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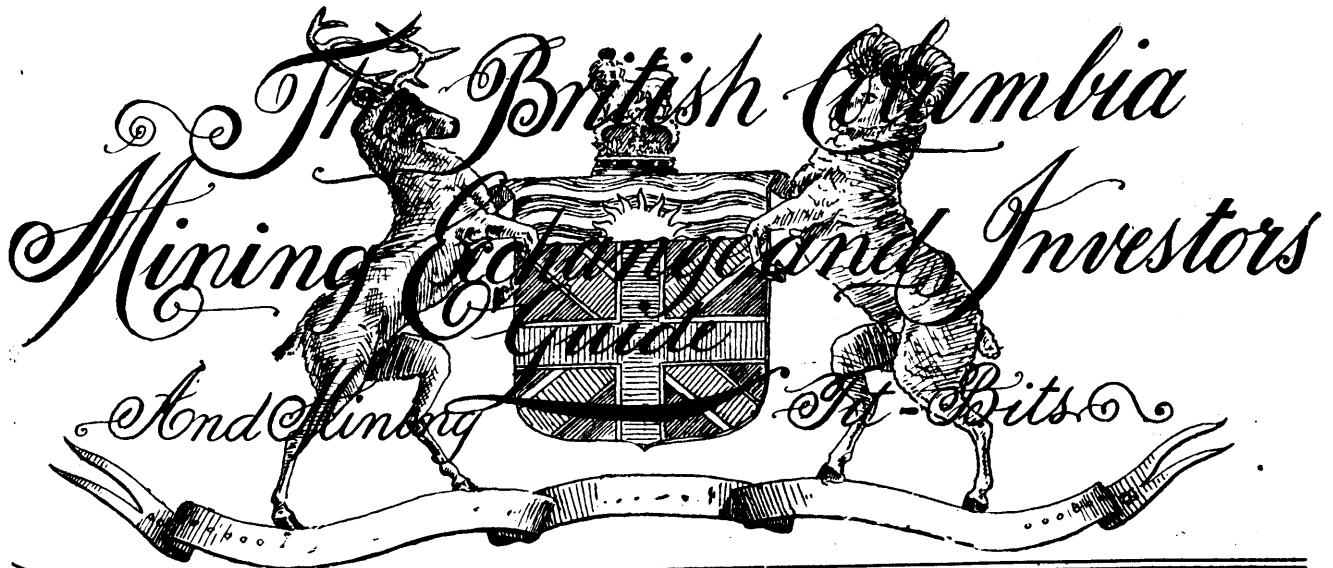
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VOL. II, No. 8.

VANCOUVER, AUGUST, 1900

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
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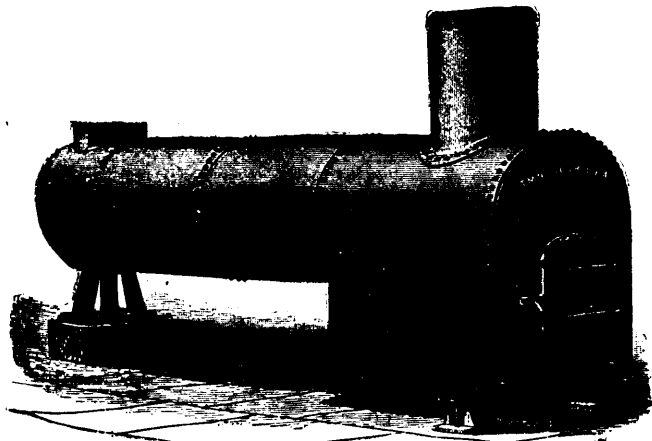
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# THE B. C. MINING EXCHANGE AND INVESTOR'S GUIDE

## And Mining Tit-Bits.

VOL. II.—VANCOUVER, B. C., AUGUST, 1900—No. 8.

### MINING AS AN INVESTMENT.

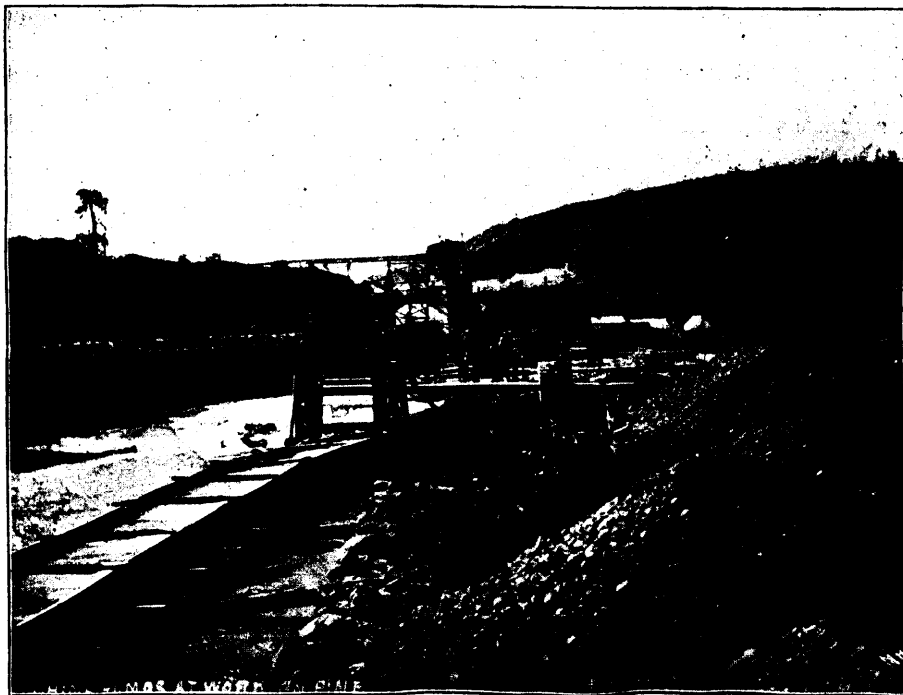
THOS. NEWMAN, M.C.M.I., VANCOUVER, B. C.

#### THE INVESTMENT OF OTHER PEOPLE'S MONEY IN MINING VENTURES.—HOW IT LOOKS FROM DIFFERENT STANDPOINTS.

Mining investments should be made exactly the same as lumbering or any other manufacturing investment is made in the attempt to increase the individual capitalist's wealth, or the annual income from that source, no matter whether the venture be the manufacture of mines or the manufacture of the products of

been offered an opportunity to purchase stock—and missed it.

It should be thoroughly engrafted in the mind of every investor, as a preliminary to handling money, that there is always a certain inevitable risk in investing capital, no matter what the nature of the investment. There is no such thing in any line of business as a deadsure, absolutely safe, guaranteed non-explosive dividend paying business. This risk is common to all. Mining is for the well posted mining man just as risky as farming, and no more so. The difference is simply this: In the failure of the farmer, the loss is not usually a total loss—the success is only a partial success; that is, the returns are only a small part of the amount



CHINA PUMPS AT WORK ON PINE CREEK.

the mine. The risk, under the same conditions as to management and careful investment, is no greater and no less, notwithstanding all the arguments *pro* and *con* so constantly brought out in mining reviews and newspapers.

That the business is in some respects on a different footing merely shows that many different characters are engaged in inducing people to invest, instead of a few of one class as in what are deemed more prosaic lines. A little idea of what is included in the acceptance of an invitation to "put some money into a mining venture" is a very desirable acquisition for the proposed investor, and as the same is not generally included in the prospectus (though it usually appears to be there all right) a few remarks on the subject may be appreciated by a portion of the readers, who have

desired. In mining ventures the failure means mostly the loss of all the investor has put into the venture—the success often means the realization of what is popularly called "fortune". By charging up to mining all the gambling in shares of utterly irresponsible companies, who, calling themselves "Mining Companies," yet never owned a mine (except the valuable one existent in the minds of their dupes and on paper); it is figured out by those grave and reverend wiseacres who write on subjects they know less than nothing about, that "it costs one dollar and something over to obtain each dollar won." Taking all the gambling in wheat and pork on exactly the same basis it is easy to show that every bushel of wheat costs several times the amount it brings, and every squeal of the unfortunate porker costs as much as the animal sells for.

What sense is there in such statements? Because, for every miner who went to the Klondike during the rush of two years ago, a dozen ignorant asses, composed of the lame, the halt, the blind, the lazy, the good-for-nothing, and the hobo, also rushed in and starved, to say nothing of another dozen of respectable, well-meaning and hardworking men who, knowing nothing whatever of the business or even how to care for themselves in that wilderness, also rushed in; would you consider the gains of the Klondike should be divided by the sum total of these men's folly? Divide the amount of gold won by the amount of money actually intelligently invested by practical men in the Klondike, which is the only fair business way in considering the chances of mining, and the result will be found more than satisfactory.

The ignorance of the general public in regard to any business involving technical points admits of the unscrupulous shark rushing people through a wide open door—and he never hesitates to do it; either in mining or anything else. He utilizes the fact that a certain business line has paid enormous profits when legitimately and carefully worked, to sell an interest in a paper imitation to the unwary. His mines seldom exist except on paper. He never intends to work them and would not know how to proceed if he did. Another fish is equally dangerous. This is the man who, seeing the large profits made by others and knowing that he is just as capable a business man, organizes his friends for the same purpose and with perfectly honest intentions (surely the kind a certain place is said to be paved with) ends, so far as his friends' pockets are concerned, in just the same way; but does infinitely more harm to the business, because his friends know that he is honest, *ergo*, they have not been cheated, (?) but—mining must be rotten. (?)

The man well advised, who convinced that mining will prove a profitable business, yet also feeling that he himself knows nothing about such enterprises, while capable of attending to the financial end, will seek out a man who is well known in mining circles and has a good standing, as a working partner, and leave the practical side entirely to him.

At the present time in Canada, and especially in British Columbia, the opportunities for legitimate investment in the business of making mines are so many and can be obtained on such reasonable terms by anyone who goes the right way about securing same, that the wonder grows why anyone will take the trouble to ring in a fake mining scheme. It would seem that some men would rather be interested in a fake than a genuine enterprise. Indeed, not so long since, the writer was earnestly informed by a promoter of mining companies that "it was easier to sell stock in a good (?) fake than in a real mine, because the public would believe anything and the Eastern brokers knew no better." Comment is superfluous. The shame is that such great energy is expended on "fakes" when good prospects which will make mines, and some of them rich mines, are idle for want of the money now being thrown away on booming such bogus schemes.

The first important consideration in making an investment is to have every possible information before the investor; first, as to the known facts for and against the property; second, the fullest information as to the standing of the man or men who furnish the facts. Reports on mining property will be found of such a character as to carry a conviction of the writer's honesty and ability on their face; or they will be simply a treatise on the geology, etc., of the ground, which does not give the lay reader any really definite

idea as to what he is purchasing, or how much money he will be obliged to furnish to carry the venture to a successful issue. In the latter case the services of another man in examining the property will be advisable. Better spend the money necessary to pay for two or three or more examinations and get a mine in the end, than to economise in this direction to the extent of saving a few hundred dollars, and expend later many thousand dollars for no return. Again, there is more money being wasted at this moment in wrongly applied development of prospects in this country than is being expended in mining. The very first consideration should be the obtaining of the very best advice as to the procedure to be adopted and the proper mode of attacking the work. Get every fact in connection with the formation and structure of the vein or deposit it is possible to learn and carefully consider every possible manner in which the desired result may be accomplished before beginning operations. Time spent in this way is both time and money in much greater proportion saved afterwards, to say nothing of the increased chances of making operations successful.

Mr. R. W. Brock makes a very sensible remark in his paper, read before the Canadian Mining Institute (West Kootenay Notes, p. 142, J. C. M. I. vol. 111). "It is regrettable in every way that the prospector's labor, his time and his money are so often squandered, especially when this is largely due to a lack of technical knowledge. At all events some qualified person should be engaged by the prospector to look over the property and furnish this assistance." Mr. Brock is applying this to the usually impecunious prospector, but it might with great advantage be applied to the efforts of most of the prospector's successors, and the efforts of all of the companies beginning operations in this country. They stand about on a parity. The first item in entering on a mining venture should be the sending out of the most experienced man available to verify the prospectors' reports and advise as to the proper manner in which to begin the development. This would undoubtedly save most of the disappointment met with and the greater part of the money now wasted.

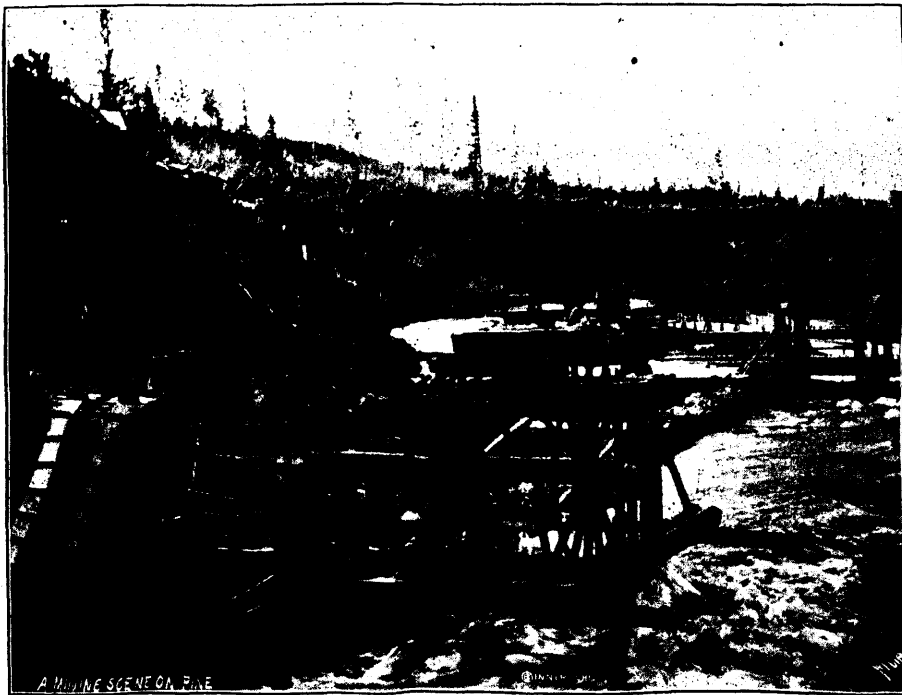
After the essential preliminary development has proved the existence of ore in paying quantity and quality, it is generally necessary to obtain capital for the purpose of opening up ore reserves and purchase of plant for mining and either shipping or local treatment. Here again is the same question: How much capital is required? The careful preparation of estimates for the work intended, for the plant required, and the disposal of the product is of first importance. Before these can be intelligently arrived at the intended work must be planned to the best advantage. One thousand dollars will produce more and better results, if applied in the best manner, than twice the amount applied otherwise. If all the expenditures which will be needed are not foreseen and provided for the mine will come to a stop and be financially a failure, no matter how rich the ore, or how much there may be of it. This is the case with more than one promising mine on this Coast at the present moment, some of which have even made successful shipments before coming to the end of their inadequate capital. Frequent expert sampling and assaying or otherwise testing the ore is another direction in which much false economy is practised. Very few assayers can properly sample a mine, let alone the miners, the foremen, or the financial manager. This work is most necessary if the business of developing the mine is to be carried

on with proper regard for results. A visit of a competent man once a month to a property being opened with any energy is the least that should be entertained, or, to put it another way, one month's expenses is the maximum which should be entered upon without the strictest checking. Failure to attend to this is the poorest kind of economy as it militates against success both ways. Work is carried on where it is productive of no result of value, and opportunities to turn in a new direction with profit are lost. A constant study of the possible chances of utilizing the different products encountered also comes under this heading. It is not an easy thing to say what substance will turn up in developing a vein, other than the one expected and looked for. Again, unless the business is properly carried on the financial manager cannot tell what the different items of work are costing and so is at a loss to decide on the proper economics. What is true economy in one section may be false in another, but the purchase of the best advice available is invariably

to possess in its favor. In one or two instances, we are sorry to say, the Department, whose business it is to have the information requisite at its command, either could not or would not give any satisfaction to those making the enquiries.

We must protest against any Government bonusing arrangements as absolutely unnecessary. This industry can stand on its merits, and if it cannot Government props will not make it a success. All that capital asks for is that every facility should be given in seeking information as to suitable Government lands open for such purpose, with water power, timber, shipping facilities, and all other particulars that the Department should be capable of imparting for the benefit of the Province and its development. The statistics given below will give some idea of the raw material in sight.

Mr. George Johnson, Dominion statistician, who has compiled the statistical pamphlets for the Paris exposition, makes an interesting calculation based on the



MINING ON PINE CREEK, ATLIN.

true economy in the long run everywhere. Mining is the only form of investment known where the investor allows his money to be drawn with occasionally sending a valuator to report progress on his own private account. No matter what his confidence may be in a builder's integrity, unless it is a mining business which is being built with his capital, he will go and have a look at the progress of the work himself or employ a competent agent to go for him; when it is a mine that is being constructed he will too often accept the builders own statements, which is complimentary to mining men but is not businesslike.

#### WOOD PULP AND PAPER.

The pulp and paper industry, to which we have referred to in a previous issue, has an undoubted future when mills are established in this Province for its manufacture. Enquiries have been made direct to the Government of British Columbia as to locations suitable, and other advantages which we are supposed

Forestry Reports of 1894. It is estimated that from 38 to 40 per cent. of Canadian territory consists of woodland and forests. That gives a forest area of 1,400,000 square miles, and if half of that is spruce we have about 450,000,000 acres of pulp wood in Canada. By the present method of manufacturing news paper, a cord of spruce wood, or 650 feet board measure, will make half a ton of sulphate, or one ton of ground pulp. Newspaper stock is made up of 20 per cent. of the former and 80 per cent. of the latter. It is estimated that an acre of spruce contains on an average about 7,000 feet board measure, which would make about five and a half tons of sulphate or eleven tons of ground pulp. If the production of ground pulp be estimated at ten tons to the acre there is the incomprehensible amount of four billion and a half tons of pulp in sight in Canada. This is below the estimate of Dr. Bell, of the Geological Survey, who places the area of the northern forests of Canada at 1,657,600,000 acres. If half of this is spruce it would yield eight and a quarter billion tons of ground pulp. Great Britain and the

United States consume yearly 900,000 tons of wood pulp, which is the product of 90,000 acres of spruce. If the entire amount were taken from Canada it would take 50 years to exhaust the present supply, according to the most conservative estimate. But as spruce reproduces itself to the size best adapted for pulp manufacture in thirty years the problem of exhaustion is evidently in the remote future.

### THE DAWSON ASSAY OFFICE.

#### NOT AN UNMIXED BLESSING.

Concerning the establishment of an assay office at Dawson, the *Seattle Post-Intelligencer* of the 1st inst., says:—

"It is announced from Ottawa that the Canadian Government proposes to abolish the present royalty on Klondike gold, and to establish a Government assay office in the Klondike, with a compulsory charge of three per cent. on all gold, whether presented to the assay office for sale or exported from the country in the form in which it comes from the mine. The object of the latter provision, of course, is to prevent any portion of the Klondike gold from going direct to the United States assay offices and mints. The time is opportune for the abolition of the royalty. The poorer miners have been pretty well frozen out. The men who have been working on lays have discovered that there is little to be made in that way, after the claim owner has taken his share and the royalty had been paid. The bulk of the mining in the Klondike hereafter will be done by the claim owners who have already acquired large wealth, or by the rich corporations which have acquired many of the claims; while those who have not command of capital must be content to work for wages. A "cinch" policy, against which the individual miner of limited means could do nothing but feebly protest, will not be enforced against the wealthy corporations, the stock of which is largely held in Eastern Canada, where men have votes, as they do not have in Dawson; hence the grab game of the Canadian authorities has to end, or at least to take a new form.

"The establishment of an assay office at Dawson will enable the Government to collect a handsome revenue, under the guise of an assay charge; and if the office is conducted as others have been in the Yukon, will rapidly enrich the officials. The poorer miner will, of course, have to take the assay which the Government officials furnish him, while the wealthy ones, who can afford to have check assays made, will receive liberal treatment. Of course, when the new office is established, a large share of the Dawson gold which has heretofore gone to the Seattle assay office will cease to come this way. Its place, however, will be made good by the gold from the new fields of Alaska, which have been and which will hereafter be developed largely by the practical miners driven from the Canadian Yukon by the abuses of the Canadian Government. There is one advantage to the Alaskan miner: his gold is worth three per cent. more than it would be on the Canadian side of the line, for this Government charges nothing for its services in assaying or minting gold."

We are inclined to believe there is more than a spice of truth in what the S. P.-I. advances. Officialism and corruption are synonymous in the North, unfortunately. Yet we wonder why the country does not progress!

### MYSTERIES OF THE KLONDIKE.

Far up Forty-Mile River, several years ago, a party of miners came upon a fissure in the frozen earth while pushing a tunnel in their mine. They tried to explore the bottom, says Joaquin Miller in *Frank Leslie's Monthly*, but they found it bottomless, at least as far as they went. The earth had cracked open here, as any very warm pot of earth or piece of clay will crack open from too sudden cooling. You think this one isolated case doubtful evidence that the warm earth suddenly was made cold and so cracked open as if it had been an earthen pot? But it is not an isolated case at all. At this very hour bold men are trying to find the crack or fissure in the earth at the lower end of the famous Berry claims at El Dorado.

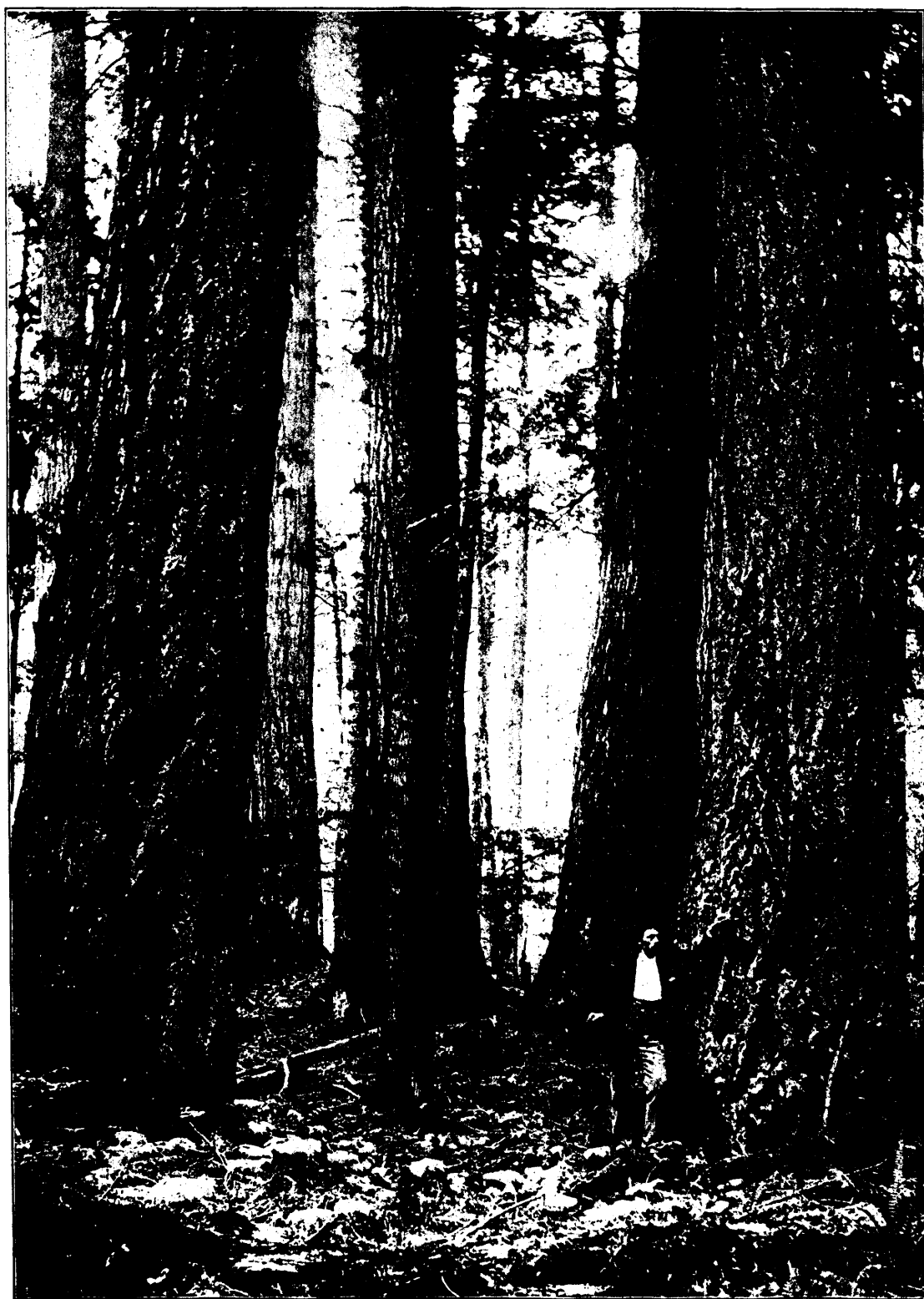
The miners there are sinking a hole for the purpose of hoisting dirt up from the pay-streak below the muck or black ice. They went down through the black muck or ice ten feet, twenty feet. To their amazement they found no gravel, nothing but inky ice, and now and then a stratum of sand, debris, dirt of all sorts, such as might sift in and filter down, as the ages went on, from spring floods or melting ice that would naturally find their way into an open crack in the earth, and these tons of ice.

The men went down, down, and down, forty feet, sixty feet, eighty feet, ninety feet. No bottom or sign of bottom. This is many times the deepest hole ever made in this northern country. And yet the bold miners, urged on not now with a hope of gain, but only a laudable curiosity to know what may be revealed, keep on and on. All El Dorado, Bonanza, Dawson, everybody, wonders and wonders. Yet there can be but one answer. It is a fissure in the earth, a crack in the earth's crust, made when this North Pole end of the earth turned suddenly from hot to cold.

Of course, we have had lots of jokes on the subject. One man, an Irishman, in trying to explain the thing, said it was all simple enough; that the earth was dropped on the ground and cracked when it was being made. Another has said that maybe the earth was laid by the side of the road to dry, and an Irishman ran his wheelbarrow against the end of it and cracked it. Ay, these are some of the things that men talk about in their Klondike cabins as the long nights creep slowly by. Of course there are theories, some wild, fantastic, almost terrible; but I have set down only that which seems to my unscientific mind as reasonable and backed by common sense.

As before said, no verdict has yet been arrived at as to how, when, and in the hands of what great forces the gold was laid in little yellow streaks, so, regularly along the beds of streams under the inky lakes of the deluge, although many and many a theory has been advanced. But when these quiet, thinking men of the Klondike cabins do reach a verdict, if ever, or are even half as certain one way or the other on the subject as they are now that here was once the deluge, the awful flood of the old Bible days with all its terrors, I shall be happy to tell you their conclusions, and by what route of reasoning they arrive at them.

Naturally, this theme has revived other subjects along the same line. Where was Eden? Where is that river "the gold whereof was good"? "Unto Adam also and to his wife did the Lord God make coats of skins, and clothed them." Yonder stand the poor trembling people, clothed in skins of wild beasts, as if but now expelled from Paradise. Yonder flashes the flaming sword which turns every way to guard the tree of life and the gates of Eden all through these icy nights



FOREST OF DOUGLAS FIR, VANCOUVER ISLAND.



of endless darkness. Maybe over yonder is evidence of Eden, as here is evidence of the deluge, for surely yonder northern light is the flaming sword that turns continually every way.

**SPOKANE EXPOSITION.**

We have received an important communication from the Spokane Industrial Exposition, through their worthy and energetic secretary and manager, who is also secretary of the Chamber of Commerce, announcing that the seventh annual carnival and exposition of the products and resources of the North-West, will be opened on the 2nd of October next, closing on the 16th October. That it will be an object lesson goes without saying, and the value of such representative enterprises cannot be overestimated. Spokane is nothing, if not enterprising.

The mining department will have especial attention, and British Columbia camps will be well to the front, also the Northern camps generally; a record display is anticipated. Several big prizes are offered for the best exhibits of fruits, cereals, grasses and vegetables, as also in connection with manufacturing interests.

We wish the management the success it deserves and predict a grand result.

**GREENWOOD BOARD OF TRADE.**

The Greenwood Board of Trade has issued its Report for the past year and which we are pleased to acknowledge.

We regret that we can only give it a cursory glance. The report, however, cannot be other than encouraging, since both the young Metropolis of the Boundary together with the mining camps have leaped into fame within the short period of five years, developing mining and the general mercantile possibilities most satisfactorily and therefore prosperously. The British Columbia Copper Company's smelter, now approaching completion, is in immediate proximity to the town. It is the terminus of the Columbia and Western branch of the C. P. R. system. Stage lines run to the Greenwood mining camps, Fairview, Similkameen and Okanagan camps, etc.

We herewith append a summary of development work done in the mining camps around Greenwood:

DEADWOOD CAMP.			
Name of Mine.	Sinking and Raising.	Drifting and Cross-cutting.	Total Feet.
Mother Lode	730	2965	3695
Sunset and Crown Silver	306	1700	2006
Morrison	200	800	1000
Buckhorn	327	510	837
Ah There and Greyhound	80	45	145
Greyhound	60	25	85
Great Hopes	75	95	170
Margurite	111	68	179
D. H. and Gold Bug group	320	454	774
	2209	6602	8871

There are six steam power plants in Deadwood camp. The Mother Lode has two 60 h. p. boilers, one large and two small hoisting engines, a straight line air compressor, five machine drills, steam pumps, electric light plant, safety cage and other mine equipment. Preparation is now being made to install at this mine a much larger plant, including two 100 h. p. boilers, a Corliss air compressor of 30 to 40 drills capacity, two iron safety platform cages and all requisite accessories. The Sunset plant includes two 80 h. p. boilers, half of a 20-drill duplex air compressor,

ten machine drills, one large and one small hoisting engine, safety cage, etc. The Buckhorn has an 80 h. p. boiler, half of a 10-drill duplex air compressor, 20 h. p. hoisting engine, etc. The three remaining plants are smaller.

GREENWOOD CAMP.			
Name of Property.	Sinking and Raising.	Drifting and Cross-cutting.	Total Feet.
Old Ironsides	620	2242	2862
Knob Hill	528	2561	3089
Victoria	—	2460	2460
Grey Eagle	—	330	330
Brooklyn	340	1710	2050
Stenwinder	355	165	490
Idaho	50	—	50
Rawhide	—	400	400
Snowshoe	380	1100	1480
Gold Drop	395	1510	1900
War Eagle	242	190	432
	2800	12668	15548

SUMMIT CAMP.			
B. C.	621	3103	3724
Oro Denora	200	300	700
Maple Leaf	225	450	675
Emma	124	25	149
R. Bell	170	147	317
Mountain View	60	158	218
	1400	4383	5783

WELLINGTON CAMP.			
Athelstan	165	230	445
Winnipeg	655	2342	2997
Golden Crown	461	1882	2343
Hartford	167	120	287
	1448	4624	6072

CENTRAL CAMP.			
City of Paris	720	4280	5000
Majestic	—	1150	1150
No. 7	209	600	809
Norfolk	140	150	290
Mabel and Oro group	175	—	175
	1244	6180	7424

LONG LAKE CAMP.			
Jewel and Denero Grande	798	1320	2118
North Star	94	230	324
Enterprise	150	—	150
Lakeside	80	55	105
	1092	1605	2697

Amount invested in mines and smelters surrounding Greenwood makes a grand total of \$4,040,000. And we must say very good for a youngster!

**NORTHERN MINERS' VISCISITUDES.**

A dispatch from Dawson says: The life of the prospector and miner, and those who follow these pathfinder from camp to camp, is a strange one and full of vicissitudes and goes far to justify an undercurrent of popular belief that some individuals are born beneath the potent influence of a bright and fortunate star, while others struggle on under a gleaming orb of adversity. In no other way can be accounted those singular strokes of fortune or mischance that befall men in mining camps. Without a sign to guide him, except some restless impulse he cannot understand, one man will stake a fortune in a day, while his fellow, equally endowed with health and strength and mental attributes, will spend years of his life in a bootless pursuit of the golden fleece.

When Jason overcame the dragon at the foot of an oak he proved himself the first lucky prospector, but

for the unfortunates who were before and who came after him even legend has reserved no space—hence it is that every mining camp glitters with the tales of those who were fortunate in the eyes of men, but is silent concerning the vast majority who had nothing to tell except “the short and simple annals of the poor.” Never was this better illustrated than in the feverish reports spread broadcast over the northern land concerning the new camps that are just now exciting the attention of the mining world.

Men seem poised upon the pivotal point of uncertainty; one day the Koyukuk, then the Tanana, then Stewart, White River, Indian River, or some mythical quartz ledge that is literally gleaming with gold, commands their attention; the next, it is all forgotten for some fabulous strike in a new quarter. The strange stories of those who strike it rich are heard; the other stories belong to the aftermath when the nervous force is spent and a period of reflection comes on.

This, in a way, may be said to be a period of reflection in Dawson. Those who flocked to Nome, jeering the sluggards they left behind, are beginning to return and the tales they tell indicate an overcrowded condition far beyond the producing ability of the camp to maintain it. They could not earn their salt in Nome, and paint shadowy pictures of a multitude of starving men begging their passage back to the States on the ocean steamers. Their stories can be only half true, for your miner is an extremist in all things—he is either soaring in the loftiest heights of heaven or the lowest depths, and is therefore almost incapable of forming a correct or even a conservative estimate of affairs such as an ordinary business man would form. An echo responds to his note of woe and the Koyukuk prospectors begin to file back by twos and by threes, telling equally harrowing tales of suffering and a worthless camp. But the cheery cry of “All’s well” comes from Tanana and men are glad again—happy to forget that there is such a thing as a camp without a paystreak and eager to listen to the gilded tales from the new Pactolus.—*Ex.*

### Notes.

A three-hundred dollar nugget was recently found on No. 14 below on Pine Creek, Athl. The claim is owned by Mrs. Morris.

A report is current to the effect that the B. C. Mine, in Summit camp, has been sold to a Montreal syndicate, amongst whom are a number of C. P. R. officials. The price is said to be \$2,000,000.

The Manitoba Government's August Crop Bulletin shows that 348,819 acres of wheat, 143,842 acres of oats and 23,414 acres of barley have been completely destroyed by drought, winds, etc. The remaining crop of wheat, 1,457,396 acres, will give an estimated yield of  $7\frac{1}{2}$  bushels per acre or a total of 10,938,613 bushels for the Province.

She s.s. *Humboldt* arrived at Seattle from the North on August 6th, with 31 passengers and \$200,000 in treasure. The Glacier Bay placer strike is still attracting many people to the new discoveries.

The *Tees* arrived at Victoria, on August 10th, with a big sum in gold. The purser had \$200,000.

The *City of Seattle* arrived down from Skagway on Aug. 14th, with \$200,000 in gold dust from Dawson.

It is proposed to enlarge the Trail Smelter to a 1000 tons daily capacity.

Le Roi No. 2 made its first shipment of ore to Northport Smelter on the 16th inst., consisting of four carloads from No. 1.

The *White Horse Tribune*, of August 4th, says:—The Canadian Bank of Commerce has been doing an active business in the shipment of gold recently. On the 25th of last month eleven boxes, containing in all \$800,000, passed through, and these were followed by seven more last week, containing \$455,000. Twenty boxes, capable of holding \$1,500,000, passed through en route to Dawson last Wednesday and these will immediately be sent back. The Bank of Commerce has now more than two millions in dust in Dawson awaiting shipment.

The most interesting mining news brought by the *Cutch* is in connection with the reported discovery of coal beds on the Dalton Trail, not far from White Horse. The discovery was made by Gustave Cervals, who had been connected with the coal business at Anthracite and other places. He brought a sack of samples to White Horse recently, but no further investigation had been made to substantiate his statements.

Manager Godfrey, of the Bank of British North America, and manager Morris, of the Canadian Bank of Commerce, Vancouver, have just returned from a trip to Dawson and the Creeks. They speak in the highest terms of the Klondike and consider the gold production a wonder. Business is flourishing and money, it goes without saying, plentiful.

The Canadian Bank of Commerce and the Bank of B. N. A. are the largest shippers of gold from the Northern diggings.

It is reported that the Hon. Mr. Turner is to represent British Columbia in London, at the B. C. Agency about to be resuscitated there. What a feather in the cap of Morris Catton, and what a guileless influence this will have on the British public!

The Governor-General and Lady Minto with their suite left Victoria, B. C., August 4th, on a cruise in northern waters, embarking on the *Quadra* at 5 p.m. Owing to the lack of sufficient accommodation, two of the distinguished visitors' children and some of the servants will not take the trip on the *Quadra*, but will remain in Victoria.

The party will probably be away about five weeks. The trip up the coast to Skagway will be made in leisurely fashion, all the points of interest en route being observed, and stops being made at the principal places. From Skagway the journey to Dawson will be continued by special train and steamer. A stay of a few days will be made at the Klondike capital, where the far-famed placer gold mines will be examined.

On their return to Victoria, the Governor-General and party will make a stay of about two weeks. The length of the return visit will afford an opportunity for

an adequate demonstration on the part of the citizens of Victoria, and also allow Lord and Lady Minto to entertain in the manner which they had intended had not the first portion of their visit been marred by the receipt of the sad news of the death of Her Majesty's son.

## The B. C. Mining Exchange and Investor's Guide.

Is published monthly as a Guide to Investors generally, to whose interests it devotes itself.

MANAGING EDITOR . . . T. R. HARDIMAN.

**CORRESPONDENTS.**—All correspondence should be addressed to the Editor, B. C. Mining Exchange, and any correspondents desiring advice or information in reference to investments, we will reply to, free of charge, provided they are annual Subscribers.

**REMITTANCES** should be made by P. O. Order or certified check and addressed, British Columbia Mining Exchange and Investors' Guide, 612 Cordova Street, Vancouver, B. C.

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THE B. C. MINING EXCHANGE AND INVESTORS' Guide circulates throughout the Empire and the U. S. We shall always be happy to give the fullest information in our power to those correspondents who are subscribers. Lately, however, we have had so many enquiries from non-subscribers on matters British Columbian, that to reply to all takes both time and money, and, while always ready to oblige correspondents as far as possible, we shall in future expect non-subscribers to remit sufficient to cover postage.

The subscription is \$2.00 yearly, postage free.

Further, we would say that our office is at the disposal of subscribers, for the use of books, maps, and general reference in connection with British Columbia industries, mining or otherwise.

We extend a cordial welcome to all strangers who may seek to investigate our possibilities. We extend to all Mining men the freedom of our office when visiting Vancouver, and request them to make it their headquarters. 612 Cordova Street West.

### Mining News.

#### ATLIN.

A despatch from Atlin, dated July 27th, says: A fine nugget was taken out of J. D. Harrigan's claim on Pine creek, about No 9 below Discovery, weighing just 30 ounces, a splendid specimen, all gold. The principal hydraulic companies report development work as very satisfactory and big results may be looked for next year.

We hear that an English Company has bonded quite a few copper claims in this camp and will spend a few thousand to prove them.

If they are encouraging it will mean a big thing for the camp as the syndicate operating is one of the richest Copper Companies in existence.

Hydraulicing is being carried on extensively, both on Willow and Boulder Creeks. The White Pass Co. is said to be working on Wright Creek.

Mostyn Williams is managing a property on Birch Creek for an English Company. Placer is said to be yielding well.

#### BARKERVILLE.

(FROM OUR OWN CORRESPONDENT.)

The New York Syndicate, operating on Wolf Creek, under the management of Col. H. B. Beecher, has weakened and the manager is sole owner. People who lack "sand" to put a mine through the development stage should not engage in the business; in this instance the person deserving congratulation

is the manager. He is taking less than the ordinary risk, with the probability of opening a very profitable mine.

The Cariboo Gold Fields, Limited, is now under the management of Wm. Thompson, locally known as "Coolgardie" Thompson. The hydraulic elevator will be abandoned and bucket-ladder dredging machinery substituted.

August McPherson and Simon Reid are opening a hydraulic on Williams Creek above Richfields.

The property of the Colonial Mines Development Co., Ltd., has been attached and manager Hamshaw is now in the East in search of money.

The Premier-Cariboo Co. is driving a drain tunnel on Peters Creek, which is expected to reach bed-rock and pay at about 1600 feet.

A telegram from Senator R. H. Campbell says rich gravel has been struck in the shaft of the Miocene Co. at Horsefly.

#### BOUNDARY.

The directors of the Cariboo McKinney Gold Mining company paid a dividend of 1½ per cent for the quarter ending July 3rd. The gross earnings of the company are about \$76,000 for the three months, leaving a large surplus in the treasury.

A rich strike of pyrrhotite ore has been struck on the Withe group of claims situate between South Deadwood and Smith's camp. The ledge is about four feet in width carrying good values in copper.

While drifting on the tunnel at the 250-foot level on the City of Paris, Central camp, a body of ore was encountered which gave assays of \$1,144.98. This was not from a picked specimen, either.

Superintendent Davis of the Rambler group in Summit camp reports having gone through a four-foot stringer of rich ore in the crosscut from the 112-foot level. The crosscut is being run to tap the main ledge, and it was not expected that an ore body would be encountered for 60 feet, but this lead was run into at a distance of 15 feet from the shaft.

#### KASLO.

A despatch to *The Nelson Tribune* says: Pierre Morris, the representative of a rich French syndicate, has arrived from Paris to inspect several properties which have either been bonded or acquired this season by S. Schwander and others of this city. Among the properties which he will inspect is the Cork, one of the claims on the south fork of Kaslo river, upon which a big strike was made last week. Mr. Schwander has just returned from a visit of inspection to the property. He states that the further the men go in the richer and purer becomes the ore. He intends to fix up quite a camp at the Cork. Already there are ten men at work. Bunk houses, cabins and other buildings are to be erected at once. The coming of Mr. Morris has some importance for two distinct French syndicates are now operating to the south fork.

#### KLONDIKE.

##### RECORD MONTH FOR GOLD.

The deposits of gold dust and bullion in the Seattle assay office during the month of July, 1900, will aggregate in value not less than \$6,250,000. It is the biggest month's business in the history of the office—very much increased by returns from the Canadian mines in the north.

While the exact figures for the month's receipts in ounces and values are not yet obtainable, the records are sufficiently up to date to show that in the first month of the fiscal year gold, mostly from the Alaskan and Klondike mines, has been received to the immense value of six and a quarter millions. The number of individual deposits is 1,300. The average is nearly \$5,000 to the depositor.

July, 1900, is not only the record month in the business of the Seattle assay office, but the receipts for this one month alone are only \$250,000 less than for the entire fiscal year from July 1, 1898, to June 30, 1899; and nearly half as much as was received during the entire fiscal year from July 1, 1899, to June 30, 1900.

The receipts for those fiscal years and for this month may be compared. The figures follow:

July 1, 1898, to June 30, 1899	\$ 6,504,952.64
July 1, 1899, to June 30, 1900	13,630,326.58
July 1, 1900, to July 31, 1900 (one month)	6,250,000.00

Total receipts of the office to date \$26,385,279.22

The receipts for the past month alone are thus shown to exceed one-fourth of the value of the entire receipts of the office during something more than two years of its existence.

July has been the month of heaviest receipts each year. The office was not opened for business until July 15, 1898, so that

in that year there is but a half month to credit. The receipts for the month of each year have been as follows:

July, 1898 .....	\$ 646,405.59
July, 1899 .....	4,250,000.00
July, 1900 .....	6,250,000.00
Total .....	\$11,146,405.59

Which shows that the months of July for three years are to be credited with approximately 40 per cent. of the entire value of gold deposits in the Seattle office.

This year the record holding month of July will have a close rival in the month of August. Much gold is yet to come from the summer clean-up in the Klondike, as the work was delayed by the late spring and lack of water in the creeks. The lowest estimate of the clean-up in the Klondike this year is \$20,000,000. The first consignments came in May, but were very small; in June \$1,137,756.41 in value was received—not more than \$8,000,000 in all thus far from the Klondike this season. The Canadian Bank of Commerce alone has over \$2,000,000 now on the way, which, with the numerous other shipments known to be en route, will bring the total for August fully equal to that of July, if not in excess.

OKANAGAN.

The news from the mines of the Okanagan Free Gold Mines Limited, continues to be of an encouraging character. The explorations at depth, which have been conducted under the direction of the best advice obtainable, have been satisfactory, and the outlook now is that the rich ore shoot from which so much gold was taken near the surface has been found or will be shortly at a depth of 200 feet from the surface. This means a great deal of Okanagan property, as when the ore shoot which they are now breaking into is opened up, which can now be done in a very short time, it means that the mill can be kept running for considerably over a year on ore of a high grade. While this is being done the pay shoot can be sunk on and new reserves opened which will be milled when that which is found above the 200-foot level is exhausted. The news which comes from Mr. Finley, the superintendent, is the most cheering that has been received from the Okanagan mine for a long time. Superintendent Finley, writing, under date of July 24th, to the directors of the Okanagan mines, says: "The crosscut in the big ledge on the 200-foot level from the raise on the foot-wall is in between 50 and 60 feet, and still we are not through to the hanging wall. Bunches of high grade ore, containing the tellerium and all the conditions found in the pay ore above, occur more frequently, which I consider to be very encouraging, I expect to find the shoot of pay ore on this level almost daily, as all the indications, point to it. The weather here is something awful for heat and drouth. The dust is six inches deep, and we are having an awful time of it."

ROSSLAND.

Messrs. Gooderham & Blackstock, the whiskey men who control the War Eagle and Centre Star Companies, throw doubt on any likelihood of amalgamation. They cannot state definitely when the mines will resume shipment, and as regards a rumour of smelter purchase by their syndicate, declare that so long as they are, as now, well treated at Trail in regard to freight and smelter charges, on low grade ore, they will entertain no thought of setting up a smelter in connection with their Rossland properties.

Water is causing some trouble at the Velvet, as to which the *Rossland Miner* says: "Quite recently manager Morrish, of the Velvet, began to make preparations for continuing the shaft from the 300 to the 400-foot level. The water, however, ran in so fast that he was compelled for the time being to cease operations on the extension of the shaft. It ran in at the rate of 80 gallons to the minute. Work was then resumed on the main adit, in order to tap the workings at depth and in this way secure an outlet for the water. The main adit is in 450 feet, and should soon strike the ledge. On the 300-foot level the north drift has been driven along the ledge for a distance of 207 feet, and the south drift for 90 feet. An upraise has now been made from the 300 to the 200-foot level. The road from Northport to the Velvet will be finished in about five weeks. In the meanwhile a 15-drill compressor has been ordered from England, and will probably be here by the time the road is in condition to haul it over. The compressor will be driven by steam power.

A few days since the engineers at the Jose and No. 1 shafts of the Le Roi No. 2 Mining Co., Rossland, went on strike because they were required to work 12 hour shifts instead eight hours as heretofore. The Sheriff has taken possession of the plant of the Lilly May mine, the pioneer location of the Trail camp, and is offering it for sale under execution to settle claims amounting to \$844.52. The Lilly May has a remarkable history.

It was capitalized at \$5,000,000 and comprised holdings of between 600 and 700 acres on Deer Park Mountain in the south belt. The promotor of the company is said to have made a large fortune out of his operations. In the city of Halifax alone it is reported that his net earnings amounted to over \$12,000, and that he systematically and effectively worked every town in the country. People are now beginning to realize that every hole is not a mine, and that many of those who own such holes are, as Mark Twain would say, capable even of falsehood.

Preparations are being made to ship from the Le Roi No. 2 mines. The gravity tramway has been tested with ton and a half cars and runs well and the ore bins at the railroad are full of ore. The railroad spur is complete and in use.

The big hoist for the combination shaft of the Le Roi is expected to be shipped from Chicago some time soon. It will occupy 15 car loads, almost enough for a train by itself. All is ready for it except the head frame, which is making good progress.

A contract has been let for two 250-horse power boilers to be added to the Black Bear plant, which will make the capacity 2,000 horse power.

Ore shipments for the year and up to the week ending 11th August, 1900:—

	Week Tons	Year Tons
Le Roi.....	5,796	80,182
War Eagle.....	—	10,603
Centre Star.....	—	7,017
Iron Mask.....	—	1,435
Evening Star.....	—	357
I. X. L.....	21	340
Monte Christo.....	—	273
Iron Colt.....	30	80
Giant.....	—	42
	5,847	100,324

SIMILKAMEEN.

The prospects in this camp are excellent.

The Sopper Farm and Helen Gardiner are looking well and seem to be the makings of big mines.

Kennedy Mountain claims are coming to the front with great rapidity and will soon be attracting the attention of the outside world.

Canada Mountain, which is just across the Similkameen river, has got some splendid showings, also Roach river, Granite and Boulder creeks.

The Sunset is a wonder, being now down 200 feet, all in solid ore; also a crosscut from the 150-foot level which is in about 65 feet in splendid ore.

Over in the neighbourhood of Nicola Lake, the Big Sue and several other properties are showing enormous bodies of ore and giving the highest kind of high assays.

The Lost Horse, which is about one half-mile from the Sunset, has one of the best showings seen in that country, the ledge measuring between walls 80 feet, out of which they have taken some splendid copper and gold-bearing ores. Mr. Stevenson has two shifts working steadily, and with his knowledge of mining is sure to make the Lost Horse one of the great mines of British Columbia.

SLOCAN.

Development in the Last Chance is being pushed with vigor. Shipments were stopped by the fire, but it is expected that the mine will be in a position to resume in a short time.

It is said that the Washington, on Payne mountain, will resume work shortly. In the past this property has shipped \$300,000 worth of ore, and it will make a big mine. It is owned by J. L. Rettallack, W. E. Mann and A. E. Jefferson.

F. P. O'Neill, of Spokane, one of the original locators of the Ruth, is working in Chicago, near the Freddie Lee. He is principal owner of the claim and told me that it was looking well.

Lorenzo Alexander, one of the original locators of the R. E. Lee, has returned from England and will develop the claim in the interests of an English syndicate. Work will be started in a few days.

The Molly Gibson is shipping 40 tons of ore a week.

The ten-stamp mill at the Chapleau is to be built at once.

A 90-foot tunnel is being driven on the Condor group.

Last week the Wakefield shipped 80 tons and the Vancouver 20 tons to the Trail smelter. Forty tons of the Wakefield shipment were concentrates.

At their annual meeting the Last Chance Company elected the following officers: President, Dr. Hindryx; vice-president,

B. Wilson; secretary, D. Heap; superintendent, John O'Regan. R. P. Rithet, of Victoria, took a look at the Arlington. He is one of the principal stockholders.

Important mines of the Nelson and Slovan districts are now shipping ore to the Hall Mines Smelter, which will probably be in full blast early this week. Among the shippers are the Queen Bess, Ymir, Molly Gibson, Payne, Arlington, North Star and Fern.

The Slovan ore and concentrate shipments for July amounted to 3,315 tons, the Payne taking first place as usual with the Whitewater concentrates making the output of that mine a very good second. The following are the details of the shipments made from the various properties:

	Tons.
Payne .....	1,090
Whitewater .....	505
Idaho Mines .....	499
Last Chance .....	231
Wakefield .....	220
Slovan Star .....	120
Queen Bess .....	108
Ruth .....	101
Enterprise .....	100
Rambler .....	85
Bosun .....	60
Vancouver .....	60
Hewett .....	40
American Boy .....	40
Soho .....	22
Vulture .....	21
Wilson .....	7
Hampton .....	3
Hillside .....	3
Total Tons .....	3,315

As the whole Slovan output of last year was only 21,507 tons, the shipments of last month show that everything is well in hand to make the district's output this year considerably exceed that of last.

The *Kootenian* reports an alleged find of rich copper-gold near Kaslo, but as the discoverer has the reputation of being very much of a "boomer" the news calls for proof by results.

The Ivanhoe is giving promise of out-distancing even the Payne. The vein was recently struck at the 800-foot level and it carries about five feet of ore, two feet of which is clear. The Ivanhoe concentrator, which is about half a mile down the creek from Sardon, is well on its way to completion and the tramway should be finished in a few weeks.

The Payne is looking remarkably well. Over 1,100 tons of clean ore was shipped in July, and the development under way will enable it to increase this in a short time. The principal work at present is the driving of a crosscut tunnel from the McGuigan side of the mountain to tap the vein several hundred feet lower than the present lowest workings. The tunnel is in about 450 feet, and it will have to run about 400 feet further before reaching the ledge. A lot of development work is going on in other parts of the mine. About 120 men are employed.

The strike recently reported in the Whitewater is an important one. Over three feet of clean ore is shown, and the mine is shipping about a carload a day of excellent ore.

The well known Wonderful has been leased to parties represented by E. A. Brown, the engineer of Sandon, and L. B. Barker of Spokane. I understand that the terms of the lease are not yet quite settled, but that they will be in a day or two, and that work will then be started at once.

#### TEXADA ISLAND.

##### COPPER QUEEN MINE.

Surface drifting on the new vein has been discontinued and a stope started on the vein at the 60 foot level, which is in good ore, rifts will be run out east and west from the old shaft, the ore being hoisted from the chutes on the 200 foot level.

On the 180 foot level the stope is being extended, the vein continuing on the face. A drift east on this vein has been started from the shaft at which point the vein was offset by a diorite dyke, along which the felsite continues.

Stoping on the 200 foot level has been continued in good ore. Some time ago a diorite dyke was encountered running at right angles to the drift.

On the 500 foot level the raise for a stope is up 30 feet and timbered. This will be connected with the winze from the 400 foot level. The ore showing in the raise is bornite about two feet wide on the foot wall and one foot on the hanging wall.

#### VANCOUVER ISLAND.

Leonora Mine at Mount Sicker, V. I., is shipping 40 tons of ore daily. It is said they are about to build seven miles of narrow gauge railway to connect with the E. and N. Railway, and thus facilitate the shipment of their ore. It is expected that it will be used also by the Tye Co., as also other Mount Sicker shippers.

#### YMIR.

A cable from Nelson to the head office in London gives the May output as follows: 2,990 tons milled, producing 1,688 ozs. of bullion, 161 tons of concentrates and no smelting ore. The total receipts for the month are \$23,782; expenses, \$9,125. During June the mill was not running steady, and a small output may be looked for, but this month the whole 40 new stamps and 20 of the old stamps have been running steady. In a day or two the 80 stamps will all be dropping and a good clean-up may be expected.

Word has been received in Ymir that the Dundee mine had at last been sold and a portion of the purchase price deposited in the treasury for the development of the property. This may be true, but as yet no positive information from the officials of the company has been received. The *Nelson Tribune* prints the following article: E. Nelson Fell, superintendent of the Athabasca, examined the Dundee last week on behalf of the London syndicate which intends to purchase a control of the Dundee Mining Company. It is now confidently expected that the deal will be closed in a short time. Late developments on the Dundee are of the most favorable character. The ledge has been opened on the surface for a distance of 1,480 feet, and is ten feet wide from end to end. It is perhaps the longest ore chute in that section. The main shaft has reached a depth of 300 feet, and there are large reserves of silver-lead ore ready for stopping as soon as active work is resumed.

The Bornite Bank is looking better than ever. J. R. Cranston, the managing director, visited the property a few days ago and reports that a six-foot lead has been found on the Flowing Bowl, one of the properties of the Bornite Bank group. The ore is a pyrite of copper and is of a pay grade. Work on the shaft continues, and it has now reached a depth of 85 feet. As soon as the shaft reaches 100 feet crosscutting will be commenced.

## Finance.

LONDON, ENG.

The prospectus of the huge cement combine, styled the Associated Portland Cement Manufacturers (1900) Limited, has been issued. Its object is to unite the leading Portland cement works in England and thus control 90 per cent. of the national production. The entire capital will be £8,000,000 (\$40,000,000), divided into ordinary and preference shares and debenture stock.

\*\*\*  
 Holders of the Transvaal 5 per cent. bonds are worried. Messrs. Rothschild have announced that the July coupon is to be defaulted upon no bullion having arrived to pay the \$312,500 necessary for a half-year interest. President Kruger's nomadic existence apparently interferes with a due regard for the feeling of bondholders of Transvaal Fives. Probably H. M. Government will take over the loan and convert it into a 4 per cent. denomination. It is of a total value of \$15,500,000 and was spent on public works and railways which will benefit the future colony.

\*\*\*  
 Opinion here is decidedly favorable to the Lord Chancellor's Bill for the admission of British Colonial inscribed stocks to the list of trustee investments. Canada is especially praised for the measure.

\*\*\*  
 Great Britain buys from Canada some £20,000,000 of her products per annum. Canada buys from Great Britain only some £7,000,000 per annum. Surely this can be improved upon on this side,

BANK AMALGAMATION.

We quote the following from a circular issued by the Bank of British Columbia to its shareholders, favoring amalgamation with the Canadian Bank of Commerce:—

The Canadian Bank of Commerce was established in 1867, and has an excellent business throughout Canada, well conducted and controlled by the management and board of directors in Toronto, is well supported by local influences, and has a progressive tendency. To complete their field and consolidate their business they propose in any case to open an office in London, and to extend to the territory now occupied by us both in British Columbia and California. Instead of doing so as strong competitors, it is proposed that the two banks be merged on fair and reasonable terms. Your present board of directors will continue as a local board in London of the Canadian Bank of Commerce, and your official staff is to be taken over on similar conditions to those they now occupy, and the officers will be entitled to the benefits of the Canadian Bank of Commerce Pension Fund on the same terms as apply to their own men.

By the terms of the agreement, holders of fully paid shares of £20 each in the Bank of British Columbia will be entitled for every three shares held to receive—

Four fully paid shares of \$50 each in the Canadian Bank of Commerce, which taken at \$72.50 per share = \$290	£59 11 9
And a cash payment of	6 8 3
	£66 0 0

It will thus be seen that the Shareholders in the Bank of British Columbia will receive the equivalent of £22 per share.



The past half year has been one of almost unprecedented prosperity for banks and discount houses. Four of the principal purely London banks show an aggregate profit for the half year of \$2,850,000, against \$1,735,000 for the first half of 1895, since which year there has been a continuous rise. Discount companies have the same tale to tell. Two of the largest, the National and the Union, show combined profit of \$535,000, against \$380,000 in 1894, since which year there has been a perpetual rise in their profits. During the last half year they have been able to borrow money from day to day at an average rate of 2 17-20 per cent. and use it for discounting bills at an average of 3 11-20 per cent. Naturally these were profitable times.

B. C. AND KLONDIKE QUOTATIONS.  
LONDON, ENG.

Alaska Goldfields	¾
British America Corporation	14-9
B. C. Development Assoct.	1 ½
Dominion Mining Development and Agency	½
Duncan Mines	¾
Enterprise	1 3-16
Hall Mines	1-6
Klondike Bonanza	½
Klondike Corporation	3-9
Klondike Consols	1 ¼
Le Roi	6 ¾
London and B. C. Goldfields	1 ¾
McDonald's Bonanza	¾
New Goldfields of B. C.	1-16
Nimrod	6
Queen Bess Proprietary	¾
Velvet	1 1-16
Whitewater Mines	¾
Ymir Gold Mines	1 ¾
Yukon Goldfields (new)	1

LATEST POINTS.—Bank Rate, 4 per cent. Open market rate three months bank bills, 3 per cent. Silver, 27 ¾ d. per oz. (bar) Standard. Copper, £74 per ton. Pig Iron, 68s. 7d. Tin, £134. Lead, £17 5s. Consols, 100 ¾. Canada Three per cent., 103. British Columbia Three per Cent. Inscribed stock, 94. Canadian Pacific Railway Shares, 96 ¼. Bank of British Columbia, 17 ½. Bank of British North America, 62. Bank of Montreal, 530. Hudson Bay, 22 ¾.

The Stock Markets.

LOCAL STOCK MARKET.

	PAR VALUE.	PRICE
Alberni Con	1 00	5 ½
Alberni Mountain Rose	1 00	5 ½
Athabasca	1 00	29
Big Three	1 00	2 ¼
Cariboo Hydraulic	5 00	\$1.30
Cariboo McKinney	1 00	95
Canadian Goldfields	—	7 ¼
Crow's Nest Coal	25 00	38.00
Dardanelles	1 00	3
Deer Park	1 00	—
Evening Star	1 00	9
Grand Forks of Bonanza	25	50
Hall Mines	1 00	—
Iron Colt	1 00	—
Iron Horse	1 00	—
Iron Mask	1 00	30
Knob Hill	1 00	60
Le Roi	£5	£6 ¾
Mineral Hill	1 00	05
Minnehaha	1 00	—
Monte Christo	1 00	3 ½
Montreal Goldfields	1 00	3 ½
Morrison	—	—
Noble Five	1 00	6
Novelty	1 00	03
Old Ironsides	1 00	75
Payne	1 00	95
Rambler Cariboo	1 00	24
Rathmullen	1 00	—
Slocan Star	50	—
St. Elmo	1 00	—
Van Anda	1 00	3
Victory-Triumph	1 00	02 ½
Virginia	1 00	—
Waterloo	10	3
War Eagle	1 00	1 52
White Bear	1 00	2
Winnipeg	1 00	8 ½

METAL MARKET.—Silver, 61 ¼. Copper, 16 ½. Tin, 35c. Lead, 3.97 ½.

Correspondence.

TO THE EDITOR.

The sense of my communication of last month was marred in an important particular. A certain sentence, re proposed Placer Act, should read: "If a placer grant has been unworked, or less than a fixed amount has been expended on it during the year, the property to be taxed on the valuation given by the owner; a tender of such valuation, through the proper Government official, by an intending purchaser *not subject to refusal*."

Your article, "B. C. Mining Laws," in July issue, is timely and valuable. The subject is of present, urgent importance and I hope the Legislature will take sensible action.

MINER.

We acknowledge the receipt of the following books and papers:—"Transactions of the Australian Institute of Mining Engineers," vol. VI.; also "Mines and Minerals," "Mining and Metallurgical Journal," "Mining Review," "Board of Trade Report," Greenwood, B. C.

Answers to Correspondents.

C. F., LONDON.—We believe, if you see the matter through, it will result satisfactorily. Everthing depends on capable, honest work and—essentially to success—funds.

SUD., ONT.—Yes; nickel has been found here and, latterly, word comes from the Interior that a high per centage has resulted from tests on certain ore located there.

W. M.—Undoubtedly; the indications are that B. C. will produce copper largely in the near future. The Province's possibilities in regard to copper ore are beyond doubt. The early stages of development are the most difficult to those holding, even especially good claims, since invariably they have not the means wherewith to develop the properties into mines. Hence the advantage lies with those who can help the owners through.



## EXPLOSIVES.

The following article is from a paper read before the Australian Institute of Mining Engineers, by Mr. J. R. Godfrey, A.I.M.E., on "Safety Appliances and Precautions Necessary in Mines." The character of this portion of the article quoted is sufficiently important to be interesting and valuable to those using explosives :

In spite of the quantity of explosives used in mining, in spite of the special instructions issued with every packet, in spite of the lessons taught by former accidents, it is a sad truth that injuries from dynamite and its kindred explosives continue to furnish about one-third of the total number of accidents for the year.

Nitro-glycerine and other high explosives are not dangerous so much by themselves and under normal conditions, as from the fact that they have to be exploded by percussion, by means of a detonator containing fulminate of mercury, which is a very sensitive medium. We have, therefore, these rules :

Never keep dynamite in the same box as the detonators.

Never clean a detonator with a hard substance, such as a pin, or even a straw, merely shake the sawdust out.

Never bite the cap on to the fuse, but use a pair of pliers.

When using powder, it is necessary to tamp very tightly, hence copper bars are allowed ; iron bars being prohibited as they omit sparks when struck on the side of the holes.

Many miners still cling to the superstition that dynamite must be tamped like powder, and, therefore, use a copper bar. This should be prohibited, it is not necessary, and is very dangerous, for if the bar slipped out of the man's hand when pushing the primer home, its falling weight is quite sufficient to explode the detonator. Hardwood sticks are all that are required and all that are permissible.

In all large mines, the dynamite stored underground should be placed in a specially constructed magazine, under the charge of one man. The detonators being in separate boxes well apart ; and a locked and cased lamp kept constantly burning ; anyone taking a naked light into the magazine should be dismissed, for if dynamite catches fire and burns away instead of exploding, it generates excessive quantities of carbonic acid gas, and carbon monoxide—the one asphyxiates, the other is a deadly blood poison ; and it may destroy every man in the level.

Proper cases should be supplied for carrying the dynamite from the magazine to the working places, and contractors' boxes should have a separate compartment for the explosive, the detonators, and the fuse, and be provided with a strong hinged lid.

In charging holes underground, explosives should never be mixed ; it is absolutely useless since the quicker explosive will do the work, and it may be dangerous by setting up chemical reactions and generating deadly gases, which would not be formed in excessive quantities by the one explosive. Never drill out missed holes, never go back to missed charges until some time has elapsed and never drill into old sockets, as a plug may only partially explode, or may coat the hole with a layer of active explosive. Neglect of these simple and obvious rules has erected a city of tombstones over the bodies of the hapless and foolish victims.

When firing holes, all approaches to the place should be carefully guarded to prevent anyone from inadvertently approaching.

When firing charges there are three methods adopted—by snuffs, by matches, and by spitting the fuse. The most common and most dangerous is to spit the fuse ; even the best fuses may have a bad coil ; occasionally where the powder is unevenly laid, the fuse will then "run" and explode the charge prematurely. The usual speed of a fuse is two feet a minute, but the writer has known an individual coil, by one of the most reliable makers, run through five feet in 25 seconds ; hence spitting is dangerous, as a man has no time to escape should the fuse begin to crackle, a sure sign that it is running.

It is becoming very common to spit a fuse with dynamite. The end of the fuse is split with a knife, and a piece of dynamite the size of a pea placed in this slit ; the dynamite is then lighted, and ignites the fuse. Some day the dynamite will explode, temporarily or permanently blind the man, and while he is groping about to find his way out, the charge will explode and he will pay the full penalty for his temerity.

Firing with a match is done by splitting the end of the fuse, inserting the head of the match and lighting the other end, this gives nearly three-quarters of a minute extra time.

The best plan is to use a candle snuff ; each fuse has a snuff placed under it, the miner lights them, and can retire to some safe place and wait until the fuse burns through and spits. As soon as he sees they have all spitted he can go away and there is no danger ; yet in spite of all this, and for the sake of saving two or three seconds, men will frequently juggle with their lives.

In firing in shafts it should be compulsory to fire with electric discharge. A man never knows what may go wrong with the engine, windlass, or ladders—if he lights his fuses, and anything should go wrong, he is like a rat in a trap, with no escape. In firing by electricity the battery is never connected until all the men are out of the shaft, and there can be no danger ; it is also far more efficient.

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It is not claimed that the Aurometer can compete in accuracy with a properly conducted fire assay; but it is claimed that the Aurometer will be found to be accurate to within a few cents an ounce of the true value of the gold dust, and that whereas a fire assay is expensive and frequently rendered impossible owing to the inconvenient delay. An assay by means of the Aurometer, though not quite so accurate, is accurate for all practical purposes and can be made in less than one minute, by any unskilled person, and without expense.

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business where gold dust is bought or taken in trade, as by its use not only are the buyers protected from possible loss, but the sellers have a means of assuring themselves that they are receiving a fair value for their dust.

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Published at 612 Cordova Street, Vancouver, B. C. Printed by Timms Printing Company, 517 Seymour St., Vancouver, B. C.