12½
Kootenay-Columbia	400	100 00	—
London	150,000	25	0 25
Minnesota	1,000,000	1 00	—
Northern Light	250,000	1 00	0 16½
Noble Five Con.	1,200,000	1 00	0 50
Ottawa and Ivanhoe	1,000,000	1 00	0 12½
Phoenix Consolidated	1,000,000	1 00	0 07
Rambler Con.	1,000,000	1 00	0 50
Reco	1,000,000	1 00	1 50
Slocan Star	500,000	50	2 75
Santa Marie	1,000,000	1 00	0 05
Sheriff	1,000,000	1 00	0 24
Silver Band	250,000	0 25	0 12½
Slocan Queen	1,000,000	1 00	0 10
Star	1,000,000	1 00	0 03½
St. Keverne	1,000,000	1 00	0 06
Sunshine	500,000	10 00	—
Two Friends	240,000	30	—
Washington	1,000,000	1 00	0 25
Wonderful	1,000,000	1 00	0 11
BOUNDARY.			
Old Ironsides	1,000,000	1 00	0 07
CAMP MCKINNEY.			
Cariboo	800,000	1 00	0 50
LARDEAU.			
Consolidated Sable Creek Mining Co.	1,500,000	1 00	0 10
TEXADA ISLAND.			
Texada Proprietary	250,000	25	0 25
Van Anda	5,000,000	1 00	0 15
Victoria-Texada	150,000	0 25	0 25
Texada Kirk Lake	600,000	1 00	—
Raven	1,000,000	1 00	0 10
Gold Bar	100,000	0 10	—
ALBERNI DISTRICT.			
Alberni Mountain Rose	250,000	1 00	0 05½
Consolidated Alberni	500,000	1 00	0 20
Mineral Creek	500,000	1 00	0 03½
Mineral Hill	750,000	1 00	0 10
Quadra	500,000	1 00	0 10
CARIBOO.			
Cariboo Gold Fields Ltd	£100,000	—	—
Cariboo Hydraulic	300,000	—	—
Horsefly Hydraulic	200,000	—	—
Horsefly Gold Mining Co	1,000,000	10 00	1 50
Slough Creek	500,000	1 00	0 50
LILLOOET DISTRICT.			
Golden Cache	500,000	1 00	1 60
Alpha Bell	500,000	1 00	0 50
Cayoosh Creek Mines	500,000	1 00	0 50
Lillooet Gold Reefs	200,000	25	0 25
FAIRVIEW CAMP.			
Tin Horn	200,000	0 25	—

† Dividends declared to date are as follows: Le Roi, \$425,000; War Eagle, \$217,500; Cariboo, \$156,000; Slocan Star, \$350,000; Reco, \$150,000; Rambler, \$40,000; Idaho, \$152,000. Alamo, Cumberland, Noble Five and Goodenough have also paid dividends.

The Le Roi has declared a dividend of \$25,000 since last return.

Agents.

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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:

Mining and Scientific Press.....	San Francisco, Cal
Mining and Electrical Review.....	" "
Pacific Electrician.....	" "
Mining and Metallurgical Journal.....	Los Angeles, Cal
Mining Herald.....	Seattle, Wash
Washington Mining Journal.....	" "
Miner and Electrician.....	Spokane, Wash
Mining.....	" "
Spokesman Review.....	" "
North-Western Mining Facts.....	" "
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Manufacturers' Record	Baltimore, Md	Nanaimo Free Press	Nanaimo, B.O.
Mining Journal	London, Eng	Mining Critic	Vancouver
Shareholder	" "	The Province	Victoria, "
The Colonies and India	" "	The Times	" "
Financial News	" "	Catalogues of Mining Machinery and Supplies.	
Canadian Gazette	" "	<i>We will be pleased to forward to any subscriber or reader catalogues and printed matter from the following firms:</i>	
Chamber of Commerce Journal	" "	Joshua Hendy, Machine Works, San Francisco, Cal. Mining machinery of all kinds.	
Australian Mining Standard	Sydney, N.S.W	The Giant Powder Co., San Francisco, Cal. Explosives.	
Standard and Diggers' News	Johannesburg, South Africa	The Pelton Water Wheel Co., San Francisco. Water wheels.	
Canadian Engineer	Toronto, Ont	John Taylor & Co., San Francisco, Cal. Mine and mill supplies, chemicals, etc.	
" Electrical News	" "	Canadian Rand Drill Co., Montreal and Rossland. Mining machinery.	
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Canada Lumberman	" "	M. Beatty & Sons, Welland. Dredgers, ditchers, etc.	
Monetary Times	" "	Theodor Lexow, New York. Carbons, diamond drills, etc.	
Toronto World	" "	James H. Lancaster, New York. Steam shovels, etc., etc.	
Toronto Globe	" "	James Macbeth & Co., New York. Electric blasting supplies.	
Mining Review	Ottawa	Bradley Pulverizer Co., Boston. Griffin mill.	
Money and Risks	" "	The Reliance Oil & Grease Co., Cleveland, O. Valve-oleine.	
Mining News	Montreal	Northey Co., Ltd., Toronto. Pumps for mining.	
Revelstoke Herald	Revelstoke, B.C	Colorado Iron Works, Denver, Col. Milling and smelting plants, etc.	
Rosslander	Rossland, B.C	Canadian General Electric Co., Electric supplies, Vancouver.	
Rossland Miner	" "	John Boyd & Co., Machinery and Supplies, Vancouver.	
Evening Record	" "	Jas. Leffel & Co., Water Wheels, Springfield, Ohio.	
Kootenaian	Kaslo, " "	Girard Water Wheel, San Francisco.	
Miner	Nelson, B.C	Electrical Engineering Co., San Francisco.	
The Tribune	" "	Geo. W. Pennington & Sons, " "	
Trail Creek News	Trail, " "	Union Gas Engine Co., " "	
Trail Creek Miner	" "	Gates Iron Works, Chicago. Mining machinery of all kinds.	
Boundary Creek Times	Greenwood City, " "	Royal Electric Co. Electric Power and Supplies, Montreal.	
Slocan City News	Slocan City, " "	Victoria, B.C.	
Slocan Pioneer	Slocan City, " "		
Grand Forks Miner	Grand Forks, " "		
Ledge	New Denver, " "		
Golden Era	Golden, " "		
Vernon News	Vernon, " "		
Paystreak	Sandon, " "		
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NOTICE TO PROVINCIAL LAND SURVEYORS

HIS HONOUR the Lieutenant-Governor-in-Council has been pleased to make the following rules and regulations with reference to the survey of Provincial lands and mineral claims:—

1. All surveys shall be personally made by duly qualified Provincial Land Surveyors.
2. All Surveyors shall use the departmental field book and paper, and at the bottom of each page of the field notes shall be entered the date and signature of Surveyor.
3. The original field-notes shall be accompanied by an affidavit in the subjoined form.
4. All Surveyors must promptly carry out the instructions of the Department in respect to the character and amount of information to be furnished in the field-notes, and at all times be ready to make such corrections and supply such additional data as seems expedient for the complete checking of their work in the field.
5. The Department will invariably exercise the right of refusing to accept surveys not made in accordance with the above regulations, and also will refuse to accept as satisfactory any and all surveys made by a Surveyor who has been guilty of repeated infractions of the preceding rules.

G. B. MARTIN,
Chief Com'r of Lands and Works.

Lands and Works Dep't,
Victoria, B.C., 15th April, 1897.

SURVEY OF PROVINCIAL LANDS.

AFFIDAVIT.

I, of a duly authorized Provincial Land Surveyor for the Province of British Columbia make oath and say as follows:—

- (1.) I have surveyed.....
- (2.) I commenced the said survey on the..... day of..... 189 , and completed it on the..... day of..... 189 .
- (3.) I personally ran all the lines of the said survey on the dates set out in the annexed field-book marked A.
- (4.) The notes contained in the field-book are a correct representation of the work done on the ground by me.

Sworn before.....
.....
Provincial Land Surveyor.

NOTICE TO JOINT STOCK COMPANIES.

THE following section, numbered 161, of the "Companies' Act, 1897," relative to the issue of a free miner's certificate is published for the information of JOINT STOCK COMPANIES.

JAMES BAKER,
Minister of Mines.

Provincial Secretary's Office,
14th May, 1897.

161. Notwithstanding anything to the contrary in section 4 of the "Mineral Act, 1896," or section 4 of the "Placer Mining Act, 1891," or elsewhere in the said Acts or other the mining laws of the Province, no free miner's certificate shall be issued to a Joint Stock Company for a longer period than one year, and such certificate shall date from the 30th day of June in each year; and every free miner's certificate held by a Joint Stock Company at the passing of this Act shall be valid and existing until and shall expire on the 30th day of June, 1897. Upon applying to renew any such certificate on or before said 30th day of June, the Joint Stock Company shall be entitled to a rebate of a proportionate amount of the fee paid for a certificate heretofore issued according to the further time for which it would but for this section have been valid.

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RATES: \$2.50 to \$3.50 per day.
Guests are treated to the best in the market

SLOCAN CITY, British Columbia.

St. James Hotel

—ANGRIGNON BROS., PROPS.—

New House Rates, \$2.00 and upwards.
New Furniture
Everything First-class. NEW DENVER, B.C.

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Agents for Mining Machinery and Insurance. Mines reported on. Members Rossland Stock Exchange. Reference: Geo. Freeman, 23 Throgmorton St. London, E.C. Correspondence Solicited. **ROSSLAND, B. C.**

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★ SLOCAN CITY,
—B.C.—

THE NEW MARKET HOTEL

HENRY STEGE, Proprietor.

Headquarters for Mining and Commercial men.

Special accommodations for hunting and fishing parties.

Located on Lake Slocan.

NEW DENVER, B.C.

H. J. ROBERTSON—Tinsmith—Galvanized and Sheet Iron Worker—Stoves, Granite & Tinware.
Liberal discount given to mine owners. Main St., SLOCAN CITY, B.C.

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Mining Properties for sale in all parts of Kootenay District.



Special attention given to the Mines of Slocan District.

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Real Estate, Financial and Insurance Agents. Mining Properties for sale. Agents for the Townsite of Alberni. Farming Lands for sale in all parts of the Province.

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CENTRALLY LOCATED.

RATES—\$1.00; \$1.25, and \$1.50 per day, according to Room. Weekly Rates less.

This old and well-known hotel is under the management of Walter Porter, who will always endeavour to make its patrons feel at home.....

Corner Wharf and Johnson Streets.

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First-class in every respect.

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Newly fitted and equipped with all modern conveniences.

SAMPLE ROOMS FOR TRAVELLERS.

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The Kaslo



W. VIDLER PAPWORTH
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FAMILY AND COMMERCIAL HOTEL.

Heated throughout with hot air.
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RATES:
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THE LARGEST HOTEL IN TOWN
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Capacity—30,000 feet.

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FOR SALE—LUMBER, of all descriptions

NELSON HOTEL

RATES, \$2 PER DAY

STEVE WHITE, Prop.
Late of White's Hotel, Virden, Manitoba.

Strictly First-class in all
its Appointments:

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THEY are reliable. A standard everywhere. In use all over the world. 3,200 Engines sold. Single or double Engines. Vertical or horizontal. Every "HERCULES" Engine is fully tested and guaranteed. Sizes range from 2 h.p. to 200 h.p.

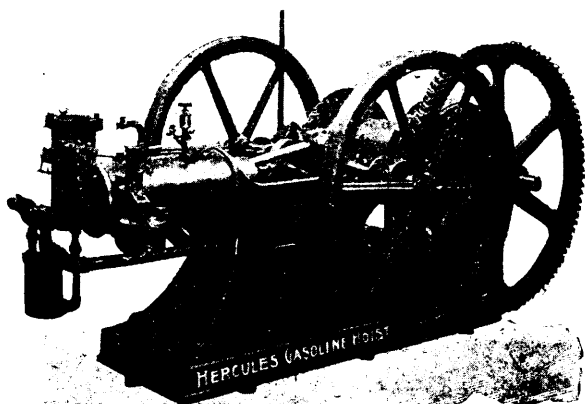
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THE WORLD'S HIGHWAY TO THE PACIFIC COAST, THE ORIENT AND THE ANTIPODES.

THE BEST, CHEAPEST AND QUICKEST WAY TO

British Columbia, Japan and China, Oregon, Hawaii, Washington,
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The Gold Fields of Cariboo and the famed Kootenay Country in British Columbia are reached only by the Canadian Pacific Railway via Revelstoke, B.C.

FOR FURTHER INFORMATION, APPLY TO ANY AGENT OF THE COMPANY OR TO

A. H. NOTMAN, District Passenger Agent, St. John, N.B.

H. J. COLVIN, District Passenger Agent, 197 Washington St., Boston, Mass.

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O. E. McPHERSON, Asst. Gen. Passenger Agt., 1 King St. E., Toronto, Ont.

I. F. LEE, District Passenger Agt., 232 S. Clark St., Chicago, Ill.

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W. R. CALLAWAY, General Passenger Agent, Soo Line, Minneapolis, Minn.

ROBERT KERR, General Passenger Agent, Western and Pacific Divisions, Winnipeg, Man.

ARONER BAKER, European Traffic Agent, 67 and 68 King William St., E.C., and 30 Cockspur St., S.W., London, Eng.; 7 James St., Liverpool, Eng., 67 St. Vincent St., Glasgow, Scotland.

D. McNICOLL,

General Passenger Agent,

MONTREAL.

PACIFIC COAST

STEAMSHIP COMPANY.

Victoria, B.C., and Puget Sound Route.

THE COMPANY'S Elegant Steamers, **UMATILLA**, **CITY OF PUEBLA** and **WALLA WALLA**, carrying H.R.M. Mails, leave Victoria, B.C., for San Francisco at 8 p.m., May 4, 9, 14, 19, 24, 29. June 3, 8, 13, 18, 23, 28, July 3, 8, 13, 18, 23. Due at San Francisco, a.m., May 7, 12, 17, 22, 27, June 1, 6, 11, 16, 21, 26, July 1, 6, 11, 16, 21, 26. Leave San Francisco for Victoria, B.C., at 9 a.m., May 1, 6, 11, 16, 21, 26, 31, June 5, 10, 15, 20, 25, 30. July 5, 10, 15, 20, 25. Due at Victoria, a.m., May 4, 9, 14, 19, 24, 29, June 3, 8, 13, 18, 23, 28, July 3, 8, 13, 23, 28.

Alaska Route.

THE Elegant Steamers **CITY OF TOPEKA**, **MEXICO** and **QUEEN** leave Victoria for Alaska May 9, 14, 24, 29, June 8, 13, 23, 28, July 8, 13, 23. Due back at Victoria May 21, 26, June 5, 10, 19, 25, July 4, 10, 19, 25, Aug. 3. The Company reserves right to change, without previous notice, steamers, sailing dates and hours of sailing.

R. P. RITHET & CO., Agents,

61 and 63 Wharf St., - VICTORIA, B.C.

GOODALL, PERKINS & CO.,

General Agents, - - SAN FRANCISCO.

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We carry in stock supplies for all machines, papers, carbons, oils, brushes, also letter and note-books, etc. Machines rented, exchanged, re-fitted and repaired. All classes of typewriting neatly done. Terms Cash.

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DIRECT LINE to
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Pullman Sleeping Cars,
Elegant Dining Cars,
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ONLY 22 hrs. from Victoria to Spokane
 30 " " " " Rossland
 33 " " " " Nelson
 36 " " " " Kaslo
 36 " " " " Grand Forks

SAVE both **TIME** and **MONEY** if you are going to the gold fields of Kootenay or Kettle River Districts by travelling via

The Northern Pacific Railway

THE FASTEST ALL-RAIL ROUTE.

Quick Time, and no delay in transit

TRAVELLERS from the East or from the West will find this the Quickest and most Comfortable Route to the Gold and Silver Districts of British Columbia. . . .

TIME SCHEDULE—In effect March 28th, 1897—Trains leave Seattle for Spokane, St. Paul and East, Rossland Nelson, Kootenay and Kettle River points, 4.00 p.m. This card subject to change without notice. Through tickets to Japan and China via the Northern Pacific Steamship Co.

For full information, Time Cards, etc., call on, or address

E. E. BLACKWOOD,

A. D. CHARLTON,

Freight and Passenger Agent, **VICTORIA, B.C.**

Asst.-Gen. Pass. Agt. 225 Morrison St. **PORTLAND, Ore.**

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THROUGH TICKETS to and from all European Points, at lowest rates, and by all Fast Lines. For Sailing Dates, Tickets, etc., apply to

E. E. BLACKWOOD, VICTORIA, B. C.

A Great Railway!

—THE—

Chicago,
Milwaukee and
St. Paul

Owens and operates 6,151 miles of thoroughly equipped road.

This Railway Co.

Operates its trains on the famous block system; Lights its trains by electricity throughout; Uses the celebrated electric berth reading lamp; Runs splendidly equipped passenger trains every day and night between **CHICAGO AND ST. PAUL** and **CHICAGO AND OMAHA**, connecting with all transcontinental lines. The

Chicago, Milwaukee & St. Paul

Also operates steam-heated vestibule trains, carrying the latest private compartment cars, library buffet smoking cars, and palace drawing room sleepers. Parlor cars, free reclining chair cars and the very best dining car service.

For lowest rates to or from any point in the United States or Canada, apply to nearest ticket agent, or address

CEO. H. HEAFORD,

General Passenger Agent,

Chicago, Ill.

C. J. EDDY, Gen. Agt. PORTLAND

FOR PUGET SOUND POINTS

TAKE THE FINE STEAMER

City of Kingston

Speed, 18 knots. Tonnage, 1147.

8.30 a.m. Lv	M 1	...*	Victoria...	110	Ar	3.30 a.m.
11.30 a.m. Lv	38	...	Pt. Townsend.	72	Lv	12.30 a.m.
2.30 p.m. Lv	82	...	Seattle....	28	Lv	9.30 p.m.
4.15 p.m. Ar	110	...	Tacoma*...	M 1	Lv	7.15 p.m.

Steamer City of Kingston makes connection at Tacoma with Northern Pacific trains to and from points East and South.

*Daily except Monday.

E. E. BLACKWOOD, Agent,
 Victoria, B.C.

Spokane Falls & Northern Nelson and Fort Sheppard Red Mountain Railways

The only all-rail route without change of cars between Spokane, Rossland and Nelson; also between Nelson and Rossland.

DAILY EXCEPT SUNDAY.

Leave.		Spokane.....	Arrive.		7:00 p.m.
7:30 a.m.	.....	Rossland.....			3:25 p.m.
9:00 a.m.	.....	Nelson.....			5:20 p.m.

Close connections at Nelson with steamer for Kaslo and all Kootenay Lake points.

Passengers for Kettle River and Boundary Creek connect at Marcus with stage daily.

The Finest Train in the World!

The long-talked of Limited Trains on

“The Northwestern Line,”

C., St. P., M. & O. Railway, to run between

Minneapolis,
St. Paul and
Chicago,

are now in service.

The press as well as the people who have inspected these trains admit that they represent the acme of the car builders' art. The engine is after the famous 999 pattern and from end to end the train is vestibuled with broad plate glass vestibules which completely enclose the platforms and add greatly to the beauty as well as to the comfort of the train.

IF YOU ARE GOING EAST

why not patronize the new

Northwestern Limited.

Excursion or other classes of tickets are good on this train and no extra fares are charged for the superior accommodations.

Tickets, sleeping car reservations and Map Folder on application to your home agent, or address

F. W. PARKER,

Commercial Agent,

606 First Avenue

SEATTLE.

TRANSPORTATION COMPANIES.

Canadian Pacific Navigation Co., Ltd.

TIME TABLE NO. 28.
(Taking effect December 28th, 1896.)

VANCOUVER ROUTE.

VICTORIA TO VANCOUVER daily except Monday at 1 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 PLUMPER 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 PLUMPER 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 "Tees" 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., Ltd., B.C.

Head Office and Wharf, VANCOUVER, B.C.

NORTHERN SETTLEMENTS—SS. Comox sails from Company's wharf every Tuesday at 9 a.m. for Bowen Island, Howe Sound, Sechelt, Jervis Inlet, Froeck, Texada Island, Lund, Hernando Island, Cortez Island, Read Island, Valdez Island, Shoal Bay, Phillips Arm, Fredrick Arm, Thurlow Island, Loughborough Inlet, Salmon River, Port Neville; and sails every Friday at 11 a.m. for way ports and Shoal Bay, calling at Bute Inlet every six weeks.

MOODYVILLE & NORTH VANCOUVER FERRY.

LEAVES MOODYVILLE—8, 9.15, 10.45, 12 noon, 2, 4, and 5.45 p.m.
LEAVES VANCOUVER—8.35, 10, 11.20, 1.15 p.m., 3.15, 5.15, and 6.20. Calling at North Vancouver each way, excepting the noon trip.
Freight steamers SS. Capilano, and SS. Coquitlam; capacity, 300 tons d.w.
Tugs and scows always available for towing and freighting business. Large storage accommodation on Company's wharf.

H. DARLING, Manager.

Telephone 94. P.O. Box 77.

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 3.50 p.m.
" 8.36 "	South Fork	" 3.15 "
" 9.36 "	Sproule's	" 2.15 "
" 9.51 "	Whitewater	" 2.00 "
" 10.03 "	Bear 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 "

SANDON AND CODY.

Leave 11.00 a.m.	Sandon	Arrive 11.45 a.m.
Arrive 11.20 a.m.	Cody	Leave 11.25 a.m.

For rates and information, apply at Company's offices.
ROBT. IRVING, Traffic Manager. R. W. BRYAN, Superintendent.

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; at 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.	" "
" "	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 "KOKANEE."

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.

INTERNATIONAL

Navigation & Trading Co.,

LIMITED

STEAMERS INTERNATIONAL AND ALBERTA
on Kootenay Lake and River.

TIME CARD IN EFFECT FEBRUARY 1st, 1897.
Daily except Sunday—Subject to change without notice.

Leave Kaslo for—
Nelson, Ainsworth, Pilot Bay, Balfour, Way Points... 5.30 a.m.
Leave Nelson for—
Kaslo, Ainsworth, Pilot Bay, Balfour, Way Points... 4.40 p.m.
Close connection at Five-Mile Point with all passenger trains of the N. & F.S.R.R. to and from Northport, Rossland and Spokane.

Leav Kaslo	5.30 a.m.	Leav Spokane	7.00 a.m.
Arriv Northport	12.30 p.m.	" Rossland	10.30 a.m.
" Rossland	3.25 p.m.	" Northport	1.27 p.m.
" Spokane	7.00 p.m.	Arriv Kaslo	8.00 p.m.

Through Tickets sold at lowest rates, and Baggage checked to all United States points.

GEORGE ALEXANDER, General Manager.
Kaslo, B.C., January 30, 1897. Head Office, KASLO, B.C.

Columbia & Western Railway Co.

Schedule No. 4, February 4th, 1897.

EASTBOUND.

No. 4 Passenger, daily except Sunday; leaves Rossland 4 p.m., arrives Trail 5 p.m.
No 2 Passenger, daily except Sundays; leaves Rossland 7 a.m., arrives Trail 8 a.m.

WESTBOUND.

No. 3 Passenger, daily except Sunday; leaves Trail 8.00 a.m., arrives Rossland 10.00 a.m.
No. 1 Passenger, daily except Sunday; leaves Trail 5.45 p.m., arrives Rossland 7.40 p.m.

Connections made with all boats arriving and departing from Trail.
GENERAL OFFICES: TRAIL, B.C. F. P. GUTELIUS, General Superintendent.

IMPORTANT NOTICE—Prospecting.

PROSPECTOR open for engagement to a Syndicate or Company desirous of securing mineral claims in British Columbia the coming season. Is well up in the geology and general conditions prevailing in the various mining districts. The past season located a number of valuable properties for his employers.

Address "INITIAL POST," Care of this Journal.