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THE MINING REVIEW.

Vol. I.

ROSSLAND, B. C., JANUARY 13, 1897.

No. 18.

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Mining Claims for sale near Rossland, Trail and in the whole Columbia basin.

WILL EXAMINE AND REPORT ON MINES

MINING NOTES.

Scarcely more than a third of the Deer Park stockholders were represented at the meeting in Spokane today. The offer of \$500,000 for the property could not be considered, there being no quorum, but a majority of the shareholders present were opposed to the idea of selling the mine at that figure

The Pure Gold Mining Company has been organized, with these officers. Walter C. Archer, president; James O'Toole, vice president; D. D. Birks, treasurer, and A. P. Hunter, secretary and manager. The company owns three full claims, the Pure Golds Escort and Trilby, at Christina lake, and has six men at work.

Ore shipments over the Red Mountain Railway are very large.

The crosscut tunnel which is being run on the San Francisco is expected to cut the lead very soon. This property is being operated by Winnipeg men.

The power drills of the St. Paul are in full operation.

The White Bear shaft is down about 100 feet. A good shaft house has been built.

Double shifts are working on the Mabel, and the lower tunnel, which is intended to crosscut the ledge, is in about 180 feet.

Judging from Secretary Carlisle's attitude, there is no likelihood of the United States government establishing sampling works at Northport.

The vein of free milling ore on the Golden Drip has widened to two feet.

The following are the Trail Creek stocks which, so far, have been listed by the new Spokane Mining Stock Exchange: Butte, Commander, Crown Point, Deer Park, Evening Star, G. cat. Western, High Ore, Iron Mask, Josie, Jumbo, Le Roi, Lily May, Mayflower, Monita, Monte Cristo, Novelty, O. K., Phoenix, Prorman, Rossland, Red Mountain, St. Elmo, Silverine, Virginia, War Eagte, West Le Roi and Josie, White Bear.

A 25-foot drift has been run in a westerly direction 65 feet from the mouth of the Southern Belle shaft, and a crosscut tunnel is being driven 500 feet to the south on another lead. The breast of this tunnel is all in ore and pyritic vein matter.

From the bottom of the Sunset shaft a drift is in 14 feet. The stock of the Canadian Gold Fields syndicate, which is working the Sunset, is selling freely.

Three or four days ago a new body of high grade free milling ore was struck on the O. K. The vein was then eight inches wide. It has since widened to over two feet, and several tons of ore has been taken out. It apparently carries very high values in free gold. The ore will be treated in the O. K. mill by means of the new automatic sampler and amalga-

On the Monte Cristo there is now a four-foot ore body averaging \$23 in gold to the ton.

The crosscut tunnel being driven on the Retaliation, owned by the Montesuma company, is in 45 feet. Another 25 feet in, it is expected, the lead will be

The owners of the I. X. L, have decided to drift on their ore body and ship the product immediately. assays having shown good values in gold. The ore is too base for treatment by means of the stamp mill and will be sent to the Tacoma smelter.

The electrical plant which is to supply power for the Trail smelter, and for other purposes in that town, is now on the ground.

The Silent Friend, a 35-acre claim adjoining the Belleview, has been purchased from Duncan McRae by a Toronto syndicate, which will form a strong company to develop the property.

The occupants of lots at the townsite of Nelson on the reservation, according to an exchange, are sinking shafts in their back yards in order to "get ahead" of the Indian Agent, who has threatened them with eviction on the grounds that the reservation is only open to prospectors or miners. Some of these placer "claims" have actually yielded gold.

Ever since Messrs, Gooderham and Blackstock got the War Eagle-Crown Point deal under way, says a Toronto advice, English and American capitalists have been making offers of purchase. The last bid was made the day before yesterday, when a representative of a London, England, syndicate submitted an offer to Mr. George Gooderham, following him to his private residence in the evening to do so. The agent effected no purchase, however, nor is he or any other man likely to do so for a while Mr. T, G. Blackstock has authorized the statement that the new owners of the mines were absolutely resolved not to sell out, but to develop them themselves. He added that for a month past the cable and telegraph wires had been kept red hot by people who wanted to get hold of the consolidated properties.

An effort is being made, it is now reported, toorganize a syndicate in London for the purchase of the Cliff mine for \$400,000. The REVIEW's informan & states that there is a strong probability of the deal going through.

FOREIGN EXPERTS COMING.

Scarcely a day passes now that does not bring to Canada some British mining expert who has been inerested in the gold fields of Australia or South Africa or years past, but is forsaking them for the rich resources of Algoma or British Columbia.

The latest arrival of this class is Mr. A. Cairns of London, England, who had just passed through this city on his way to Rossland.

Mr. Cairns has for year been identified with the. famous Coolgardie fields of Australia, and he says there is plenty of gold on the Antipodean continent yet, much of it free-milling quartz, but the scarcity of water there is the main difficulty, the only stream of any considerable size accessible to the Coolgardie property being 300 miles distant. A company with £2,000,000 capital has been formed to pump the water that distance.

Considering that Western Ontario and British Columbia have comparatively excellent facilities as regards water and fuel supplies, Mr. Cairns' prediction that London's attention will largely turn to our country's mines in the spring would appear to bewell founded.-Toronto World.

A MUCH-WANTED REGULATION.

Mining men will be glad to know that the following order-in-council is now in effect:

Any person or joint stock company, being the holderof any mining property, who may apply for celiefs against the forfeiture of his or its interest in such property by reason of his or its omission to obtain a. new free miner's certificate on or before the day following the expiration of the lapsed certificate, shall,. upon the production of an affidavit setting forth the: circumstances of such omission, and full particularsof the property affected, together with the declaration of the gold commissioner or mining recorder for the division or divisions in which such property is situated. to the effect that no records adverse to the applicant'sinterests therein have been made by him during thetime in which the said applicant was not in possession. of a free miner's certificate in good standing; and, further, upon the payment to the minister of mines of. a fee of five dollars, be entitled to receive the relief. sought for; and the minister of mines may thereupon. give instructions for the alteration of the date of the expiration of the lapsed certificate, and may also giveinstructions for such amendment to be made to the records affected as may be considered requisite...

LIMITS OF DEEP MINING.

The question of deep mining is thus treated in the last issue of the London Mining Journal:

"It is universally recognized that the obstacles to deep mining are of a two-fold nature, physical and economic. The first consideration limits the depths below which it will be impossible to mine; the second that below which it will not be profitable. That there really is a limit to which the word impossibility can fairly be applied is evident, when we consider that the earth's temperature is a constantly increasing amount as we descend below the surface, so much so, that if the more central portions are not in an actually liquid condition, they are probably in what may be called a potentially liquid condition at a temperature much higher than their melting points. It is fairly well known nowadays that the rise of temperature does not vary with the depth in simple arithmetical progression, but that the law is rather more complicated, so much so that the probable temperature attained at great depths is not easy to calculate. Moreover, there are a number of subordinate circumstances that must serve to profoundly modify the results in individual cases. First of all, both the absolute depth and the relative depth must be considered, meaning by the former the depth that the working reaches below sea level, and by the second the depth below the month of the working, or, to put it differently, the height above sea lever at which operations are commenced must be taken into account. The theory of the effect of the incumation of the strata upon local temperature seems to be entitled to considerable weight, more especially when the depths are, comparatively speaking, not very great. More important still, perhaps, is the greater or less conductivity of the rock strata, and more especially would it be important to ascertain chether there is a stratum of non-conducting rock below any given spot thus preventing the central heat from ascending, or above the given spot, thus preventing the central heat from escaping. For example, the low temperatures obtained by Agassiz at the Calumet and the Flecla mine are due not only to the proximity of the cold waters of Lake Superior, but to the conducting powers of rock impregnated with metallic copper, which enables the cooling influence of the body of water to make itself felt at great depths. Another most important factor is the direction whence the water currents at any particular point are moving, whether they are coming upwards, and are thus conveying heat to the spot, or whether they are capable, on the outrary, of cooling it by taking heat away. It seems accordingly certain that local conditions, such as cannot well be predicted, will play a most important part in determining the temperature in depth at any particular point. Mining is no longer the severe manual labor it used to be, and machine drills and mechanical baulage require rather intelli-Sent supervision than physical exertion. We hold that the greater difficulty will be found tess in keeping the temperature of the air iow enough for working in than in handling the very hot rock as broken out from the mine, especially if it be wet, and the miners have hot water or hot mud to contend with. If this water is highly mineralized, as in the bottom of the Calume and Heela shafts, a further difficulty will be encountcred.

"Pressure must, like temperature, be considered under two heads namely, that of the atmosphere and that of the rocks. The former does not need serious consideration. In the Triger method of shaft sinking, men have worked under three atmospheres of pressure, though with a cert in amount of difficulty. This pressure may be taken as just about the limit at which men can work, and not all men by any means can stand this, though, no doubt, sufficient labor (at a price) cauld be obtained for all ordinary mining purposes. As this pressure corresponds to a depth of over 25,000 feet below sea Tevel, any difficulty on this score mdy be disregarded. The effect of rock pressure is more open to discussion; some engineers hold that the pressure on the roof and sides of an excavation must necessarily increase with increasing depth, and attempts have been made to reduce this view to a matter of calculation. It is, however, by no means so self-evident as it appears at first sight, and has often been proved to be absolutely maccurate. Thus all mining engineers have come across instances

(Continued on page 3.)

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Silver Bell Mining Company

Assays from surface ore: \$42.96, \$53.00. \$52.30, \$51.90, \$85.26. Ore taken from the bottom of the shaft on Oct. 26th, assayed \$103.14.

Situated two miles from Rossland, B.C., has good shipping facilities and all other conditions favorable for a paying mine.

TREASURY STOCK

is now on the market at Fifteen (15) Cents. The remarkably fine showing from development work warrants even a higher figure. Machinery now being

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There are three distinct ledges on the property, including the main 'edge of the Silver Bell.

Development work is now in active progress. Five men are employed.

First block of Treasury Stock on the Market at 6 cents.

Tunnel now in 50 feet.

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Arrives at Trail 745	ລ. ເກ
No 5, PASSENGER, Sunday only-	
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Red Eagle Gold Mining Company, LIMITED INCORPORATED UNDER THE LAWS OF BRITISH COLUMBIA.

Capitalization: **\$1,200,000**.

Shares, Par Value \$1.00, Fully Paid and Non-Assessable.

Treasury: 500,000 Shares

President-W. H. FIFE, Fife Hotel, Tacoma, Wash.

Provisional Directorate: Vice-President—WM. BENNISON, Rossland, B. C. Managing Director—J. W. COVER, Rossland, B. C.

Consulting Engineer-C. W. CALLAHAN, London, Eng., and Rossland, B. C.

Properties (80 acres): RED EAGLE and RED POLE, in the famous South Belt-Trail Creek Mining District, B. C,,—adjoining Mayflower and Curlew.

Assays of ore from surface of Red Eagle give results ranging from \$20.00 to \$928.80. The Red Eagle has been surveyed, and a crown grant applied for. The price of Red Eagle Treasury Stock is 10 cents.

The work of development has commenced, and will be prosecuted vigorously.

Intending investors are invited to examine the Red Eagle properties.

For prospectus and full infor. nation, address:

Remittances may be made through the Manager of the Bank o British North America, Rossland, B. C.

WM. BENNISON & CO., Mining Brokers, Shaw Block, Rossland, B. C.

(Continued from page 2.)

OUR TIME HAS COME.

THE WAR EAGLE IN TORNTO.

where the upper levels of a mine needed very careful tim bering, whilst the lower ones required very little or would stand without any, and in most shafts it is the upper portion that requires the most careful securing. For, whilst it is perfectly true that pressure increases with increasing depth, this same pressure tends to consolidate the rocks, and renders them more capable of resisting the pressure. The amount of support required by an excavation depends not only upon the pressure, but even more on the nature of the walls, and whether these are strong enough to resist the former. It seems probable that in very deep-mines the horizontal thrust, tending to squeeze the walls of an excavation together, will be the most serious danger to be guarded against; this can readily be done by building suitable arches and by careful stowing of deads. The latter will, in any case, be necessary to save hoisting worthless material at a deep shaft.

"Looking, then, at the two main elements that determine the possibility of working at great depths, we find that though a limit must be reached, it will be a very low one, and one that will not need to be taken into practical consideration for many years to come. The temperature at the bottom of the deepest bore hole in the world 6573 feet deep was about 150 degrees F., under conditions when the heat was retained as much as possible. It seems, therefore, quite safe to say that nothing will be possible at a depth of 10,000 feet and under exceptional circumstances may even be possible at a depth of 20,000 feet.

"The question, therefore, resolves itself into the further consideration. Will minerals be found as rich at great depths as at shallow ones? With respect to coal the question is easily answered. There seems no reason whatever why the deep-lying seams of coal should not be every bit as good as those near the surface, and experience, as far as it has yet gone, seems to bear out this view. Coal has been cut in deep shafts, as in Belgium, and in still deeper boreholes in many parts of the world, and no inferiority as compared to shallow coal has been found to exist. With, regard to metalliferous mines, it is known that there is in many cases a surface enrichment that may continue only a very few feet, or may, in exceptional cases, hold down to 300 or 400 feet, and that below the region of this superficial alteration ores are just as likely to be rich as poor in depth, the latter condition appearing not to exert any noticeable influence upon their quality. If there is a zone on the earth's crust at which mineral veins either become barren or phenomenally rich, it can only be said that we have as yet nowhere reached it, nor obtained even the slightest evidence of its existence. Finally, it must be remembered that the impossibilities of one generation become the everyday practice of the next. Mining has progressed within the last century at least as rapidly as any other branch of engineering, and it may well be that, our descendents a century hence will merely point to our present ideas of the limit below which mining is impossible as amusing examples of oldfashioned prejudice."

More and more attention and space is being devoted by London papers to our mines. The London Advertiser recently contained the following article:

"What we are coming to in Canada in the matter of the development of our mineral resources is made apparent by a Butte, Mont., correspondent, who gives the following as a conservative estimate of the output in that district during 1896:

	Pounds copper.
Anaconda Company	130,000,000
Boston and Montana	45,000 000
Montana Ore Purchasing Company	18,000,000
Parrot Company	14,000,000
Colorado Company	5,000,000
Clark's Reduction Works	4,000,000

Total...... 216,000,000

"The value of the copper at 11 cents per pound is \$23,760,000. The gold and silver, by-products of the copper ores, will yield \$8,000,000, making the total yield of the district \$31,760,000. This exceeds 1895 by about \$1,000,000. Take a map of Montana and draw a line for an axis, passing through Helena and Virginia City, make the axis not to exceed 120 miles long, and mark off a strip of territory on each side about 30 miles wide, and you have the boundary of a tract 120 miles long and 60 miles wide, from which has been produced all Montana's copper, most of the lead, three-fourths of the silver, and nine-tenths of the gold. Bannock and Gold Creek are the only placer districts of note outside this rich mineral zone. Butte, with its unparalleled deposits of copper, lies near the centre of this mining zone. It is not likely that there can be named anywhere a tract of equal area that has produced so much value in so short a time, and still retain so large a proportion of unworked ground of unknown richness. The daily product of the Anaconda company is now 3,000 tons. During the present year the company has expended \$2,000,000 in making improvements, and has divided \$3,000,000 among it stockholders. Among the improvements was the purchase of several new mammoth hoisting engines. These enormous pieces of machinery are capable of lifting many tons from a depth of several thousand feet. Next year nearly all the mines of this company will be sunk several hundred feet deeper.

'We give these figures to show the enormous benefits accruing to a company from the effective development of its minerals. Many assurances have been supplied recently by mining experts that we in Canada have just as rich mineral lands as Montana-both in Ontario and the Rocky Mountains. What we need is mielligent development, which has not hitherto been possible because of the holding back of moneyed men. The era of progress has, however, set in, and the eyes of the investing public, hitherto kept, on Butte, on Johannesburg and on Western Australia are now being directed to Rossland and the Rainy river district. Canada's turn has surely arrived.

"All the gold ores of British Columbia occur in copper alloy, as does also the nickel of Sudbury. The northern shores of Lake Superior, while not as rich as those in Michigan, show rich ledges of copper."

The flotation of the War Eagle consolidated is now an assured fact. The new company is capitalized for two million dollars, and effects a consolidation of the War Eagle, Crown Point, Tiger and Uncle Sam in the Trail Creek district, and the Richmond groups in the Slocan district.

The Gooderham interest controls 1,037,500 shares in the new company, receiving 247,500 shares for Crown Point stock, 40,000 shares for other properties and options, and 750,000 shares for money subscribed to purchase the War Eagle. This stock costs Gooderham, it is understood, \$510,000.

The remainder of the stock is divided as follows: One hundred and twelve thousand five hundred shares are reserved for the other Crown Point shareholders, the transfer, however, which gives them only at the rate of 36 cents a share, being optional. Williamson, the manager, gets 75.000 shares. The treasury reserve is 350,000 shares, and 425,000 have been offered to the public at 80 cents, and all subscribed, the money realized by the sale of this stock, plus Gooderham's subscription, making up \$850,000, or the price of the War Eagle. The War Eagle mine is in a better position now to pay steady dividends than it has ever been. It can ship too tons of ore a day easily, and, after leaving ample funds for development purposes, its earning capacity should not be less than \$30,000 a month. It can pay fair dividends on the whole capital of the company and provide the expense of developing the other properties as well.

The importance of the sale cannot be overestimated. So long as the War Eagle was controlled in Spokane, and D. C. Corbin was largely interested, there was always a danger that in the interests of the Spokane Falls & Northorn railroad a smelter would be built south of the international boundary line. This is now impossible. The relative positions of the Crown Point and War Eagle prevent it. It is very likely that a smelter may be built somewhere between the two probably at the forks of Trail Creek, about half a mile from Rossland. In fact it is hard to see for what purpose than to provide capital for the construction of a smelter, 350,000 shares have been reserved in the treasury. The sale is, therefore, of great importance to the town of Rossland and Trail Creek district generally, as it will help to centre the smelting industry on Canadian soil.

It is not less important to the east, and particularly to Toronto. It is an object lesson to the eastern public, given on a grand scale, of the real value of Trail Creek mining, and should stiffen the back of every holder of any interests in that country. And just at this juncture, when the government is committed to the Orow's Nest Pass railway, it will help to create a healthy public opinion on the advantages of this more intimate connection between the eastern and western mining regions. For the immediate future Canada must stand or fall by her mining industry and its development. This deal will help to bring it home to people that there is something to stand on.—Toronto World.

THE MINING REVIEW

A weekly newspaper devoted to the mlning interests of Trail Creek District.

1 Paichsbed every Wednesday at the office of The Mining Review, Columbia Avenue, Rossland, B. C.

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Resumes Cards first name	\$20 to per insertion. \$70 per month
There will be so do	intion from these rates

Vol. 1. JANUARY 13, 1807.

EDITORIAL NOTES.

THE committee on mining of the Victoria Board of Trade have for some time past had under their consideration certain proposed amendments to the law regarding the incorporation of mining companies, and recently presented a report containing the following suggestions, which will be forwarded to the minister

After seriously considering the different phases of the subject and looking at the matter in its broadest sense, and with the sole object of bringing the mining industry of this province to a sound and healthy basis your committee make the following recommendations as the basis of your action. It thought necessary, to bring the subject to the notice of the provincial gov-

- 1. No companies to be registered to do business in this province except those organized under British or Canadian acts,
- 2. The following scale of fees to be charged by the government on all mining companies incorporated.

Ger the purpose of comparison we place in parallel columns the fees which would have to be paid in Britain).

Cap to ap to	Fees to be naposed.	fees payable in Great Britain.
\$ 100,000	\$ 25	£ 30 5
200 000	100	55 5
300,000	200	80 5
40,000	300	105 5
500,000	500	130 5
~600,000 /	600	156 10
700,000	700	185 10
.800,000	800	200 10
ζωυ,αω,	900	220 00
1,000,000	1,000.	235 5

- 3. Not less than one-third of capital to be set apart for "working cap tal," and which shall not be sold for less than par value.
- 4. Careful revision and consolidation of the "Companies Acts," particularly as applying to the organization of mining companies.
- 5. If at all possible, to prevent the repetition of the names of claims.
- The Provincial Government to require from all mining companies incorporated in British Columbia, or registered under the Companies Acts "foreign" an annual or semi-armical statement, should be pubdished in pamphlet form, so that investors at home and abroad would be able to judge of the position of their investments. The statement should be in tabulated form, not too much in detail, but giving the most salient points, after the style of the Dominion banking returns: Authorized capital, treasury shares each, sold; tre sury shares unsold; shipment of ore, tons; workmen, average value of ore shipped; length -of time closed down; value of plant and machinery.
- 8. That no shares (other than treasury) to be permitted to be issued until after a certain percentage (if only 5 per cent.) of the treasury stock has been seld, and the money in the hands of the company.

MARKET REPORT

An improvement throughout nearly the whole list of stocks is to be noted this week. Not all have advanced in price, but the market is steadier and the feeling among outside brokers and investors is much healthier. War Eagle is now \$1.62. O. K. has been exceedingly active since the strike, and is on the boards at 32, while Deer Park is quoted at 25. Big Three is favored and Monte Cristo is also in some demand. A dispute among the large holders, resulting in a stoppage of work, has caused West Le Roi and Josie to decline to 17, near its old price. Newer stocks continue to sell well. Canadian Gold Fields, Victory-Triumph, Cambridge, Waneta-Trail Creek, Red Eagle, Silver Bell, Ibex, Montezuma and International all meet with favor. An advance in the price of Victory-Triumph transquis contemplated, owing to the magnificent showings on the property and the rapid progress of work, which will be carried on until March by the promoters, without using any treasury March by the promoters, without using any treasury

101103,			
COMPANIES.	CAPITA- LIZATION.	PAR	MARKET PRICE.
Alberta	\$1,000,000	\$ 1 00	t 15
Alamo	500,000		*
Butte Gold Copper	1,000,000		t 071/2
Caledonia Con	3,500,000	1.00	t 10 t 10
California	2,500,000	1 00	15
Cambridge	1,000,000	1 (0)	t o8
C & C	500,000	1 00	*
Celtic Queen.	750,000	00 1	t 05
Commander	500,000	1 00	t 25
Crown Point.	1,000,000	1 00	40
Colonna	800,000	1 00	t 15
Cumberland	500,000	1000	* ⁵¹
Deer Park	1,000,000	1 00	25
Elise	1,000,000	1 00	t 15
Enterprise Eureka	1,000,000	1 00	*20
Evening Star	500,000	1 00	t 05
Georgia	1,000,000	1 00	20
Good Hope	500,000	1 00	8
Great Western	1,000,000	1 00	17
Grey Eagle	750,000	1 00	071/2
Homestake	1,000,000	1,00	17:4
Hall Mines	£300,000	£1	
Hilltop	1,000,000	00	t to
Iron Colt	1,000,000	1 00	t 20
Iron Horse	1,000,000	1 00	*20
Iron Mask	500,000	1 00	57
Ivanhoe	700,000	1 00	t 10 58
Jumbo	500,000	1 001	60
Juliet	1,000,000	1.00	1 12
Kohinoor	1,000,000		* 10
Kootenay London	40,000 1	00 00	121/2
Le Roi	2,500,000	5 00 7	
Lily May	1,000,000	1 00	20
Mayflower	1,000,000	00 1	14 ½ 16
Mugwump	1,000,000		20
Monita	750,000	1 00	25
Minnesota	1,000,000	1 00	-
Noble Five Con	1,200,000	1 00 1	62
Old Ironsides	1,000,000	1 00	11
9. K	1,000,000	1 00	31
Orphan Boy	700,000 500,000	1 00 1	-
oorman	500,000	1 00 1	9
Ked Mountain View	1,000,000	1 00	12
Rossland, Red Mt	1,000,000	1 00	.25
Rambler Con	1,000,000	1 00	13.
Silver Bell	1,000,000	- T	13. 15
ilverine	500,000	00 1	ม์เ
outhern Cross & W Con	500,000	1 00	20
t, Paul	500,000		121/2
unshine		50 2 10 00 1	, 15 *
Trail Mining Co	250,000 10	00 00 3	k
Inion	600,000	1 00	
lictory-Triumphlirginia	500,000	1 00 1	19
Var Eagle.	500,000	1 00 1	62
Var Eagle Vest Le Roi	500,000	1 00	17
vince iscar	500,000	1 00,	. .
oung British America	1,000,000	1 00 t	•
ilor	1.000,000	t ool	15
Dividend paying properties appear i Amasterisk denotes that there is no	n italics.	narket	-
oles treasury stock.	STOCK OIL UPGIL		It de-

MOBERLY, C. E.

MINING OPERATOR.

ined and reported on. ROSSLAND, B. C. C. F. CLOUGH, President.

L. J. MCATER. Vice-Pres. & Preas.

F. CLOUGH & CO.

MINING BROKERS.

ROSSLAND, B. C.

Head Office.

Spokane, Wash.

36 King St. E.

Toronto, Ont.

(X/ALTER C. ARCHER,

MINING AGENT,

NOTARY PUBLIC AND CONVEYANCER.

Full list of Mining Stocks. Quotations given by letter or wire.

Telegraphic address: Archer, Rossland.

P. O. Box 240.

ROSSLAND, B. C.

WE ARE PREPARED TO PURCHASE any of the Standard Stocks at Market Quotations, paying cash for same. Wire offerings,

SAWYER, MURPHEY & CO., MINING BROKERS,

Canada Life Building,

TORONTO, ONT.

OFFICES:

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MONTREAL. QUE.

Contractors for the sale of Treasury Stocks of Mining Corporations in the Trail Creek District.

S. NORMAN & CO.

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BROKERS.

Direct Telegraphic Connection with Rossland.

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SPOKANE, WASH

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MINING BROKERS AND REAL ESTATE.

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201 and 202 THE ROOKERY.

SPOKANE, WASH

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Mining Stocks and Properties of Merit.

RECORD BLOCK,

ROSSLAND, B. C.

HE ANGLO CANADIAN MIN-ING EXCHANGE, LID.

(Incorporated by Dominion Charter.) Head office: McKinnon-building, Toronto, Canada, Rossland office; Columbia avenue, near Grand Union Hotel.

Represented by GEO, GURD, Secretary.

THE CANADIAN GOLD FIELDS SYNDICATE. LIMITED.

LEADING FEATURES:

Incorporated December 9th, 1896, under the great Imperial Companies Act.

Entire Capital Stock, "Treasury."

There being no Promoters' Shares.

Absolutely no personal liability following the Shareholders.

Shares sold at TEN CENTS are actually Fully-Paid and Non-Assecsable.

Empowered to do a General Mining Business anywhere for profit.

Ample Capital Stock to enable successful accomplishment of any undertaking.

Every Share participates in all of the Syndicate's operations.

Will not risk all of its working capital upon success or failure of any single mining undertaking.

Begins business with control and vigorous development of the justly celebrated Sunset Group of rich Gold-Copper properties at Rossland.

Owns the "Jennie," a Slocan property, the clean ore from which assays \$80 to \$650 per ton.

Is officered by men, more than one of whom, in any emergency, can step into the breach and do expert work, whether the "sharpening of steel," the use of any mine workman's tools, or the conduct of financial operations of magnitude be necessary.

Orders and Remittances for Fully-Paid, absolutely Non-Assessable Shares of the Canadian Gold Fields Syndicate, Limited, at 10 cents, may be sent direct, or through any bank, to

THE WALTERS COMPANY, Ltd., Rossland, B. C.

No Order Filled for less than FIVE HUNDRED SHARES.

AGENTS WANTED EVERYWHERE.

BACK TO "DEEP DIGGINGS."

An attempt is to be made to revive the interest in the "deep diggings" mining which flourished in British Columbia away back in the first boom days of the fifties and sixties. The rich gold propositions of Rossland and other camps have largely superseded the old time placer and "deep diggings" operations, but there are those who claim that just as rich results may be obtained from the old river beds of British Columbia as from working the rocky quartz, says a Toronto exchange,

At the Queen's hotel there is at present registered Mr. Charles Ramos, a pioneer of the old wealth-producing district of the Cariboo, and his object in visiting the east is to call the attention of our capitalists to that particular class of gold-seeking with which he is identified. Mr. Ramos was an associate of the famous "Cariboo" Cameron, who made \$750,000 out of the Williams creek diggings in the early sixties, and since then he has been engaged in mining in California, Oregon, Washington and other parts of British Columbia. He was, by the way, born in British Guiana.

The term "deep diggings" is applied to that branch of gold mining which has for its bases of operations the old beds of rivers. In the alluvial deposits of gravel and soil washed down from the mountains and stored by nature beneath the running streams of water are frequently found quantities of the precious metal, and this gold is the object of this method of mining to obtain.

The modus operandi adopted is to sink shafts in the banks of the rivers and then drift and timber in the gravel beneath the running water. These deposits often continue for miles under the streams, and the usual depth for 'pay" gravel is about seven feet, though it sometime runs as high as 90 feet. An idea of the returns to be obtained from operations in this line may be therefore arrived at by reflecting that the workings on Williams creek in the early days are said to have yielded, on an average, over \$1,100 in gold to the square foot. And Mr. Ramos points out that when the gravel some on the "dump" it has a great ad-

vantage over quartz ore, inasmuch as it has only to be "washed" to extract the gold from it.

Lack of capital and the need of machinery, Mr. Ramos pointed out, caused a cessation of operations in this district in the early days, but now he thinks a revival is at hand. It is understood that it is the opinion of Prof. Dawson, the Dominion government geologist, that not half the gold has been taken out of the Cariboo diggings, and Mr. Ramos thinks that Canadians will do well to try to get hold of what remains.

NOT A LITTLE AUDACIOUS.

The Vancouver and British Columbia General Exploration Company, Limited, (a concern registered in April last with a capital of £25,0001, have arranged to sell for £500,000 to the Galena Mines, Limited, a property of about 103 acres, or six silver-lead mining claims, Slocan Lake, in the West Kootenay District of British Columbia. The prospectus of the Galena Mines Company has been advertised this week, and from it we learn that its capital is £550,000 in £1 shares, of which 50,000 are now offered to the public, 475,000 are taken by the vendors in part payment, and 25,000 held in reserve. Three of the five directors are also on the board of the vendor company. According to the report of the local mining engineer the development work afready done consists of a sixt, -five foot shaft, from the bottom of which a crosscut has been driven north a few feet to tap the ledge. On this ledge drifts have been run about forty feet each way. A winze has been sunk fifteen feet. The value of the ore on the dump or estimated to be in sight is £87,406. The same authority estimates the yearly profit on an output of 150 tons per day at £759 (say £180,750 annum.) At such a preliminary stage of the enterprise it is not a little audacious to ask £500,000 for a property so little developed, even though, as we are assured by the engineer, "snow-so plentifulelsewhere in the district—is seldom over a foot and a half deep at the mine."—London Statist.

VALUE INCREASES WITH DEPTH.

The mining world has been set by the ears by the developments in the Kennedy mine in Grass Valley within the past few days, says a San Francisco despatch. At a perpendicular depth of over 2,100 feet a body of rich orc, thirty feet in width, has been discovered. In magnitude the ore body will compare favorably with any yet found, and the great depth at which it lies explodes a long cherished and hereofore believed infallible tradition of the search for gold on the Pacific coast. It is an old theory which age has almost crystalized into a formula that gold ore disappears after a certain depth has been attained. This is a ereed of every old prospector from the Yukon to the Panama isthmus.

The development in the Kennedy not only topples over this old-time belief, but may lead to a revolution in mining in this state, for the deeper they go in the Kennedy the wider grows the ore body, in which respect, we may add, this property resembles the mines of Trail Creek.

NICKEL PRODUCTION.

The production of nickel in the United States in 1896, entirely from Canadian ores and matte, reached a total of 3,697,039 pounds, which, compares with 2,678,661 pounds in 1895, showing an increase of 1,018,378 pounds. Of the production in 1896 metallic nickel amounted to 1,600,049 pounds, the remaining 2,096,890 pounds being in the form of oxide and sulphide.

This production may be said to represent the greater part of the world's output, as very little is reported from abroad, outside of the small quantity made in Norway, Sweden and Germany. For a part of the year the Societe le Nickel, in France, has had its works and its mines, in New Caledonia closed, the stocks on hand being sufficient to meet all requirements for the metal for some time to come. The demand tor nickel, except for use in steel making, does not seem to increase; and the amount required for alloying steel is still comparatively small. No great increase in the use of the metal industrially can be expected until it can be furnished at a much lower price than at present.

Big Three Gold Mining Company.

Incorporated under the Laws of the State of Washington and Registered under the Laws of British Columbia.

THE COMPANY OWNS

CAPITAL

THREE BIG MINES.

"MASCOT," "SNOWSHOE," "SOUTHERN BELLE."

In Trail Creek District, Rossland, B. C.

PAR VALUE, \$1.00 EACH.

3,500,000 SHARES. PAR V. SHARES FULLY PAID AND NON-ASSESSABLE.

Treasury Stock 1,000,000 Shares.

TO BE SOLD FOR DEVELOPMENT PURPOSES.

OFFICERS:

President: R. H. POPE, M. P., Cookshire, P. Q., Vice-President: O. G. LABEREE, Spokane, Wash. Sceretary and Treasurer: R. Dalby Morkill, Jr., Rossland, B. C.

DIRECTORS:

J. P. Graves, Spokane, Wash.; Chas. H. Wolf, Spokane, Wash.; O. G. Laberee, Spokane, Wash.; R. H. Pope, M. P., Cookshire, P. Q., and R. Dalby Morkhel, Jr., Rossland, B. C.

DESCRIPTION.

The "Mascot" is situated on Columbia Mountain, and adjoins the famous "Kootenay" mine Work done: 100 feet of tunnel, the whole face of tunnel in ore; 30 feet shaft, five feet of ore in bottom of same. Two strong veins on the claim, with good grade ore like the "Kootenay" mine. The "Mascot" is the most promising mine for the work done in Trail district. Buildings, roads and trails all completed.

The "Southern Belle" is located on Red Mountain, and adjoins the "Cliff" and "View" mines. Has a shaft 50 feet

deep, and about 2½ feet of good ore. Assays taken were: \$35.00 to the ton, and as high as 20 per cent. in copper, one of the best copper ores in the camp. Has numerous open cuts and two short tunnels.

The "Snowshoe" adjoins the "Southern Belle" and the "Northern Belle." It has a tunnel 80 feet long, shaft 20 feet

deep; good surface showing and ore values increasing with depth.

The "Big Three" has a bright future, and the stock is a good investment. All three properties are developing very fast into mines.

The present treasury stock is offered to carry on further and rapid development work. Development under the able supervision of W. Y. Williams, a gentleman of sound ideas and wide experience in mining.

Ten thousand shares of Treasury Stock offered at 10 cents a share. Shares will advance. In ordering shares, send draft, money order, or express order, to

A. L. White & Co., 259 St. James St., Montreal, P. Q.

Subscribe For The

KE

TWO DOLLARS A YEAR

The season of activity in Mining is beginning. Keep informed. You will find all the news of Trail Creek in reliable form in

THE MINING REVIEW,

A. R. MACDONALD & CO., Rossland, B. C.

CERTIFICATE OF IMPROVEMENTS.

CAMBRIDGE MINERAL CLAIM.

Situate in the Trail Creek Mining division of West Kootenay district. Where located About 4 miles south east of the own of Rossland, on Viclin Creek.

TAKE notice that I, N. F. Townsend, as agent for H. S. Wallace I. No. 72.405, John Elliott. No. 75.011, and Ernest Miller, No. 72.371, intend, sixty days from the date hereof, to apply to the Mining Recorder for a certificate of improvements, for the pur pose of obtaining a Crown grant of the above claim.

And, further take notice, that action under section 37 must be commenced before the issuance of such certificate of improvements.

Dated this toth day of October, 1896.

N. F. TOWNSEND. CERTIFICATE OF IMPROVEMENTS.

VICTORY MINERAL CLAIM.

Where located . On Sophie Mountain, in the Trail Creek Mining Division of West Kootenay, District of British Columbia, TAKE notice that I, A. R. Macdonald, acting as Secretary of Victory-Triumph Gold Mining Company, Limited Liability, free miner's certificate number 77270, intend, sixty days from the date here of to apply to the Mining Recorder for a certificate of improvements for the purpose of obtaining a Crown grant of the above claim.

And further take notice, that action under section thirty-seven must be commenced before the issuance of such certificate of improvements.

nprovements.

Dated this 1st day of December, 1896

A R MACDONALD.

CERTIFICATE OF IMPROVEMENTS.

TRIUMPH MINERAL CLAIM.

Where located: On Sophie Mountain, in the Trail Creek Mining Division of West Kootenay District of British Columbia.

TAKE notice that I. A. R. Macdonald, acting as Secretary of Victory-Triumph Gold Mining Company, Limited Liability, free miner's certificate number 7279, intend, sixty days from date hereof, to apply to the Mining Recorder for a certificate of improvements for the purpose of obtaining a Crown grant of the above claim.

improvements for the purpose of obtaining a Crown grapt of the above claim.

And further take notice that action under section thirty-seven must be commenced before the issuance of such certificate of improvenents.

Dated this first day of December, 1866.

122-266.

A. R. MACDONALD.

CERTIFICATE OF IMPROVEMENTS.

EMERALD MINERAL CLAIM.

Situate in the Trail Creek Mining division of West Kootenay district. Where located: East of and adjoining the town of Rossland.

Rossland.

TAKE notice that 1. N. F. Townsend, acting as agent for Hirschel Cohen, free miner's certificate number 75804, intend, sixty days from the date hereof, to apply to the Mining Recorder for a certificate of improvements, for the purpose of obtaining a Crown grant of the above claim.

And further take notice that action, under section thirty-seven, nust be commenced pefore the issuance of such certificate of must be commenced pefore the issuance improvements. Dated this aird day of November, 1895

N.P. TOWNSEND.

"CAMBRIDGE"
TREASURY STOCK,
AT 8 CENTS.

"CAMBRIDGE"
TREASURY STOCK.
AT 8 CENTS.

...BUY CAMBRIDGE

Treasury Stock,

AT 8 CENTS PER SHARE.

Development work done by promoters has greatly improved the appearance of the property. Title perfect.

Crown Grant in course of issue.

Work to be commenced shortly and kept up till the Mine is ready to ship.

Steady appreciation in Cambridge Stock is a certainty.

No better speculative investment at the price in Trail Creek.

Orders for Stock accompanied with remittances to

MELFORT BOULTON,

130 JORDAN STREET, TORONTO.

OR TO THE OFFICE OF THE

CAMBRIDGE GOLD MINING CO ..

Room 7 Hart Block, ROSSLAND, B. C.

"CAMBRIDGE"
TREASURY STOCK,
AT 8 CENTS.

"CAMBRIDGE"
TREASURY STOCK,
AT 8 CENTS.

<u>A SPLENDID INVESTMENT.</u>

VICTORY-TRIUMPH

Treasury Stock at 10 Cents.

PROVISIONAL DIRECTORATE.

President—David B. Bogle.
Vice-President—Olaus Jeldness.
Secretary-Treasurer—A, R. Macdonald.
Trustee—Jefferson Lewis.

Bankers:

Solicitor:

BANK OF BRITISH NORTH AMERICA.

W. J. GREEN.

Office—Rossland, B. C.

Mines-Sophie Mountain.

Capitalization:

\$1,000,000 in One Million Shares, \$1 Each, fully paid and Non-Assessable.

Treasury Stock, 250,000 Shares.

A Block of 50,000 Shares of the Treasury Stock is now on the Market at 10 cents, subject to advance without Notice.

PROPERTIES Victory, Triumph and Triumph Fraction eighty-five acres in all, located on Sophie Mountain, Big Sheep Creek, Trail Creek Mining District.

DEVELOPMENT: The promoters of the Company are vigorously prosecuting the work of development, and the showing on property is excellent. On the famous Victory ledge, which runs nearly 2,500 feet through the claims, there are several open cuts and a working tunnel now in over 40 feet. In this there is a large body of solid ore, carrying gold, silver and copper, average assays running near the pay limit, while the ore improves from day to day, as depth is gained. On the Triumph there is a copper ledge, crossing the Victory vein at nearly right angles. This has the finest surface showing of copper ore, carrying gold, ever seen in the camp. On December 5th, when starting a working shaft on this ledge, the miners uncovered ore which assayed over 22 per cent. copper. Work on this shaft and the Victory tunnel will be continued without cessation, the promoters having placed sufficient lunds in the treasury to guarantee the work for several months.

At a Depth of 8 feet Triumph Ore assayed 30.4 per cent. Copper and \$3.00 in Gold.

Total Value Approximately \$70.00 per ton.

Assays During the last Week: VICTORY, \$35.42 -12 7-10 per cent. Copper. TRIUMPH, \$59.00-25 per cent. COPPER.

VICTORY-TRIUMPH will soon advance in price.

F. M. GILLESPIE & CO., MINING BROKERS.

Agents for the Sale of Treasury Stock.

P. O. BLOCK. ROSSLAND, B, C,