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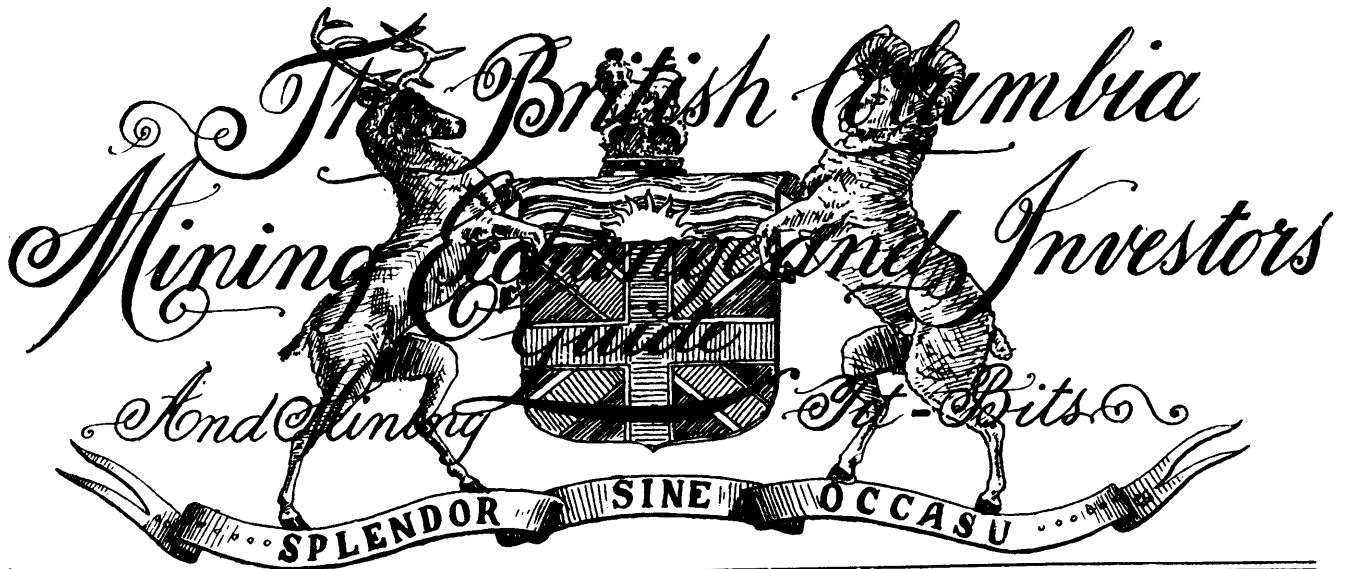
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Vol. II, No. 6.

VANCOUVER, JUNE, 1900

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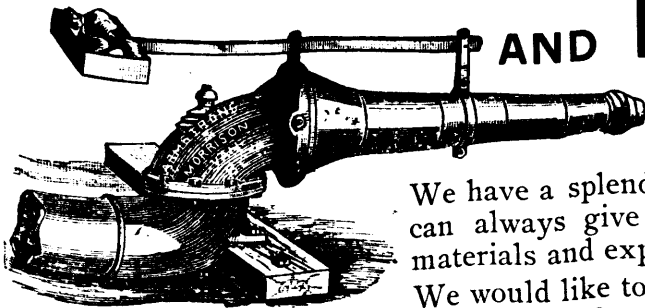
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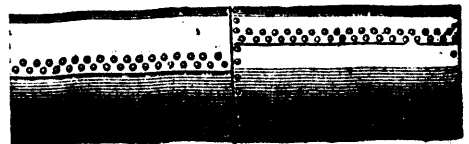
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And Mining Tit-Bits.

VOL. II.—VANCOUVER, B. C., JUNE 1900—No. 6.

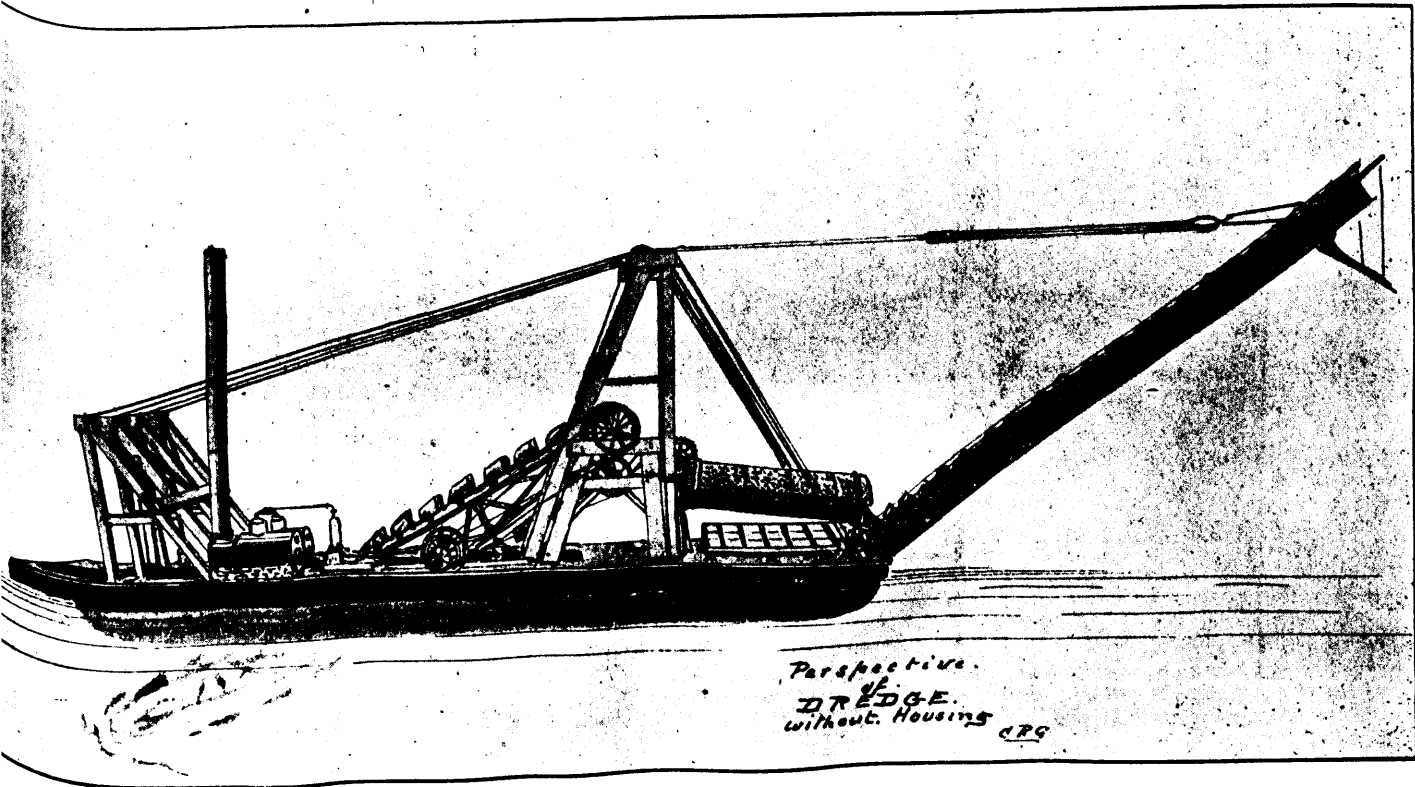
GOLD DREDGING.

We have referred in our April issue to the possibilities in connection with this industry on British Columbia wash, provided the proper appliances and men were associated with it. In New Zealand this branch of mining has had especial attention paid it, with the result that both the men in charge and the machinery used are of a character which the experience of years

share, four weeks after commencement of operations. Further we would say these dredges can be constructed in Vancouver.

CHAMBERS OF MINES.

The Toronto Economist says: "The Central Canada Chamber of Mines has been formed at Winnipeg. It has been organized upon the same basis as the Johannesburg Chamber of Mines, its object being to dis-



NEW ZEALAND GOLD DREDGE.

has undoubtedly shown to be the most effective, so much so that the New Zealand type of dredge is adopted the world over where the industry is promoted and the results are at all successful. We have already alluded to the paying quality of our B. C. gravels, so that as we pointed out, it needs only the required system and management to assure success.

In one district in New Zealand alone—Otago—the March returns were: 39,165 oz., and for the week ending March 26th the average return from 32 dredges was 67 oz. per dredge.

We give illustrations of the most approved New Zealand dredges, capable of putting through 4000 cu. ft. of gravel per day. Some of these have paid off all liabilities and besides a dividend of one shilling per

seminate reliable information and statistics through the medium of the press throughout the world. The institution promises to be of great value in furthering the interests of Canadian mining, as many of the leading mine owners and financiers of the Dominion are associated with it. Why such a Chamber of Mines as this should have been left to Winnipeg to organize it is difficult to conjecture, as far more people are interested in mines in the older districts of Ontario and Quebec."

The same applies to British Columbia. We would, however, from experience, remark, these Chambers of Mines are very easily organized in this country, but from the fact of proper material being wanting they have proved a non-success. The indispensable essen-

tial in connection with an important association of this kind, where so many interests are concerned and of so divided and diversified a character, is men of integrity—men who can command the confidence and the respect of the community, and in whose hands the public can trust themselves with confidence that no selfish interests can prevail over *bona fides*. In any event we maintain the proper authority in mining matters should be the Minister of Mines. We are Britishers amongst Britishers and not amongst aliens, as in Johannesburg, where all capital was foreign and the Chamber of Mines, composed also of aliens to protect their own investments and those of their clients.

IRON ORE DEPOSITS OF TEXADA ISLAND.

Extracts from Special Report of WM. M. BREWER, in *The Engineering and Mining Journal*.

The possibilities of extensive iron and steel works on either Vancouver or Texada Island have never been thoroughly discussed by the public press. California capitalists being impressed several years since with the importance of the iron ore deposits on Texada Island, secured a large tract of land by Crown grant from the Provincial Government. The same syndicate erected a charcoal blast furnace at Irondale in the State of Washington, and for a time manufactured pig iron of such superior quality that it was recognized by the



NEW ZEALAND GOLD DREDGE.



NORTHERN GOLD FIELDS.

We hear that there are 3,000 tons of freight at Bennett awaiting shipment to Dawson, 600 tons of which are last year's.

The Klondike Corporation have contracted for their first and second boats at \$100 per ton, also the Flyer line, which are already booking for their third steamer.

There is likely to be another line from Dyea, over the Chilcoot Pass for which the capital is already enlisted, and the charter will probably be secured at the earliest possible moment from the Provincial Govt.

Crowds are going North daily, both to Atlin and Klondike; though one hundred is going to Klondike for one to Atlin or elsewhere.

The Canadian Development Co., the Klondike Corporation (for which Dodwell & Co., of Vancouver, are agents), the Flyer Line or King's Barge Line, will tow barges through from White Horse and also insure against loss. It would cost about \$2.00 per ton extra, but there would not be the possibilities of the goods lying at Bennett for months as they have done during the past winter and spring.

Union Iron Works of San Francisco as the best grade of iron they could obtain. For some commercial reason the furnace was blown out, and the shipment of iron ore discontinued, but the owners of the property kept a small number of men on prospect work for the reason, as explained to the writer, that it was their desire to determine whether this iron ore was underlaid by copper bearing ore, because on the surface there was considerable copper associated with the iron ore.

A shaft was sunk which, for the first 50 feet, passed through ore carrying low copper values; below that point the shaft was continued vertically through country rock a further 100 feet, from the bottom of this a tunnel was driven under the main body of iron ore, and at a level of 277 feet below any of the workings from which ore was extracted for shipment to the blast furnace. This work, the writer was reliably informed, has resulted in determining that a good grade of ore occurs on that level, the body being about 70 feet in thickness. This is the deepest work that has been done on any part of the iron ore deposits on either of the islands. The ore is a magnetic iron, with phosphorus below the Bessemer limit.

The location of the deposit is at salt water, where a wharf and ore-bins have been built, which are connected with the workings in the mine by a gravity tramway. This deposit of magnetic occurs between the contact of crystalline limestone and diorite. Along the line of strike the outcrop can be traced for about one and a-half miles on a south-easterly direction from the main workings. It forms prominent bluffs in many places and every indication is present that this deposit is of vast magnitude.

When it is considered that crystalline limestone, of apparently the same grade as is being so successfully used at present for flux in Van Anda Smelter, occurs in close proximity to all the iron deposits on the west coast of British Columbia and the Islands, and that a good grade of coke is made at Union Mines on the east coast of Vancouver Island, it can readily be seen that pig iron can be manufactured cheaply in Western British Columbia. If an iron industry is established in Western British Columbia, the iron plants would not be entirely dependent on coke from the Union Mine, although at the present time no coke is manufactured from the Nanaimo, the Wellington or the Extension Mines, situated near Nanaimo, on the east coast of Vancouver Island. There are also the coal fields in the vicinity of Port, McNeill, on the eastern coast which have never yet been opened, although some boring has been done. The extent and grade of these fields are problematical until they have been systematically exploited. From the best information the writer can obtain, the outcroppings would appear to indicate a good grade and fair thickness.

There are also coalfields on the north-west coast of the Island on Quatsino Sound, owned by the Hallidie Syndicate of San Francisco, which are being developed, prospecting having been carried on since the Spring of 1899. Whether the coal is suitable for coking the writer is not informed. In addition to these occurrences of coal on Vancouver Island, there are extensive fields of anthracite coal on Queen Charlotte Island, which are owned by a syndicate of B. C. capitalists.

MINERAL DETERMINATION AND MINERAL TERMS.

COMPILED BY T. R. HARDIMAN.

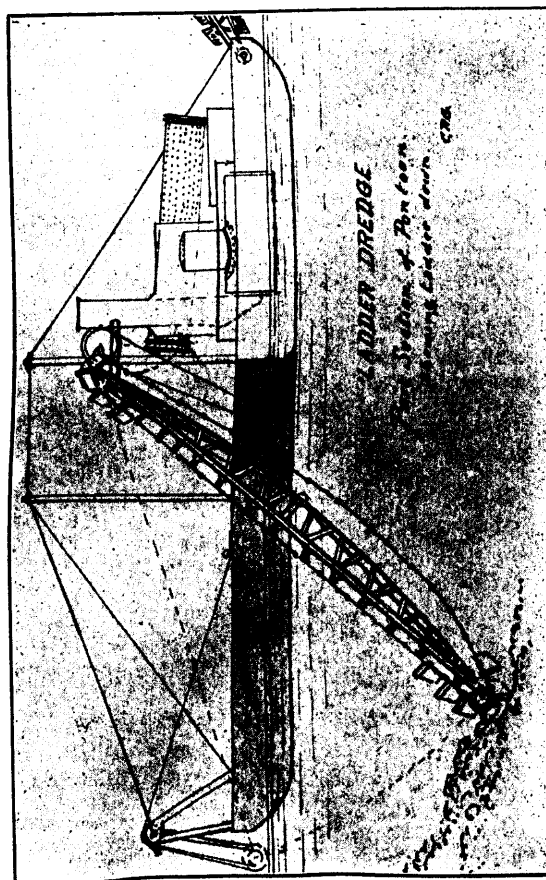
COPPER—Continued.

The principal sources of the world's supply of copper are: North America (more especially Montana and Michigan) which yields an enormous amount, and are amongst the best paying investments in the world to-day; Spain, South Africa, Australia, Cuba, Chile and Bolivia. New deposits of the various ores of copper are being found in other portions of the globe consequent on exploration, though through these last being distant from the confines of civilization and means of transport, it will be long ere they will contribute to the world's copper supply.

The Bruce Mines, on the North Shore of Lake Superior, which were lying idle for a long period of time, was taken over some three years since by an English syndicate, formed by Lord Percy Douglas, and we believe, is now again producing. An enormous amount of this ore is on the property. The writer, some eighteen years since, went over these workings and was astonished at the amount of mineral matter in sight, both in ore and as native copper, large masses, weighing two or three hundred tons, of native copper were seen. This property will doubtless produce largely.

Great Britain obtains still some copper from her mines in Cornwall, which have been producing both copper and tin since the time of the Phoenicians, from the admixture of which they produced the ancient bronze. The Isle of Anglesea, in the Irish Sea, is also a copper producer.

British Columbia, from the Trail District west, is cut by a copper zone which is being gradually developed and proving to be all that it promised. The Similkameen, especially Copper and Kennedy Mountains, through into the Kamloops Camp, better prospects could not be found. In fact, a mineralogist would find these camps a paradise either as a matter of study or speculation. West to the Coast the same line can be traced from Pitt River to Howe Sound, where the Britannia Copper Company is developing some rich sulphide claims, carrying good values in copper



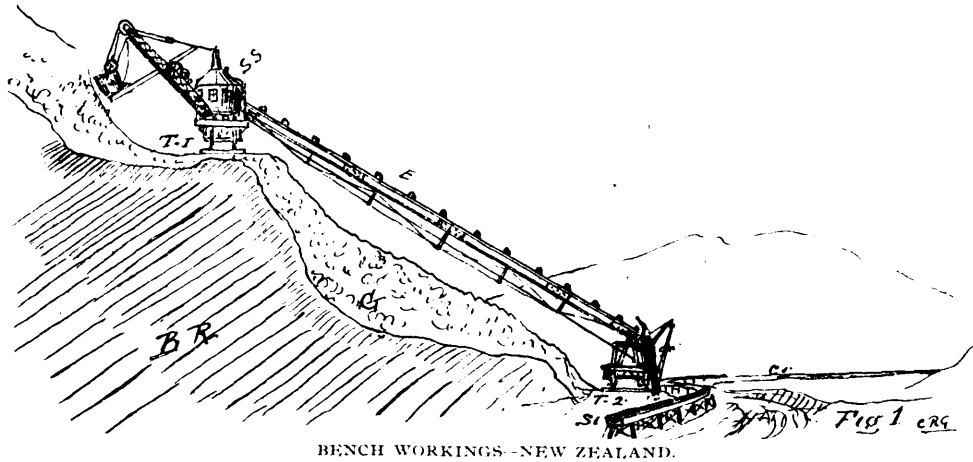
and gold. This property will, we hope, very shortly enter the ranks of steady producers and dividend payers.

Texada Island (Van Anda) is another rich copper zone, and is producing very satisfactorily. A smelter has been in operation here for some twelve months, and matte has been shipped to refineries continuously. A number of men are employed in the mining and smelting on this rich island, and, like all British Columbia copper ores, the values in gold are large, with a high percentage of copper. Texada Island promises to be a large producer of copper, gold and iron. It is to be deplored that money cannot be obtained to open up and develop the promising locations in this richly mineralized zone; one of many such, between Kamloops and the Coast, under practical guidance, such an industry as copper-gold mining industry in British Columbia will reward the investor more than satisfactorily, the risk being a minimum one.

On Vancouver Island, distant some six miles from the E. & N. Railway, the Mount Sicker property is situated, which has been secured by a London company, the Tye Copper Company. The output from these claims is expected to be 1,500 tons of ore per month. The average values (smelter) are sufficient to demonstrate the possibilities of this ore, which is a sulphide of copper and iron, and gives gold, 1.8 oz. ; silver, 3.8 oz. ; copper (dry), 9.2 per cent. Another

Fraser into the Chilcote country. In fact these conglomerates have been known for some years back to have existed for some distance up the North Fraser, and are well known to contain gold in larger or smaller quantities, and by many the source of the Fraser river gold is attributable to this wash. The height averages about 4,000 feet.

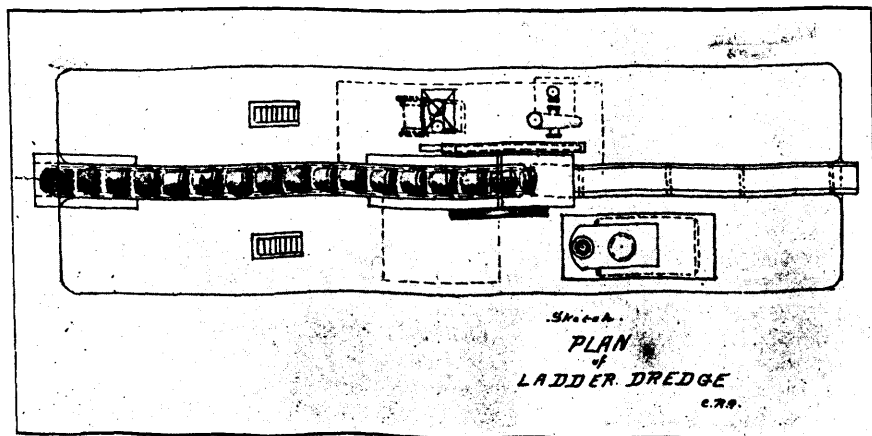
However, of all the varied resources of the Province, which comprise the various metals, coal, timber, fish



shipper is therefore added to the list of our B. C. copper producers.

The increased demand for copper, in connection with the various industries of which it partly or entirely is associated, and knowing the yet undeveloped resources of British Columbia copper deposits, which should be contributing to the world's supply and thus enriching the Province and those mining it, must be our excuse for diverging from the straight lines of this article, to point out the profitable field here awaiting capital rightly directed.

and furs, the most important of which is metal mining. In fact our existence depends mainly on the development of our vast mineral deposits. The several Provincial Governments have up till now neglected to give prominence to the illimitable source of wealth stored up in the hoary hills which surround us, or to assist the prospector in his difficult task over an extremely rough country. He has never been recognized as an indispensable factor to our growth—the wealth of the country, which he undoubtedly is. Had any but blockheads controlled our Provincial affairs, results



RESOURCES OF BRITISH COLUMBIA.

The area of British Columbia is about 356,000 square miles, composed mostly of mountainous country, with here and there arable and pasture lands which will produce almost anything in the cereal, fruit or vegetable kingdom. Cattle and horses range in herds over the bunch-grass country along the Fraser and Thompson rivers. The hills are composed of conglomerates, and covered with a bunch-grass which is very nutritious and on which the cattle fatten during the season. These hills, which are part of the Cascade range, cut through the Boundary west of Trail, through the Similkameen, Nicola and Kamloops, crossing the

would have been attained to tangibly show that our mineral resources are, par excellence, beyond dispute as to their character and value.

As a result of the recent election we hope to see a live administration, who will take the matter in hand for the public good, placing officers in charge of their respective departments and districts who shall be competent to advise the Minister of Mines of the value of new finds and to aid the prospector in his arduous task, either by monthly or quarterly reports dealing with the properties in question after examination, and recommending those which are likely prospects to capitalists for development. This course would mini-

mise "wild-cattin'" and be far the cheapest system in the end to the Province.

The construction of railroads and the making of trails through portions of the country, from which revenue may be derived by the opening up and development of mineral deposits contained therein, should be commenced at the earliest possible moment. Those who have witnessed the exploration of the Kootenays and the building of railways through these rich portions of the Province, know that the advantage, which should have accrued to the Government and the people from these sources of profit, have, through the utter want of diagnosing the situation by the proper authorities, been allowed to drift away from us and build up cities in the United States. The acumen of the American has been the quantity that, to say the least, we admire: though we deplore the want of it in the average Britisher, when it comes to taking the initial chance in the development. After all "the spoils belong to the brave."

The advantage, however, is at present against us, through the apathy of the people who should have taken hold of the railway question from the start. It is useless retrospectively unless we make up our minds to alter conditions and identify ourselves individually and collectively in our own development and thus obviate the mistakes of the past. Doubtless individual selfishness has been responsible for incalculable mischief and has retarded our onward progress to a large extent. To say this must be eliminated, if we wish to succeed as a people, is a fact that the sooner we recognize the better.

We quote the separate returns derived from the main industries of British Columbia, which will conclusively show the mineral industries to be the most important of our varied resources. These figures are to the end of the fiscal year, Dec., 1898. The returns for 1899 being not yet issued by the Government, we are unable to do more than arrive at an approximation. The increase for 1899 not aggregating so much as it would have done, but for the Eight-Hour Law, Alien Bill, etc., which on one hand caused a strike and on the other kept general development back,—thanks to the prescience of our so-called law makers, whose vocation is a mistake, in fact we are doubtful of them even as tinkers. But we digress.

capitalist. We shall be happy to give to those interested in the above industry any and all the information in our power, which will be of benefit to themselves and the country.

The annual report of the Minister of Mines having just reached us, as we go to press, we are enabled to add the official returns for 1899, which are—

Gold (Placer).....	67,242 oz.	...\$1,344,900
Gold (Lode).....	138,318 oz.	... 2,857,573
Silver.....	2,939,413 oz.	... 1,663,708
Copper.....	7,722,591 lbs.	... 1,351,453
Lead.....	21,862,436 lbs.	... 878,870
Coal.....	1,294,132 tons.	... 3,882,396
Other minerals.....		... 377,655

Total value.....\$12,356,555

It will be seen by these returns that our estimate of the Gold production in our last issue was a very conservative one. The actual production being something like \$1,000,000 in excess of our approximation, which we placed at \$3,000,000, there or thereabouts. Doubtless the returns would have been still better had it not been for causes pointed out in this article. We shall deal further with the report in our next issue. Taken as a whole, the returns are satisfactory and reflect great credit on the department responsible for them. Mr. W. F. Robertson, the Provincial Mineralogist, is to be congratulated on the care shown in compilation.

SOUTH AFRICA AND THE EMPIRE.

Cape Town raised £2,000 (\$10,000.00) in a few days to send to the sufferers from the fire at Hull, Canada—*vide* London papers.

What more glorious proof could we have of the unification of the Empire than this example of disinterestedness from a sister portion of the Imperial whole, some 15,000 miles distant! Who, while in the throes of that worst of scourges, war, and its attendant horrors, yet so handsomely and unselfishly donates to minor distress.

Verily, Kruger has proved that our enemies should be known to make sure of our friends. Oom Paul little thought of such dire disaster when he launched his ultimatum in October last, and that he would, instead of driving the English into the sea, be the instrument by which the British Empire should be consolidated into one free people—liberty loving and liberty preserving and perpetuating. Shades of Cromwell, Hampden, Russell, Blake, your descendants have proved worthy of you. They have preserved the honor of your names, which stand to humanity at large for all that is noble in manhood, all that you fought for, all that makes life worth living—Freedom. Not the freedom to oppress or enslave, but that which would do unto others as you would like others to do unto you.

A celebrated Frenchman once said: "A king of England, who will be the man of his people, is the greatest king in the world; but if he will be anything more, he is nothing at all."

This is the secret of British rule. Our good and noble Queen has been essentially one of her people, and her example as a woman, wife and mother beautifully exemplary, and of a character that will live in the hearts of the people until the end of time. As a Queen she has endeared herself to us by a just administration of the laws, and the care she has shown in the minutest matters that were of import to her people.

1898.		VALUE.
Gold (Placer)		\$643,346
<small>(Mainly from Cariboo diggings, only some \$75,000 being produced from the Atlin division of Cassiar, and other portions of this district only \$32,300.)</small>		
Gold (Lode).....	110,061 oz.	... \$2,201,217
Silver.....	4,292,401 oz.	... 2,375,841
Lead.....	31,693,559 lbs.	... 1,077,581
Copper.....	7,271,678 lbs.	... 874,781
Coal.....	1,135,865 tons..	3,407,590
Coke.....	54,396 tons..	271,985
Timber.....		425,751
Fisheries, Oil, etc.		3,846,951
Agriculture.....		78,977
Estimated Mineral returns for 1899, valued at		\$11,973,671

PULP AND PAPER.—We would direct attention to the advantages British Columbia possesses as a field for this enterprise, to those who step in at the present time and establish pulp mills in different suitable locations in the Province, where spruce, as a raw material, can be obtained in any quantity and where a market for pulp or paper could be gained the world over. Here is an opportunity for an enterprising

God save the Queen, and may she long continue with us, as Empress of the New and Greater Britain which her brave soldiers and sailors have won for her.

HONOR TO WHOM HONOR IS DUE.

We sincerely hope those heroes who defended Ladysmith, Kimberley and Maffeking will be rewarded as they deserve. Every man should receive a pension for life, and their leaders, White, Powell, Buller, French, and others, it should be our delight to honor. Their names are writ in brass, as the bravest of the brave.

Lords Roberts and Kitchener have shown how brave and competent men can carry out their promises. Johannesburg in May, Pretoria now occupied, and the war practically over. Desultory hill fighting may continue for a while, but we are inclined to think that the two thousand Imperial Bushmen the Australians have just sent over will know how to deal with that sort of thing and stamp it out in short order. The emancipation of South Africa will soon be complete, and a just and equitable government established under the grand old flag of the Free!—the British Union Jack!

BRITISH COURAGE.

One effect of this war, we fancy, will be to dissipate the belief, which has for some time past been growing in the public mind, that the British people, owing to their somewhat rank prosperity, are growing effeminate. They are becoming sedentary, it was said; they are afraid of bad weather; they are given over to luxury and money-getting.

The argument was not very philosophical, for sedentary pursuits do not necessarily destroy courage. Increased respect for sanitary laws involves of itself increased attention to the weather, and it is doubtful if the desire for luxury impairs fortitude at all. The Mahdi was the most sensual of despots, but he met death on the field of battle like a hero of antiquity. Still, the opinion prevailed till it began to pervade all literature, and men, writing from easy chairs, moaned lengthily over the approaching emasculation of the British race, once so formidable in war.

We shall, we think, hear less of these elegiacs for some time. All through this war the luxurious classes, not only the aristocrats, who have the pride of pedigree to support them, but the sons of the very rich, have gone to the front with more than readiness, have faced the hardships of a campaign in the desert—very real hardships—with cheery stoicism, and have, when needful, paid their blood-tax willingly as ever did knights of old. There are scores of men at the front who, if they had stayed at home, might have passed lives of unbroken ease and enjoyment, without reproach, and in an age of infinite intellectual pleasures, without much fear of the weariness of life which used, as Matthew Arnold believes, so to torment the Roman great. The middle class, which furnishes most of our officers, has sent out its sons to die in such heaps that they are blamed for temerity; while of the lower class, from which our "Tommyies" are drawn, what can we say, except what Sir Redvers Buller has publicly said, "the men are splendid!" The "casualties" as we now say—though the old expression, "the death-list," or "the wounded-list," was a finer one—tell their own story, the great officers repeat the same tale, and there is not a private letter which arrives but recounts some instance of the cheerful fearlessness displayed by the whole ranks of men.

And remember, this fearlessness is not fearlessness of death, such as a sedentary suicide might display. These men, as they charge amidst the showering bullets, face what for a third of their number is the certainty of shattering wounds, or the long agony of torn extremities, or years of existence with maimed limbs, impaired eye-sight, or incurable ill-health. There can be no greater courage, and that the British in South Africa displayed it in the highest measure is admitted as freely by the Boers, who once despised them as weaklings, as by the correspondents sent out in such swarms to record their feats. —*Spectator*.

"THE MAN FOR TOMMY."

Private H. Easterbrook, 2nd Devons, writing to a friend in Exeter, after recounting some narrow escapes at Colenso, Spion Kop, and other battles, says: "I should like to see some of the big nobs out here in the fighting line—those who are afraid to leave their fire-sides, but stay at home and make war and say the work ought to be done quicker. It would open their eyes a bit. . . . I see that some of our papers at home criticise our generalship, but it would not do for them to do so here, where the men are that fight for their country. There is not a man here that would not follow Sir Redvers. He is not one to say, 'Go ahead.' He goes ahead himself, and says 'Follow.' That is the man for Tommy."

Lieut.-General Von Boguslavski pays the following tribute to the British soldiers:—"On one or two occasions during the war we had been led to doubt whether the British troops would maintain their old reputation for cool bravery. It must, nevertheless, be acknowledged that the tenacity displayed by General Buller's troops in ever returning to the fray, in spite of many reverses, and being almost continuously in action from February 14 to February 27, is certainly not to be underrated. The words of Shakespeare are still true, which he put in the mouth of Lord Rambures, who warned the braggart French princes before the battle of Agincourt that 'that island of England breeds very valliant creatures, their mastiffs are of unmatchable courage.'"

Notes.

Mr. W. Pellew Harvey, F.C.S., has returned to Vancouver from London, Eng., after an absence of eight or nine months. He informs us that he has been fairly successful in his operations whilst in London, and that he has enlisted an encouraging amount of support, sufficient to take over certain properties of proved value—notably, the Mount Sicker Copper-Gold property. Mr. Harvey believes that our Coast possibilities—that is, from Kamloops to the Coast—are superior to that of the Rossland camp and that the near future will prove it. Development, of course, is necessary and the money to carry it forward.

The corner in copper and the recent drop is said to have caused a loss of nearly \$90,000,000 in Boston alone. While the disaster is doubtless exaggerated, it is manifest that New England investors and speculators are badly hurt, and, probably, many of them decry "mining," not noting the difference between working the mine and working the street. The episode is so usual as to attract little notice.

The mica production in the United States, during 1898, amounted to 129,520 pounds of sheet mica, valued at \$103,534, and 3,999 tons of scrap mica, valued at \$27,564, giving a total value for the product of \$131,098. This is an increase of 46,850 pounds of sheet mica and 3,259 tons of scrap mica over the production of 1897. This shows the production of sheet mica in 1898 to be greater than for any year since 1884.



Captain Denholm Fraser, R.E., is at present engaged in making the necessary arrangements for inaugurating a magnetic survey of India and Burmah.



Nickel steel is coming into use as a substitute for ordinary mild steel in the manufacture of boiler tubes. Experiments have demonstrated that nickel steel of 20 or 25 per cent. of nickel, will have, as regards acid corrosion, a vastly longer life than mild steel and, as regards deterioration from the action of heated gases and steam, at least twice the durability of mild steel.



Twenty-four carat gold is all gold; 22-carat gold has 22 parts of gold, one of silver, and one of copper; 18-carat gold has 18 parts of pure gold and three parts each of silver and copper; 12-carat gold is half gold, the remainder being made of three and a half parts of silver and eight and a half parts of copper.



Years ago Becquerel found that salts of the rare metal uranium possessed that power of throwing off a feeble and invisible radiance that affected photographic plates, like the X rays. Mme. Curie in Paris last year isolated from the Bohemian mineral pitchblend two other elements that behave in the same manner, but are far more active. One of them she called "polonium," and the other "radium." The latter is said to be one hundred thousand times as intense as uranium in its photographic effect.

Prof. Geo. F. Barker, of the University of Pennsylvania, has been experimenting with all three of these elements and with the mineral (pitchblend or uranite) from which the two elements are derived. He recently exhibited a series of photographic plates on which impressions had been produced by these substances. His process has been as follows: a photographic plate was enclosed in black paper and then covered with yellow paper. After one whole day's exposure to the sunlight no effect was produced. This precaution proved the thoroughness of the protection. Then the various metals and salts were placed outside the covering of the plate and they produced dark stains. In order to take photographs of objects such as a hand or a foot these objects would be placed between the metal and the plate, and the result would be similar to that obtained by the X rays. Such substances as bone show clearly through the flesh and surrounding tissue. A photograph can be taken by means of radium in half a minute.

The property of the new metal is apparently of great practical value. The results of the X rays, now so useful in surgical diagnosis, can be duplicated by a method much cheaper. Radium seems to suffer no diminution of energy or loss of weight during the process. In addition to producing an impression on the photographic plate, radium produces phosphorescence and discharges electrified bodies. Thus it will be seen that it possesses all the qualities of the Roentgen rays.

Radium apparently violates one of the fundamental laws of physics, namely, the conservation of energy. It does not appear to derive its photographic power from the sunlight nor lose it by expenditure.



The Dominion of Canada, in 1898, produced 6,730 long tons of copper, as compared with Montana's output of 106,650 tons, and with the remarkable yield of the world-famous Calumet and Hecla Mines of Montana, which last year shipped no less than 41,000 tons. The famous Rio Tinto Mines of Spain, with the management of which W. A. Carlyle (late of Rossland) is now connected, also made a splendid copper yield last year, the output being 34,740 tons. British South African copper producing mines, in Cape Colony and Namaqualand, together produced 6,490 tons last year, or slightly less than the Canadian output. Newfoundland, which is steadily increasing its copper output, gave a yield of 2,700 tons for 1899.



The Rio Tinto report is an excellent one. The high price of copper has made the company abnormally strong. The profits for 1899 amount to no less than £1,669,000. Objection has been taken in certain quarters as to the payment of the dividend. To be able to hand over £4 on every £5 share and keep a good surplus on hand is something to be proud of. How long is the present price of Tintos to continue? There are reserve orders in hand to fully maintain the present values for some time to come.



The shipyards of Great Britain, all working together, could turn out a big steamship every day of the year.

Fifty British warships are at present under construction. Seventeen of these are torpedo-boat destroyers.



The excitement, consequent on the relief of Maffeking, culminated at the taking of Johannesburg and Lord Roberts' triumphal entry into Pretoria, when London may be said to have fairly gone wild in the expression of her enthusiasm over the glorious news of the success of British arms.



The historical Stock Exchange, which is so prominently associated with the South African campaign, by its contribution of men and money, and by the never-to-be-forgotten scenes enacted within its walls in connection with the war—notably the reception of the heroes of Ladysmith, Sir George White, together with Capt. Lambton, of the Naval Brigade—fairly outdid any previous event, when celebrating these successes. The heroic B. P.'s health was drunk in unlimited champagne, with the most demonstrative enthusiasm; patriotic songs made the roof ring in sympathy with the occasion; 5,000 members participated in the celebration, which was held in honor of the Meteor Flag of Old England, British pluck and British liberty. London, on this occasion, was an education and revelation to foreigners, scenes throughout the length and breadth of London beggars description. Patriotism was king and had full sway.

THE BIRDSEYE BOND.

Nelson advices say that the last payment on the Birdseye bond, amounting to \$8,700, was paid recently. The work of pumping out the shaft, now that the surface water has ceased, has been begun, and it is expected that mining operations will be in full swing shortly.

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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.

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Mining News.

ATLIN.

The travel into Atlin continues, but is not as heavy as it will be after the lakes open. The district will this season be converted to a large degree into a big hydraulic camp, and a number of rich quartz propositions are being developed that are expected to prove good yielding properties. An English syndicate is putting in a hydraulic plant on Wright creek that will cost \$150,000. The syndicate is known as the Pen-Dugwig. It has 800 acres of placer ground. The company will employ a large number of men.

On Willow creek, George A. Brackett, builder of the famous Brackett wagon road, is putting in a big hydraulic plant and employs seventy men.

On Birch, Pine and other creeks other big concerns are being installed at a cost of many thousands of dollars, and the gold-laden earth of the Atlin district will be overturned by acres this season, and the yield of last season no doubt will be increased. Labor is in good demand there. Sluicing in the district began recently.

The Porcupine district, up the Chilkat river, is alive under the spring operations of miners. Several big flumes and other works are being prepared, and it is estimated by reliable men competent to judge that the output of the camp this season will be \$250,000.

Supplies for summer use were chiefly taken in during the winter over the ice of the river. It then costs 5 cents a pound in freight. Indians are now taking it in canoes in large quantities for 3 cents.

YMIR FLOURISHING.

Mr. H. C. Carr, engineer in charge of the Dundee mine, Ymir, reports that the section around Ymir is rapidly assuming importance, and in time will surpass some of the districts that are now talked of a great deal. The latest to manifest their faith in that section is the Vernon Syndicate, which has the sum of \$200,000 in its treasury. This syndicate has purchased the Big Four group, and has energetically commenced the work of developing it. The Dundee will shortly be taken over by an English Syndicate. Ten men are at work developing its ore shoots. There are now some large reserves of ore in sight, and not the least important is a three-foot ledge that carries 60 per cent lead and \$150 in gold to the ton.

BOUNDARY.

The new machinery at the B. C. is set up and has been running several times for testing purposes.

The Winnipeg mine has been pumped out and development work has again commenced.

Work on the Dominion Copper Company's properties will be resumed in a short time.

The Athelstan mine is looking well. Trial shipments will be made to the Trail and Granby smelters.

Work has commenced on the Great Hopes in Deadwood Camp. F. H. Oliver has charge of the property.

The railway spur has been completed to the Golden Crown ore bins, and shipments will be made immediately to the Trail smelter.

The Old Ironsides and Knob Hill companies in Phoenix camp have let the contract for a 10-drill Rand compressor, two 80-horsepower boilers, two 8x10 friction drum hoisting engines, etc. This is only a temporary plant and will be used with their present one until the arrival of their big 40-drill plant.

Work has been in progress at the Kimberley group for the last week, and shows steady improvement at 535 feet. The face of the tunnel shows over 3 inches of solid ore, the balance of the face shows so well that a separate dump has been started. In the 10 feet of work done the improvement is very marked.

The total amount of work done in the B. C. mine, in Summit camp, is 3,200 feet. Total ore shipments are 2,400.

PHOENIX.

Ore is being hauled from the Athelstan to Hartford Junction for a carload shipment to the Trail smelter.

The War Eagle is now running eight-hour shifts, and is making good progress in drifting from the 100-foot level, east and west.

Recently in excavating for a powder house on the Victoria a fine ledge of copper ore was opened up on the surface.

The Gold Drop will doubtless make its usual average of about 200 feet of development during May. Two drills are working steadily.

At the Golden Crown mine two box cars were loaded with ore, and have since been shipped to the C. P. R. smelter at Trail, which concern is desirous of securing all the Boundary ore that can be obtained. Mrs. Porter, wife of General Manager W. J. Porter of the Golden Crown, had the honor of placing the first ore in the cars.

Foundationless rumors were current this week that the Old Ironsides would shut down indefinitely to permit the putting in of cages. One cage is now being put in, and the men on the 300-foot level only are forced to lay off for a short time. Otherwise the mine is running as usual in full blast, as well as Knob Hill. Only one cage is here yet, which is being put in shaft No. 2. Shaft No. 1 and the winze in the Knob Hill will also be fitted with cages.

FAIRVIEW.

The Dominion Consolidated Mines Company own three claims, viz., the Flora, Western Hill and Virginia. The vein is traceable the entire length of the property, 4,500 feet, outcropping in different places from two to twenty feet wide. The mine is equipped with a six-drill compressor plant furnished by the Rand Drill Company. As soon as the 4,000 feet of working tunnel is completed a 100-stamp mill will be erected and the mine worked on a large scale. The company own the water-power at Okanagan Falls, about 10 miles distant, giving them ample power for all purposes. Assays taken across the vein, which is from 15 to 20 feet wide, show an average of \$5 to \$10 per ton in gold.

NELSON.

The Venus Mine is to have a new rotary mill, capable of reducing 20 tons of rock a day. The company expects to have the mill installed and in operation shortly. It is estimated

that it will save two-thirds of the values and when it is paying its way a cyanide plant will be put in to treat the tailings. In addition to the rotary mill the Venus Company is putting in a complete steam plant, consisting of a 40-h. p. boiler, and a 35-h. p. automatic engine, which will give sufficient surplus power to run some 200 electric lights for the mine and mill.

Athabasca returns for May are: period of run, 29 days; number of tons crushed, 420; value of bullion recovered, \$14,899; value of concentrates, \$3,612; total value recovered, \$18,511.00. Per ton of ore crushed, \$44.07

FERGUSON.

Possibly one of the richest and most important discoveries ever made in this camp was staked a short time ago by P. and A. Ferguson. The location is a little over a mile back of Ferguson on Goat Creek, practically in town. It has been walked over for years and thought by trespassers to be only float from some unknown but oft sought for place up the hill. Only the other day McLennan and John McTaggart were up and put a shot into the stuff, but failed to find a lead, and of course did not staking. Not so with the Ferguson brothers. They were out for a Sunday stroll and just fell onto it, secured samples containing 30 per cent of pure native copper and drove their stakes. When the news of the find became known late that evening there was a whirl of excitement. At 3 o'clock the next morning, perhaps before, the town of Ferguson in most part were away to the scene of native copper, which is just now a better find than a gold mine.

GOLDEN.

The Golden Placer and Quartz Mining Company will commence operations on their placer property at Golden very shortly. The company are showing considerable enterprise by installing the most modern machinery obtainable for development purposes.

LARDEAU.

The Messrs. Lade and Gunn brothers left a few days ago with pack horses, to cut a trail to the Triune. They intend to take out ore all summer and make some large shipments this winter. The Triune promises to become a steady shipper, having good clean ore right from the surface. From four to eight men will work on it from now until there is room for more.

The Pontiac mine, situated in the Lardeau-Duncan district, is being bonded for \$50,000 by an English syndicate, which is making preparations to do a large amount of work on the property and will commence shipping ore as soon as the C. P. R. build the line of railway from Lardeau to Duncan City.

J. T. Lauthers arrived here from the Monitor recently. He says five men are now at work on the 100 ft. additional tunnel. A tunnel will also be driven on a big strong parallel lead about 250 ft. from the present workings. Supplies are already on the ground.

B. Thomas, M.E., of Vancouver, will be in the camp this week to report on the claims now under option to Edgar A. Bennett, recent local manager of the Silver Cup.

The Jewel, a North Fork property, has been sold to A. F. Welch, of London, Ont. Four men are now at work and development will continue all season.

The forces have been increased on all of local superintendent Westfall's properties, up the North Fork.

ROSSLAND.

The revival of business consequent on the resumption of work in the mines has been so marked that the freight traffic of the C. P. R. so far in May has increased 100 per cent over the same period in April.

The assessment for the current year is as follows: Total assessment—Improvements, \$648,550; land, \$1,620,425; total, \$2,268,975. Total exemption—Improvements, \$87,000; land, \$238,885; total, \$325,885. Total improvements, \$561,550; total land, \$1,381,540; total, \$1,943,090. Total ratable—Improvements, \$280,775; land, \$1,381,540; total, \$1,662,315. The total assessment for 1900 is \$2,268,975, as against \$1,831,660 for last year, showing a very healthy increase of \$437,315, or about 22 per cent for the past 12 months.

The Nickel Plate shaft has reached the 600-foot level and a sump below that level, which will be 15 feet deep, has been sunk 4 feet. The arrangements for taking away the old house at the Nickel Plate mine have now been completed and the timbering of the latter is in process of removal. The sheaves of the big headwork are in place and the cable is on the ground. The new hoisting engine is in place and the connection can be made expeditiously just as soon as the progress of the alteration necessitates the change.

The Nickel Plate is now in a position to ship 400 tons daily.

There are 362 men on the pay roll of the Le Roi mine at Rossland. During the last 14 days of April 6,700 tons, an average of 479 tons a day, were shipped to the smelter.

Waterloo stock has been in demand at figures around 4½ to 5 cents. Insiders at McKinney are buying extensively. The stamp mill is running day and night, and Manager Graham is to be congratulated on his ability and energy in pushing the Waterloo to the front.

The upper ore bunkers of the War Eagle were destroyed by fire on Sunday morning, inflicting a loss of \$10,000. The fire started in the tramhouse, in which was located the machinery of the tramway. As soon as discovered, the War Eagle Fire Department got to work, and assisted shortly afterwards by members of the regular fire department, the flames were kept under control. The origin of the fire is unknown. Immediate steps are under way, looking to the reconstruction of the bunkers. The burned bunkers had a capacity of 1,000 tons, and the new bunkers will hold 2,000 tons.

The output for the week, ending June 16th, is as follows:—

	WEEK.	YEAR.
Le Roi	4,534	43,764
War Eagle.....	—	10,603
Centre Star	—	7,017.5
Iron Mask.....	—	1,434.5
Evening Star	—	276
Monte Christo	—	273
I X L	—	274
Iron Colt	—	50
Giant.....	—	42
Total.....	4,534 tons.	63,734 tons.

It will be observed that the Le Roi was the only shipper, the other mines are working out ore so as to be in a position to ship regularly.

TEXADA ISLAND.

The Smelter was run down on May 23rd to clean out the dust chamber and for a general overhauling of the machinery which is now being done. The furnace will blow in very soon.

Lot 34 of Copper matte was shipped on the 26th.

Three cargoes of Mount Sicker ore, consisting of about 500 tons, have been delivered at the Van Anda Smelter during the past two weeks, most of which is now roasting.

G. H. Nichols came down on the 29th from this mine. He informs us that he and Mrs Nichols are leaving the Island, and intend going to Dawson within a few days. He speaks very highly of the prospects at the Paris mine, where they have got out a large quantity of copper ore of good smelting grade. A tunnel is now being run to tap the vein at 100 feet.

The leasees of the Black Prince, A. McKinnon and Company, have 30 tons of ore ready for shipment to the smelter, and are now cutting a wagon road to the beach to facilitate ore shipment. They report the vein to be very strong, and so far as they can judge to be of good smelting grade.

We have it on good authority that the Chilmanous mine, lying to the east of Van Anda, will shortly resume work, and that a hoisting plant will be installed at an early date.

The Marble Bay Mine have been shipping regularly about 15 tons of ore per day to the smelter, since they commenced stopping on the 170 foot level.—*Coast Miner.*

The sinking of the shaft on the Copper Queen has been continued, and is now down 515 feet. The last shots fired in the bottom of the shaft show a contact between the lime and felsite, carrying some ore. The sinking on this will be continued for a while to demonstrate its permanency, before drifting on the 500 foot level is begun. A shut-down of several days has been necessary to overhaul the hoisting machinery, which is now in running order again.

At the Cornell mine work on the different sections has been continued during the past two weeks with very satisfactory results, allowing for the partial shut-down for the celebrations on the 24th of May. The winze in No 2 East drift is down 50 feet and continues in ore. A crosscut will be run to the foot wall, and an upraise made to connect. The working shaft is now down 86 feet, and a station is being cut out preparatory to drifting on the vein, east and west of the shaft. The stope on the No 3 level will be continued, work having been suspended for a few days, for the purpose of timbeaing. The ore in the bottom of the shaft has improved in the last 10 feet of sinking, and is looking well of the time of writing. No 1 East drift, this stope has been continued up to the lime where it is offset

considerably from its general course, and will be further prospected, following the lime hanging wall of the vein.

The leases of the Jack Spratt mine were in Van Anda this week, making arrangements for the teaming of a shipment of ore from their mine. They report that the vein continues as far as drifted upon, and they will await the sampling and assay of their ore shipment before deciding upon further operations.

KLONDIKE, Y. T.



TAKING GOLD FROM BOXES AFTER SLUICING.

The steamer "Amur," coming from Skagway, has brought the first of the Klondikers returning from Dawson with their bags of gold or its value in paper. This vast sum, while it is the maximum amount of all clean-ups, will be the minimum yield of the great gold-producing country that lies within the Arctic circle. In the future the Atlin and White Horse copper belt will be developed, and will add to the stupendous riches that are buried in the earth in the Yukon. Besides, this spring's large yield only shows what the Klondike is capable of, and when capital is invested in modern mining machinery, the output will be enormous. Fresh discoveries are being made from time to time, and the quantity of precious mineral taken out there will augment the product of the present claims, which are by no means worked out yet, and will continue their output for many years to come.

Now that connection between Skagway and Dawson is complete and safe, there will in all likelihood be a great movement of people north, and permanent cities will be established in the region of snow and ice. The progress of the whole country cannot but be stimulated by the news of such a large production of wealth.

Among the richest men to come out was F. G. Noyes, who had \$45,000 in gold. Two men from Victoria also did well—J. Kingsley, formerly a motormeer there, and Chas. Nelson, who was in the employ of the Victoria Transfer Company.

A miner digging up moss to kink the logs of his cabin discovered gold in the gravel of the hillside claim adjoining the famous 46 on Sulphur. This has caused a great stampede from Dawson, and excited miners are staking out claims on what is believed to be an old channel which ran along the right limit of the Sulphur.

There is, too, a great rush to the Nome goldfields, and to the creeks up the Koyukuk, which are reported to be very rich. While the stampede is great, it is by no means as large as was expected.

DAWSON.

May 9th.—The ice broke in front of Dawson, but ice jams delayed the arrival of boats until the 15th. The upper lakes are not yet clear.

The largest nugget yet found in the Klondike was picked up on Gold Hill recently. It weighed 77 ounces, and is valued at \$13,000.

Several serious shooting and stabbing affrays have occurred there recently.

Much gold is coming from the creeks, and the banks and merchants estimate the output at \$25,000,000.

Eight thousand dollars were subscribed for the Ottawa fire sufferers.

The investigation of charges against Gold Commissioner Senkler was adjourned to June 2nd. The Dawson public has no belief in the charges. Mr. Senkler is generally liked and trusted.

Business is flourishing and the Nome exodus is small.

The first boat from Dawson reached Bennett on May 31st.

Dawson is beginning to present a more substantial appearance. Claims are now being prepared for sluicing; that is, for washing the gold from the large dumps of earth taken out of the claims during the winter. Residents are very much gratified at the excellent mail service, the mail coming and going regularly every week all through the past winter; letters only from the United States, however. Provisions are a little cheaper in some lines, but there is no change in the cost of living and board and lodging at \$200 a month, eggs at \$3 per dozen, oranges at \$1 each, and apples costing 50 cents apiece, are examples of the high prices at Dawson. The license on saloons has been reduced from \$2,500 to \$1,500 per annum. A duty of \$2 per gallon is assessed on all wines, liquors and beer brought into the Yukon territory. It is estimated that the seasons clean-up will be at least \$20,000,000.

SOME OF THE CLAIMS.

On Bonanza Creek there was a veritable army of miners last winter. The creek claims, hillsides and benches of this creek gave employment to 1,950 men, 211 claims in all being worked. Above discovery on this creek, \$1,231,900 was taken out, the washings of 12,065,000 pans. The output below discovery was \$1,984,500, taken from 19,267,200 pans.

Gold Run, which overlooks the city of Grand Forks at the confluence of Eldorado and Bonanza, produced a million dollars, showing an average value of 12 cents to the pan. On the area worked 235 miners were employed, 18 steam plants and six steam hoists.

Sulphur's clean-up amounted to \$1,481,820. It gave employment to 461 men. This creek is a difficult one to work, for the depth of bed-rock and the elusive character of the pay-streak make mining operations costly. A new and rich strike has just been made on this creek—an old channel being discovered on the rich limit, pans from which go as high as 50 cents to the pan, and this will greatly increase the output of this summer there.

On Dominion creek, which possesses the longest and widest paystreak of any creek in the district, the clean-up by June, 1 will approximate \$2,351,060. There were when the miners left Dawson more than 27,000,000 pans of pay gravel on the dumps, having an average value of a little over seven cents to the pan. On the 101 mines being worked a total of 805 men are employed, and 39 steam thawers and 22 steam hoists are operated. Expenses though are heavy on Dominion. Freight charges are from 12 to 15 cents a pound in winter and double that in summer, and fuel is scarce.

On Hunker, miners have reduced big dumps. The 69 claims worked show an average of over 10 cents to the pan. The use of machinery has solved the problem of successful mining there. This creek will have a gold production valued at \$1,201,660. In all 443 miners were employed, and 28 steam plants, using 17 hoists, were operated.

On Gold Run between the claims of 12 and 50, there are 446 miners employed. They produced 10,000,000 pans of gravel, having a clean-up value amounting to \$1,037,050. Gold Run though is only rich in spots. No well defined continuous pay-streak has been demonstrated to exist. One mine may be enormously rich, with perhaps \$500 buckets, but the next claim may not even have a showing of colors.

French Hill and Gulch employed fifteen men and the output will exceed \$25,000. On Gay Gulch, another pup of Eldorado, there are thirteen claims, giving employment to 60 men, and having an output of \$100,000.

Gold Bottom, which was discovered by Henderson before finding Bonanza, the clean-up is but \$40,000. This creek gave employment to 23 men. Quartz Creek employed a hundred miners and produced \$200,000. Adams Creek employed 37 men and produced \$92,900, and on Adams Hill 61 men took out \$195,400. On the Magnet Hillsides and Gulch, which empties into the Bonanza at eighteen below, 96 men were employed and they took out \$447,000. American Gulch employed 81 men

on the ten claims worked and will have a clean-up of \$225,000. For Gulch and the Hill-sides have largely passed under the control of the McGillivray Syndicate. There are 17 claims worked on the Gulch and on Oro Fino Hill. 120 men employed, and the output will reach \$700,000. Only six claims are worked on Monte Cristo Gulch, but its output will reach \$17,500, and it employs 58 men, using 11 steam plants and five hoists. King Solomon's Hill, the last hillside on the left limit of Bonanza, will have a clean-up of three-quarters of a million, and employs 148 men on the dozen claims worked. Extensive preparations are being made there for summer work.

No. Claims Worked.	Creek.	No. Men Emp.	Total
49	Eldorado	541	\$3,746,200
13	Gay Gulch	62	106,800
6	French Hill	15	24,900
3	French Gulch	22	48,000
2	Oro Grande Gulch	15	21,000
8	Eldorado Hill-sides	32	32,700
29	Bonanza above discovery	315	1,231,900
47	Bonanza below discovery	642	1,984,590
34	Gold Hill	235	1,002,000
8	Bonanza Hill	26	52,600
16	Chehecaco Hill	176	712,300
13	Adams Creek	37	92,200
8	Adams Hill	61	195,400
11	Magnet Gulch	96	477,000
10	American Gulch	51	225,000
17	Fox Gulch & Oro Fino	121	702,000
6	Monte Christo	58	173,500
12	King Solomon's Hill	148	749,100
11	Dominion, above up	68	158,000
31	Dominion, below up	339	1,220,950
10	Dominion, above low	106	277,500
28	Dominion, below low	194	480,460
17	Dominion Hill-sides	86	192,250
4	Dominion tributaries	12	22,850
40	Sulphur, above	275	852,220
29	Sulphur, below	186	594,500
31	Gold Run	446	1,037,950
18	Hunker, above	142	432,100
35	Hunker, below	311	788,000
5	Hunker benches	59	180,000
8	Gold Bottom	23	39,200
	Quartz Creek	100	200,000
	All other creeks	250	500,000
560		5,280	\$18,553,270

NOTES.

S. S. *Cutch* arrived from Skaguay on the 18th. of June, making the trip down in 66 hours. She had \$100,000 in gold dust on board. The *Cutch* sails again on the 20th.

The last spike was driven on the railroad extension between Cariboo and White Horse, on the 8th of June, and the first through train with 100 passengers was sent over the same day.

S. S. *Dirigo* also arrived, bringing about \$300,000 in gold. Passengers on the boat estimate the Klondike washup this year will be anywhere from \$25,000,000 to 45,000,000.

The *City of Nanaimo* brought down 15 tons of matte from the Van Anda for shipment to the New Jersey refineries.

S. S. *Alpha* arrived on Sunday from Cape Nome, after an exciting voyage there through the ice. All passengers and freight were landed without opposition, in fact, the condition of the people there was such that the *Alpha* was hailed with delight.

Foodstuffs were almost a luxury, and coal, \$150 per ton.

Another smelting furnace is being added to the Van Anda melter, Texada Island.

Finance.

(LONDON, ENG.)

There is a gradual and perpetual disappearance of old landmarks of the city. One, the century-old Wool-pack restaurant, disappeared in consequence of the transfer of the Bank of British North America from Clement's Lane, where it has been for thirty successful years, to Grace Church Street. Thirty years of fortunate Canadian banking means expansion, and the new building will be four or five times as large as the old.

Westralian Mines are largely waiting upon a declaration of the results of the new sulphide plant. The Kalgurli mine has furnished a sulphide result report, the first report, by-the-way, since the mine was established four or five years ago, and it was such a cheerful one that the quotations sagged at once and heavily. In some of the other mines the output has been purposely decreased—notably in Lake Views.

Having received an order to start the construction of four new first-class battleships, the Thames Iron Works Company, Ltd., requires a million dollars more capital and is getting it by means of cumulative 6 per cent. preference shares of \$5 each. This is the famous battleship building firm presided over by A. F. Hills, the vegetarian reformer and philanthropic millionaire.

Almost directly upon the receipt of the awful new of the terrible Ottawa fire, Govett, Sons & Co., and Wedd, Jefferson, the well-known brokers and jobbers in the Colonial section on 'Change, started a "House" relief fund. At the time of writing, already \$50,000 has been contributed especially.

After being distinctly mediæval until the middle of the nineteenth century, Japan has gone the modern pace with the last of modern nations. The British consular report on the trade of Japan for 1899 shows that there was a decline of over twenty-five million dollars in imports owing to the increased protective duties. Manufactured goods suffered most, the principal loss falling upon England.

Official report of the Klonike and Columbian Gold Fields Co. in bankruptcy has been issued, in which the receiver states among other things that the directors acted in bad faith, in the interests of the promoter, J. Morris Catton, and not of the company, and that he will report that the total sum of £11,395 has been paid by the company to Catton. He will also report that there has been fraud in connection with the promotion and formation and in the conduct of the company's affairs. The present estimate of the company's assets is "nil." This is not the first of Morris Catton's operations by a long chalk and we could have foretold this result without being considered prophetic.

The Leyland Steamship Amalgamation has fallen through. Also the Yorkshire Soap-makers' Association, an outcome of the combine mania, and by what we hear, justly merited the cold shoulder it met with in endeavoring to palm off on the public such poor prospects at such inflated values.

The fashion in connection with industrial trusts, started in Nov., 1897, with the English Sewing Cotton Co. which took over 15 businesses, with a capital of \$13,750,000. From that time these issues have fairly held their own, the combines totaling some 284 businesses, having a capitalization of \$185,100,000. A large number will be launched this year and amongst them, it is said, one of the largest ever attempted.

The creditors and shareholders of the Northern Exploration Company of British Columbia, Limited, met this week at the Board of Trade, Lincoln's Inn Fields, W. C., to select a liquidator under a winding-up order recently made against the company. Mr. A. S. Cully, Assistant Receiver, reported that the company was promoted by Mr. F. Callow Hole, in June, 1898, with a capital of £200,000, divided into 190,000 preference and 10,000 ordinary shares, to adopt and carry into effect an agreement dated April 12th, 1898, and to prospect, explore and enter into contracts with respect to mines, mining rights and property in British Colum-

bia. The agreement showed that Mr. Hole had arranged with Mr. Thomas Kellie, a member of the Provincial Parliament of British Columbia, for the latter to organize a party for exploration purposes in the vicinity of Revelstoke, British Columbia. Mr. Hole had agreed to equip, maintain, and bear the cost of the exploration party for one year from May, 1898, and the company was to acquire the benefit of any options which the party might secure during that period. The exploration party acquired options, but offered them to the company on terms that could not be accepted. It March, 1899, the company entered into negotiations for the acquisition of a portion of the Pine Mountain group of mines in Arizona, but after an expenditure of £300 upon inspection the matter was dropped. Two months later Mr. Grant Govan, with whom the company had negotiated for the acquisition of that property, undertook to deliver to the company an interest of not less than £10,000 in cash or shares in the company which he was then forming to take over the Pine Mountain property, in consideration of the company paying him £1,000. In the event of Mr. Govan making default, the £1,000 was to be returned, but default had been made, and Mr. Govan had apparently left the country without returning the £1,000 to the company. The case called for further investigation, particularly with regard to certain shares received by directors from the vendor. A resolution was passed for Mr. S. Jeffreys, chartered accountant, to act as liquidator and wind up the company with the assistance of a committee of inspection.

The Lipton dividend and report was a disappointment to many. *The Daily Mail* forecast of an expanded dividend, did not eventuate, though it caused a rise in the shares to \$12.35. They, however, since dropped to \$10.00. The old dividend of 11 per cent. was paid.

Combines are still the order of the day. The Bradford Dyers' Association have invested \$250,000 in the British Cotton and Wool Dyers' Association, and the latter has reciprocated by buying shares in the Bradford Company for a like amount.

In Scotland a coal combine is promised, also an amalgamation of engineering,—Dixon & Co. with the Calderbank Street Co., all large and wealthy undertakings.

The B. A. Corporation has floated another Rossland company on the London market, known as the Le Roi Mining Company No. 2, Limited. Capital \$600,000. The object is to acquire and work the Josie, Poorman, and Annie fractions, the Rockingham and No. 1., embracing an area of 72 acres on Red Mountain. The £5 shares are said to be already at a premium of 10s.

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

Alaska Goldfields,	15-16
Athabasca,	½
British America Corporation,	13s. 9d.
B. C. Development Assoc.,	1 ½
B. C. and New Find Goldfields,	½
Dominion Mining Development and Agency	¾
Duncan Mines,	¾
Hall Mines,	1s. 3d.
Klondike Bonanza	¾
Le Roi	£6 ¼
London and B. C. Goldfields,	1 5-16
McDonald's Bonanza,	¾
New Goldfields of B. C.,	1 3-16
Queen Bess Proprietary,	¾
Velvet,	1 1-16
Whitewater Mines,	11-16
Yukon Goldfields, (new)	1 ½
Ymir Gold Mines,	1 ¼

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	19
Big Three,	1 00	3
Cariboo Hydraulic	5 00	\$1.10
Cariboo McKinney	1 00	80
Canadian Goldfields,	—	7
Crow's Nest Coal,	25 00	39 00
Dardanelles,	1 00	3
Deer Park	1 00	3
Evening Star	1 00	8 ½
Grand Forks of Bonanza	25	50
Hall Mines	1 00	—
Iron Colt	1 00	—
Iron Horse	1 00	—
Iron Mask	1 00	35
Knob Hill	1 00	52
Le Roi	£5	£5
Mineral Hill	1 00	05
Minnehaha	1 00	4
Monte Christo,	1 00	4
Montreal Goldfields,	1 00	4 ½
Morrison	—	3
Noble Five	1 00	4
Novelty	1 00	03
Old Ironsides	1 00	80
Payne	1 00	1 04
Rambler Cariboo	1 00	22
Rathmullen	1 00	—
Slocan Star	50	—
St. Elmo	1 00	—
Van Anda,	1 00	3 ½
Victory-Triumph	1 00	03 ½
Virginia	1 00	—
Waterloo	10	17
War Eagle	1 00	1 40
White Bear	1 00	3
Winnipeg	1 00	15

LATEST POINTS.—Bank Rate, 4 per cent. Open market rate three months bank bills, 3 per cent. Silver, 27 ½d. per oz. (bar) Standard. Copper, £73 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, 2 ¼.

NEW YORK METALS.

June, 16.—Copper, dull; broker's price, \$16.50. Tin, steady; strait, \$30.75. Lead, unsettled; broker's price, \$3.60, exchange price, \$3.72 ½.

Answers to Correspondents.

X. Y.—We cannot give you the information you ask for, not being able to trace the location you refer to. We will do our best to ascertain and write to you.

TORONTO.—The fall has been considerable and in the face of the returns it seems inconsistent, you cannot, however, control the markets unless you are prepared to buy largely, and latterly it is the other way about. Realizations seem to be the order and hence the result. Advise you strongly to hold.

G. P.—The district you mention is not yet sufficiently developed to pronounce upon. The prospects are, however, good.

ST. HELENS.—I. We believe they will come out all right, in fact, dead sure, providing they can secure the working capital, which has been the drawback to so many undertakings in B. C. 2. Most decidedly; what industry can succeed without such conditions?

BAXTER.—Yes; hold on, they must advance.

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