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THE CANADIAN MINER

VOL. I.

TORONTO, ONT., JANUARY 23, 1897.

No. 2.

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Refer to page 18.

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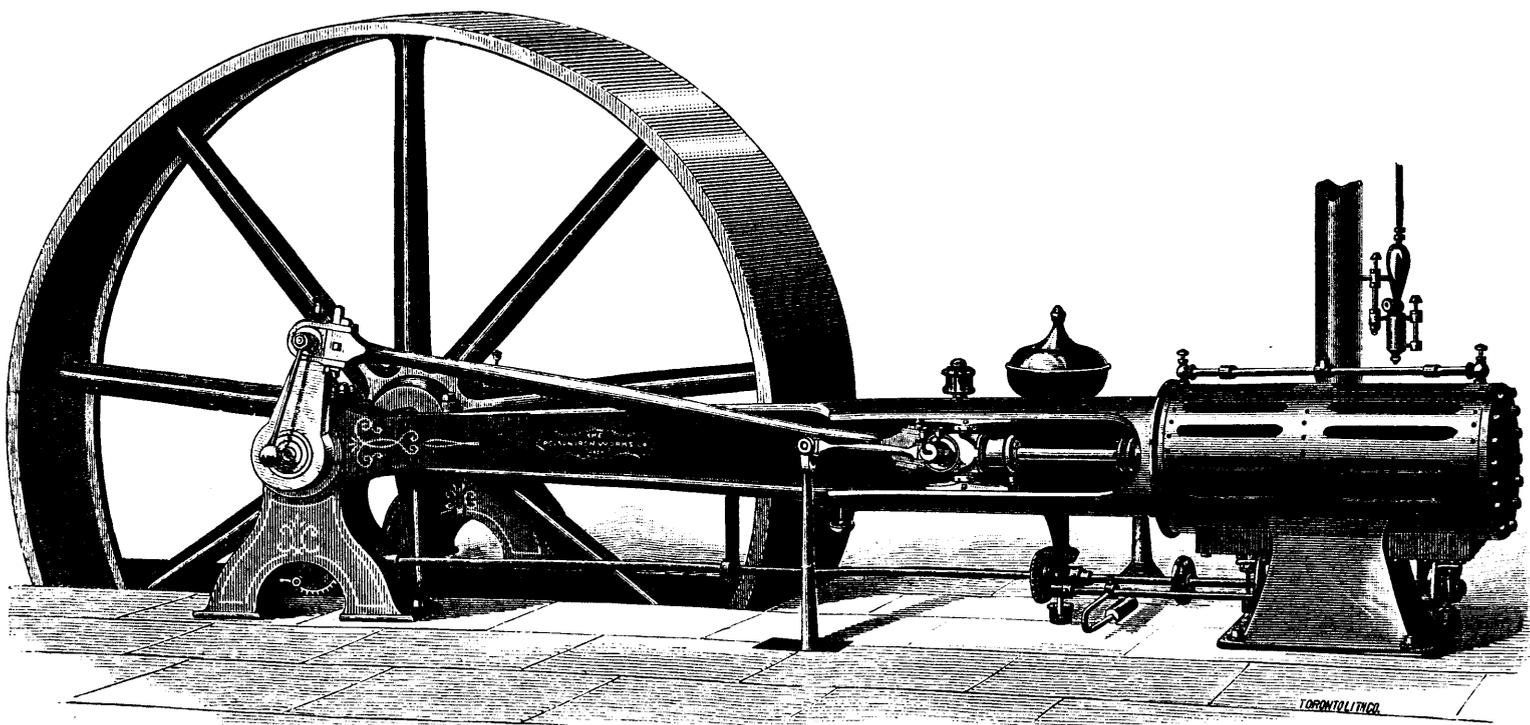
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J. F. LANSING, Com. Mgr.

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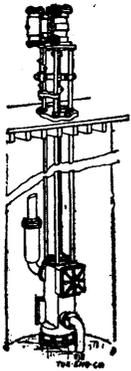
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GOOD Gold Mining Location for sale near the Scramble Mines. Good report. Only a few miles from Rat Portage. For price, etc., apply to Box 12, Canadian Miner Office.

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Original discoverer of ore or mineral on claim entitled to stake out a second claim.

Crown Lands sold under provisions of mining laws in force prior to 4th May, 1891, exempt from royalty.

Copies of the Mines Act, 1892, Amendment Act, 1894, may be had on application to

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TORONTO, May, 25th, 1894.

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In replying to advertisements in this paper, mention The Canadian Miner.

The Canadian Miner.

VOL. I.

TORONTO, JANUARY 23, 1897.

No. 2.

SEVERAL SEINE RIVER MINES.

SOMETHING ABOUT THE CELEBRATED FOLEY MINE, AND THE SAW-BILL, AND HAWK BAY.—THEIR PRESENT DEVELOPMENT.

The region of the Seine River and Rainy Lake, rivaling in fame the district of the Lake of the Woods, as a gold region, contains a considerable number of partially developed mines, and amongst them the Foley mine, one of the best developed mines west of the Great Lakes. The centre of the region mentioned is Shoal Lake, an expansion of the Seine, around which are clustered many hundreds of mining locations. In the most marked of present developments, a group of Port Arthur men, formerly engaged in quiet commercial pursuits, have been prominent. The group embraces Messrs. Geo. T. Marks, H. A. and F. S. Wyley and others. Amongst the mines with which they have been prominently connected, are the Foley, the Saw-Bill, the Hawk Bay and the Lake Harold, and several others of equal promise.

To a few of the mines we give attention in our present issue.

The Foley Mine.

The Foley Mine, on Shoal Lake, was owned by a New Jersey company, the Ontario Gold Mines Co., which decided finally to take out an Ontario charter, and reorganized a new company representing the American and Canadian investors. The new company is called the Foley Mines Co. of Ontario, Ltd., with Rod. A. Demme, of Detroit, as President; Hon. Lyman Melvin Jones, Vice-President; W. H. Cawthra, Treasurer; Edmund Bristol, Secretary, and Joseph C. Foley, General Manager of the mines. The capitalization of the company is \$200,000, in \$5 shares—all paid up. We believe, and say so for the benefit of the curious, who like to know who control the stock of successful companies, that Messrs. Demme and Foley own over 100,000 shares. Notwithstanding the errors that new companies make almost invariably, especially in countries where practical miners are scarce, the mine is rapidly reaching the condition of an ideal mine. We have before us the original report in mining of Mr. J. H. Chewett, B.A.Sc., C.E., of the date November 30, 1896, on this property. The chief development—an outline of which was given in Mr. Harvey's article in our last number—is at the north shaft on the Bonanza vein. From another plan we have seen in the company's office, we assume that the wings and upraise indicated in the plan we have published will be continued to meet adjacent levels. At present, the main shaft, has reached a depth of considerably over 200 feet, and the drifts on either side at the 100, 150 and 200 foot levels have been considerably extended beyond the points reached on November 30th. On January 16th the cross-cut from the 150 foot level to the Jumbo vein was in 95 feet, and it is thought that at 120 feet, or with only 25 feet more tunneling, the Jumbo vein will be reached. That vein averages 5 feet in width at the surface for a distance of 700 feet.

The next most forward mine is at shaft

No. 5 on the same vein, and there are various other veins in which shafts had, on December 1st, been carried down to a considerable depth and with results indicating large but, in different veins, varying returns. The ore is free milling to the extent of 88 per cent. on an average. Assays of different veins—and the veins are surprisingly numerous—vary from \$5 per ton to \$63, with \$24 per ton as the average, or say \$21 of free milling ore. The cost in the present isolated condition of the property is \$6 per ton for mining and milling, leaving a profit of \$15 per ton. The quartz from the veins operated at present is very friable, and from 2½ to 3 tons of ore per stamp can be crushed daily. As the lesser figure the 20 stamp mill can crush 50 tons per diem, with a net profit of \$750 dollars a day.

The region around Shoal Lake presents remarkable features which will require discussion in a later issue. The vein rock is eruptive. The veins are numerous, and the largest operated does not exceed 6 feet in width. The veins with the greatest surface exposure—the Jumbo and the Bonanza—are close together and cross each other in one place. Nine or 10 veins are already in process of development, but there are 25 other known veins that outcrop on the surface. And all this on an area of 83 acres.

A vein was discovered towards the end of last summer only 300 feet east of shaft No. 5 on the Bonanza, and at date of the report had been wholly stripped for 175 feet, and exposed at intervals for 700 feet. On the surface the width was only 10 to 15 inches. At a depth of 10 feet the width had increased to 20 inches, and the ore was somewhat richer. Some of the assays exceeded \$100: the average was \$61.58, or in round numbers, \$60 per ton. The vein, which is called the "Lucky Joe," may, it is thought, prove to be the best on the property. If the present grade of ore continues, the Lucky Joe would yield, when giving employment to a 20 stamp mill, \$2,000 per diem. Since the report was written, the Lucky Joe's shaft has been deepened and on December 21st, it is now about forty feet in depth, and has, if anything, increased in richness.

Since the discovery of Lucky Joe, another promising vein has been discovered 250 feet west of shaft No. 5, but has not yet been sufficiently tested to estimate its value.

The Foley Mine may now be said to have attained the real character of a mine, at least at its main shaft. The mill will probably be in operation this week. Boiler and engine houses are provided, and accommodation for 100 men, and for horses, etc. Four thousand feet of tram-way from the main shaft to the dock on the lake shore have been laid, and between the mostly bare mining area and the water, a town site, under which the veins continue, has been laid out, and various buildings erected. This town site has a deep soil and is well timbered. We would like to enter more fully into a description of the Foley Mine, for the details are most interesting: but space forbids for the present.

We may mention, however, that the country rock is altered granite, probably due

to a movement on the strata that has been the cause of the great fissuring here noticeable. The vein matter is quartz carrying fine gold, iron pyrites, chalcopryrite, galena and zinc blende. Lucky Joe carries an appreciable (financially) quantity of silver. The equipment of the mine embraces a duplex hoist and skip road laid with steel rails for the north shaft; a self dumping car discharging into a hoppers ore bin at the top of a most substantial shaft house, from the ore bin of which the tramway cars, having a capacity of 3 tons each, are filled. The tramway to the dock has sufficient grade to allow the cars to run by their own weight. Compressor, machine and blacksmith shops, crusher, retorts for smelting into bullion, a tug and scows are amongst the equipments in addition to other equipments before mentioned.

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The Saw-Bill Mines.

The Saw-Bill Mine is regarded as a most promising property. Its creation is due to the Port Arthur miners before referred to. The company operating it—The Saw-Bill Lake Gold Mining Company is largely a Hamilton concern, embracing Messrs. J. H. Tilden, W. Southam, F. C. Bruce, Thos. H. Lester, H. Becket, John Hoodless, prominent business men of that city, and G. T. Marks, and H. A. & F. S. Wyley, of Port Arthur, W. H. Plummer of Sault Ste Marie, and others. The Local Managing Director is Mr. F. S. Wyley.

To reach the Saw-Bill, the most northern of the three best developed mines in the Seine River district west of Port Arthur, a visitor must get off at Bonheur Station on the C.P.R. Thence by canoe with occasional portaging, he traverses romantic lakes and rivers, bordered by rugged ridges, forest clad slopes and fire swept reaches of scrubby timber, for 33 miles. In winter he makes the distance, after the waters are frozen over, across the ice most of the way, with occasional bits of bush road between. Until a good road or a railway is built, winter will furnish the best opportunity for economical carriage of machinery and supplies to Saw-Bill and the other mines in that neighborhood.

The Saw-Bill mines are situated on Saw-Bill Lake, an arm of the Upper Seine River. Parallel rocky ridges mark the neighborhood. In places the surface is bare, but an ample supply of wood for mining purposes is found, and large pine suitable for building grows on the lake shore. Altered granite (green) is the country rock. The viens carry iron and copper pyrites, galena, and occasionally zinc-blende, the last, however, absent from the Saw-Bill property. Such promising mines as the Regina, Foley, Ferguson, and Lake Harold mines are in the same formation. One vein on the Saw-Bill location is exposed for 650 feet, and again at 1,500 feet. The vein is 2 to 4 feet wide at the surface. At the lowest point on the outcrop the vein is 4 feet wide and at the higher points narrower, hence the original inference that the vein widens as the depth increases—an inference justified by the work done. The cost of treatment is amply covered by

\$4 per ton, says Mr. J. H. Chewett. This would leave \$12 per ton of net profit. As the mine develops and the veins are larger the cost will diminish. A mill capacity of 25 tons a day, which is a fair estimate for a 10 stamp mill, should if kept supplied, yield a profit of \$75,000 to \$90,000 per annum.

Mr. Chewett hypothetically puts the length of the vein at 2,000 feet, the average width 2 feet, and assumes continuity in depth for 500 feet. This is certainly far within the limits that might be expected, but would give for the deposit 2,000,000 cubic feet or 155,000 tons which, if holding \$16 of gold per ton on an average, would yield \$2,500,000 of gold, quite enough to keep the stamp mill going for twenty years, or with double capacity for ten years, and would yield a profit of \$2,000,000. These figures may prove astray in realization, but both theory and local experience would tend to make the company hope that they are under the mark.

At the middle of January the main shaft of the Saw-Bill had reached a depth of 150 feet. The drifts on the 60 foot level are expected shortly to reach 100 feet, both to the north and south. The vein is widening as the depth increases and it holds its quality. The walls are still remarkably well defined. At present more machinery is being supplied, fuel for the summer is being cut and lumber for the erection of further buildings. Drifting has just been started from the 120 foot level. The vein averages 7 feet wide and has been nearly the same from the 60 foot level.

The company has a capitalization of \$100,000 in one dollar shares.

The Hawk Bay Mines.

THE Hawk Bay Mines, which are looming up into importance as the work of development proceeds, are between four and five miles south of the Saw-Bill Mines, and about a quarter of a mile from the shore of the bay, which is an offshoot of the Seine River. The company operating the mines has a capitalization of \$150,000 in one dollar shares. The mines were partially developed by the Port Arthur syndicate; then the company, in which Hamilton men are largely interested, took hold of the work. F. C. Bruce, H. N. Kittson, John H. Tilden, C. C. Mewburn, H. C. Beckett, well known Hamilton business and professional men, G. T. Marks, H. A. Wyley, F. S. Wyley, of Port Arthur, and Hugh C. MacLean, of Toronto are the chief shareholders.

Twenty men are employed sinking shafts, putting up shaft house and other buildings. One vein has been sunk by a main shaft to a depth of over 50 feet, and is $3\frac{1}{2}$ to 4 feet wide. The outcrop shows for fully 2,000 feet, and holds in quality very well, with a good showing of free milling gold. A three drill compressor is being put in at present, and hoisting plant, pump and also all necessary machinery to prepare to open the mine and erect stamping mill during the present season. Of course, as is usual with mines in northern Ontario, where wood is abundant and needed, a saw mill is on the spot. Assays, even with care, not always being a real test of the value of a development, a large quantity, some forty tons, we understand, of the ore is to be put through the stamp mill so as to get at the real value of the ore, less, of course, a remnant of concentrates.

In replying to Advertisements in this paper, mention The Canadian Miner.

DEEP TUNNELLING OUT WEST.

DEEP tunnelling, where large veins or masses of ore exist in mountains, at once tests the continuity of fissure deposits, and also may in the future prove an enormous gain in economic mining. Brick Pomeroy wasn't so far astray when he proposed to save a hundred miles of railway route, by a few miles of tunnel through a mountain rich with silver. The tunnel idea has revived in the far west of the United States and the Pacific province of Canada, may see great things through it, if the money and co-operation is forthcoming. The great Palmer Mountain tunnel is being cut, to lay bare the riches which lie far below the surface of the Okanagan. In Idaho a tunnel is to be driven for four miles through the richest ledges in the district. The 3,000 foot tunnel projected on the Old Dominion property, is expected to make this one of the greatest mines in the State of Washington.

In British Columbia, the piercing of the Red Mountain at Rossland, is proposed and if carried out would prove to be one of the greatest schemes for opening up gold deposits yet seen in the great West.

In the Old Ainsworth camp, too, a long abandoned project of hugh proportions is to be revived. When the silver slump came, the tunnel scheme, which was to have made the camp one of the greatest producers in the Kootenay, was dropped, after the tunnel had been driven 350 feet into the Bobtail claim, a short distance below the town of Ainsworth.

This was four years ago, but now, it is said, that with the aid of Portland bankers, all the properties between the Lady of the Lake claim and the lake front have been bought up and the tunnel is to be driven into the hard rock, through the whole series of properties, for a distance of nearly a mile. Work is to be commenced on April 10th, and when the present project is completed, the tunnel is likely to be extended 2 1-2 miles further, which would make a cutting of 3 1-2 miles in all.

The carrying out of the project just alluded to would probably establish the claim that some Canadians now make, that Canada is the richest mineral country that has yet been really "tapped" on the face of the earth.

A PROSPECTOR'S OUTFIT FOR PANNING.

WHAT A THOROUGH GOING PROSPECTOR MAY TAKE WITH HIM FOR PANNING.

THE woods will be full of prospectors next spring, many of them mere beginners, wholly unused to the work. Our prospectors generally go by the eye. They know an ore sufficiently to guess it may be valuable, show the ore to people acquainted with metallurgy and frequently send it for assay to professional assayers. A great deal more, however, can be learned by the prospector himself, if he has the necessary acquaintance with how to make a few simple tests with a light outfit, sufficient for an ordinary trip. Those unacquainted with scientific prospecting could learn a good deal by taking a course of study between now and the opening of the prospecting season. We reproduce for the benefit of those who can take advantage of it, a description of a simple outfit for panning, which can be varied to suit circumstances. The actual prices may differ somewhat in Ontario and on the Pacific coast from those given. Mr. Hamilton Merritt's book, when it appears, which will be, in all likelihood, within two months time, will furnish fuller and better information for the guidance of our gold-hunters and searchers for other valuable metals. The outfit, which will cost about \$7.50, includes: 1, Glass-stoppered bottle, containing strong nitric acid. (This can be carried in a "patent

lightest weight liquid mailing case."); 2, Two gold pans, one to be used for mercury only; 3, Mercury, about one pound; 4, "Travellers' letter and parcel balance" hand scale, weighing 0.25 to 12 ounces, for weighing 0.25 to 12 pulp; cost 30c; 5, Balance, hand scale, with sliding weight, very sensitive, from 0.1 to 5 grains; cost \$3; 6, Small Russia sheet iron retort and sheet of Russia iron one foot square (with hole for retort in the centre), for supporting the retort; 7, Small porcelain dish or thimble; 8, Iron mortar and pestle, cost, 90c; 9, Brass wire sixty-mesh sieve; cost, 40c; 10, A little sodium carried in naphtha, in a wide mouthed bottle, in a "patent lightest weight hand mailing case"; 11, Wooden pestle; 12, Sheet or shot lead (pure, if possible); 13, Borax; 14, Soda; 15, Blowpipe, cost 25c; 16, Boneash; 17, Clay pipe for cupelling; 18, Charcoal; 19, Candles.

For the qualitative determination of value of concentrates by measurement with Plattner's Ivory scale (cost \$3.) a sufficient outfit, including the scale can be obtained for \$5, if the prospector makes his own little anvil, pestle and guard and pincers, and gets a small cheap hammer. He will need, in addition (included in the \$5) only a Fletcher blowpipe furnace, clay crucibles and capsules, a spirit lamp and some litharge.

For quantitative work a prospector's simple blowpipe outfit might comprise:—1, Knife; 2, Magnifying glass; 3, Blowpipe; 4, Charcoal; 5, Candle; 6, Old scissors; 7, Pincers; 8, Steel anvil, 1-2 by 1 1-2 by 2 inches; 9, Pestle and guard; 10, Small hammer; 11, Magnet; 12, Borax; 13, Soda; 14, Litharge; 15, Boneash; 16, Clay pipe for cupel; 17, Round-headed bolt for making cupels. To this may be added platinum wire, spirit lamp, microcosmic salt, cobalt nitrate, three cornered file and glass tubing. The total cost need not greatly exceed \$1.

Therefore, for the entire panning, qualitative and quantitative, field outfit for purposes above indicated, the cost need not exceed \$14, and with it the prospector, or indeed the mining engineer, can, with practice, obtain in most cases valuable information in the field concerning the ores of the precious metals.

The weight of the complete outfit, including the panning, qualitative and quantitative, outfits (avoiding duplication in above lists), may be about:

	Pounds.	Ounces
Two pans.....	3	12
Mortar and pestle.....	11	
Remaining articles, including... mercury and other ingredi- ants.....	5	4
Total weight.....	20	pounds.

ITEMS FROM ALL OVER.

THE price of lake copper, in New York, averaged monthly, has ranged since Jan., 1892, from 8.91 cents per lb., to 12.25, with an average for the whole period of considerably over 10 cents.

At Stony Portage, north of Lake Superior, a short distance from Missanabie station on the C.P.R., indications of mineral wealth are excellent. Specimens knocked off the surface rock have assayed \$28 per ton in gold and \$30 in silver.

For advertising mining properties and prospectuses, The Canadian Miner is an excellent medium. It reaches the leading investors of the Dominion, irrespective of their politics, and the part of the Dominion in which they reside in a manner unequalled by any Journal in Canada.

ONTARIO NEWS.

Lake of the Woods.

WORK is being pushed with a diamond drill outfit with a view to locating the Sultana lead. The bore is down over 100 feet.

DRIFTING has been commenced on the Sweden mine at a 60 foot level. The vein continues to hold out promising indications.

THE Trojan Mine continues to improve as development work proceeds. The first shaft had to be deserted on account of the great inflow of water.

SIX months ago Mr. H. H. Beck, of Winnipeg, purchased from the Hudson Bay Company, a corner lot in Winnipeg, for \$500. The lot is now worth \$2,500.

THE Rat Portage Gold Mining Company is negotiating for a steam hoisting apparatus for the Master Jack mine. The shaft is now down 82 feet, and 125 feet of drifting has been done.

W. BARRETT LENNARD, of London, Eng., is at Rat Portage investigating the mining prospects of the Lake of the Woods and neighboring districts. He talks little, but keeps his eyes and ears open. He has been to the Manitou country and speaks highly of what he has seen there.

THE name of the English company which has bought the Cornucopia mine is the Anglian Mining and Finance Company. A large sum was paid for this promising mine. Mr. R. H. Ahn, through whom negotiations were carried on, has been to the East purchasing machinery to operate it. Rumors at Rat Portage are that \$100,000 was paid for the mine.

THE telegraph line from Wabigoon on the C.P.R. southward to Fort Frances at the head of Rainy River, runs along a route largely denuded of forest in parts by fire. There is abundance of cedar for poles. The line will be of great advantage to the Rainy Lake and Seine River people, for the nearest telegraph station to Fort Frances is Tower, a long distance away in the wilderness of northern Minnesota.

LOCAL surveyors at Rat Portage have been kept very busy making surveys of mining locations secured during the fall, and though new men have appeared upon the scene, it is impossible for some locatees to have the surveys done in accordance with the Mining Act. They have simply to wait their turn. The question naturally arises: if this is the position of things this winter, what will it be next summer, when not only will there be a large exodus of Rat Portagians into the surrounding country in search of locations, but a large number of Eastern and other people bound with the like intent. The country around the Lake of the Woods has not really been explored, much less prospected and several of the best gold properties now known have been discovered only within a few months past.

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The Mikado a Wonderful Mine.

ONE of the most wonderful growths of a mining property we ever heard of, says the *Rainy Lake Journal*, is that of the Mikado, 20 miles southwest of Rat Portage. It was found last June by an Indian in a distinct granite formation that has been run over by prospectors for years, and was sold by him to a Rat Portage doctor, who, within six weeks, sold it to Colonel Engledue, of South Africa, for \$25,000 cash. The latter took it to London and put it into the hands of the South African Development Company, who capitalized it for \$2,225,000, subscribed for every dollar of the

stock, and in addition subscribed a cash working capital of \$750,000. Not a dollar of the stock is to be had for love or money by anyone outside of the favored few who constitute the company! A peculiar thing about this property is that the vein is 20 feet wide, the ore is free milling, and the ore has milled as high as \$125 to the ton, and another peculiar thing about it is that the country rock on both sides of the vein for a distance of 50 feet is also free milling and mills from \$1.50 to \$4 to the ton! Now, do not cry, but take our advice and catch on while you can! There are others to be had, but the fact that the company owning the Mikado inserted a half-page advertisement, descriptive of the property, in *The London Financial News*, "merely for the information of the public," probably did more toward starting a raging boom for our gold mines among English capital than any other factor. So be wise and get on the sled.

**

Sudbury.

MR. F. B. CHAPIN has sent out men and supplies to his mining camp at Wahnapiatae Lake. He will go out in a few days to superintend operations in person.

MESSRS. TOWNSEND and Annes left a few days ago with provisions for three months. Their work will be in connection with the Homestake.

WE understand Mr J. T. Cryderman has disposed of a half interest in one of his many promising gold properties to Dr. Schuman of New York, for \$2,000. This claim is six miles north of the village of Wahnapiatae.

PROSPECTOR C. W. JESSOP goes with a gang to the gold fields to spend the winter developing three properties owned by Messrs. Kilpatrick, McKinnon and himself.

MR. D. O'CONNOR returned from Toronto today, where he has been in connection with the Comstock gold property which is showing so favorably. This claim has been owned jointly by Mr. O'Connor and Mr. Gibbs of Toronto. The latter has disposed of his half interest to Sawyer, Murphy & Co., brokers of Toronto, and in conjunction with Mr. O'Connor have formed a strong joint stock company and applied for incorporation under the name of "The Comstock Gold Mining and Development Co. Ltd," with head office at Toronto. The applicants are D. O'Connor and F. Cochrane of Sudbury, O. A. Howland, T. G. Morley, V. Bedford of Toronto, Solicitor, F. Arnoldi, Toronto. Capital stock \$600,000, shares \$1 each.

PROSPECTOR H. F. DOWNING who has been in town for a few days awaiting Mr. O'Connor's return leaves this evening for the Comstock. He goes with instructions to build another more commodious camp to accommodate the increased force which will in all probability be put on in a few weeks.

THE diamond drill has not yet commenced operations on the Gordon Coal Mine, being delayed for repairs.

AN option has been given to Mr. W. Tough on 320 acres of mining land near the Gordon Mine. It is rich in silver and gold, with good prospects of coal.

DR. SCHUMAN is looking over his zinc property. He has secured the services of the veteran miner, Mr. D. Wink.—*Sudbury News*.

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Around Wabigoon.

AROUND Lake Wabigoon and its fertile oasis, is another gold field, close to the C. P. Railway. The story is told of an Indian, who showed samples of quartz carrying free gold to an astounding extent, and was told by the gentlemen, to whom he showed them, to return in three days and get his price for the discovery—

\$100. The Indian failed to return. A prospector who had arrived at Wabigoon, was induced by Mr. James Muirhead to turn his attention to the region north of the track instead of to the Manitou country, as he originally intended, by a recital of the facts as above set forth. During the trip he encountered the Indian who had the samples, was conducted to the location, and as soon as he saw it paid the Indian \$300 spot cash for it. Returning to Wabigoon after making out the location, he proceeded to Winnipeg, and there sold the property for \$10,000.

MR. J. E. WALKER, the well-known fisherman and explorer, of Port Arthur, has just returned to that town, and claims that he has just completed the sale of one quarter interest in a mining claim in the Township of Van Horne, for \$10,000. Van Horne is the Wabigoon township in which Hon. John Dryden has the Algoma pioneer farm, and it will be seen that in addition to farming, it is going to be a mining centre.

**

DYNAMITE EXPLOSION IN A MINING CAMP.

A PORT ARTHUR telegram of the 17th inst., says:—There was a dynamite explosion at Hammond's camp, near Saw Bill Lake, on Friday morning. Four of the men, Edward Guishaw, John P. Wras, William Duchaine and Joseph Drainville were pretty badly mutilated. Guishaw had his ear blown off and his face cut up. P. Wras had his leg all cut. Duchaine had a leg broken, and was otherwise mutilated. Drainville had both a broken leg and a broken arm. The accident appears to have occurred while a dynamite can was being thawed near a fire outside, when it exploded and did all the damage. The men were brought to the track by the Saw Bill and Hammond teams, and came down in a caboose from Bonheur on Saturday morning. They are all now quartered in St. Joseph's hospital here.

For advertising machinery and camp supplies no better medium exists in Canada than *The Canadian Miner*. It reaches the managers and directors of our mines.

THE London, (England) *Mining Journal* says: "Now that it is universally admitted that Ontario is probably one of the greatest depositories in the world of the precious and economic metals, it is to be hoped that the Ontario Government will move with the times and give mining all the prominence it is entitled to. It is surely time something was done towards making known the mineral resources of Ontario, and considering the great importance of the country, generally, of a mining industry, the Ontario Government would be justified in spending large sums in aiding in opening up means of communication and advertising its resources. At present it requires considerable effort to get at the wealth, and it is most essential that railways should be built, telegraphic communication established, an improved mail service given, etc. The absence of railway and telegraphic facilities has, and will, seriously retard the development of mines."

Friends of *The Canadian Miner* would do us a kindness to mention in writing to any of our advertisers that they saw the advertisement in our Journal. There are very many men, who from temperament, occupation or otherwise do not do so. There are advertisers who only measure the value of advertising by what they actually see, and cannot see further. This is not the true way to judge the value of advertising. The quiet mention of an advertising medium never does harm to anyone, and often does good to the medium.

The Canadian Miner.

ISSUED ONCE A WEEK

AND

Devoted to the interests of Miners, and all kinds of Mining; to the popularizing of Mining as a great National Industry; and to the protection of investors in Mining Companies.

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A WORD TO YOUNG INVESTORS.

TAKE no stock in Bears, but be careful about Bulls. We refer to mining, and our advice is tendered to the young and inexperienced in mining matters.

You listen in your city, or town, or village, to some glowing account of the prospects of some property. Several of your friends, some of the most substantial of your neighbors, have subscribed for stock. The local promoters of the company are enthusiastic, and the color they lend to the prospect is perhaps genuine and natural. But your promoters and brokers are not miners: some of them could not tell a quartz from a sandstone, even though they get a little of the vocabulary of geology at the ends of their tongues. Some of them are intelligent in regard to mining—even though there are few who actually know anything practically about it! And if they are thoroughly honest they will of course, have taken pains to see that the stock they are selling is that of a company which has a clear title, a very large proportion of treasury stock—stock devoted to development work—and that sufficient development work has been done to really test the probable lowest value of the mine. The mine, or prospect as it generally is, should be managed by a man or men of practical experience—we do not mean in other occupations, but in mining. Be satisfied on these points. Proper development does not mean a hole sunk in a bed or vein of gold or silver ore, but a real shaft of some depth and perhaps side drifts. Assays are not always reliable. In free milling ores, mill tests of tons are much better. If you are thoroughly satisfied on the points mentioned you may invest with good prospects of success—especially, if you consult some older, more experienced friend, who is trustworthy and not inclined too much to throw cold water on new enterprises. If you invest on surface or hole showings and assays, you take your chances to lose or win.

Even with usual care it is better not to

stake your money on one mine. Small as the amount may be that you are willing to invest in mining, it is prudent as a rule to divide it amongst four or half-a-dozen mines. If most of them fail, the loss is just what you put into it, if no further assessments are to be made, and that is the usual plan of selling shares on this continent. If one or two mines pay, the profits will probably reimburse you for the loss on the others, and may yield not only a large interest on the total investment you have made in mines, but even enormous profit.

You are not, in every case, able to do as magnates in the financial world do, inspect the mine yourself and employ thoroughly competent experts. But if a new company is launched in your neighborhood it will be well to hasten slowly. Co-operation of probable stock-holders could secure a trustworthy and competent expert to investigate any property in which investment is proposed. Wait for his report before full committal to responsibilities.

There are some people who are too rash and sanguine; there are others too cautious and miss golden opportunities. It is well to be neither.

We have before us in Canada to-day, the opportunities of developing one of the greatest natural sources of national wealth. We must do it carefully, calmly, hopefully.

ROSSLAND AS A CITY.

ROSSLAND is soon to step out from under the regulations of a mining camp, and be incorporated as a city. The rule of a commissioner has been a mild but effective one, though the good order that has prevailed is probably to be ascribed more to the natural good citizenship of the population, which is almost entirely Canadian and American, than to any regulations of the authorities. Rossland, unlike some of the new camps of days gone by, has taught the world that in the "wild west" of America a booming mining camp can preserve all the natural decencies of civilization, just as well as towns in the old and settled east, and perhaps all the better for the lack of the meddlesomeness of faddists—a meddlesomeness that in the wild west would very likely result in trouble.

We wish prosperity to Rossland in its career as a city. There is reason to think that it may become a new Johannesburg, without the troubles and unfortunate surroundings of that thriving mining capital of South Africa. 25,000 of a population within a very few years is not at all a sanguine estimate of what Rossland's population will number. And possibly other causes than the mining in its immediate vicinity, may make it number twice as many, or more, within a decade, for it has the Columbia River and may become a centre of railways, and be the commercial capital of the Kootenay. On mining in the immediate vicinity alone, few places become large cities.

It is said that the American population of Rossland, which is numerous, though in a

minority, are anxious to vote, and that when incorporation takes place, a "crisis" may occur. Well, the way to obtain the right to vote is an easy way. The foreigner has to take the oath of allegiance, just as a Canadian has to do in order to be able to vote in the United States. If Americans prefer to remain Americans they can do without the privileges of voting, and otherwise they will be as if in their own country. They will have good schools, and all the liberty and protection the law can afford. They can hold property and transfer it, just as they could in their own land. This is not the way Canadians are treated in some of the American States, where our people, though long resident, cannot acquire real estate without foregoing allegiance to their own country. No, the "crisis" will not come. In Rossland our cousins and ourselves will dwell in unity, vote or no vote.

Warnings are not relished in rapidly growing towns, where the fever of expectation is high. But a warning is timely. Rossland must proceed patiently. So far its partially developed mines have turned out well, and indications justify very great expectations indeed. But especially before the enormous wealth of Rossland and Trail Creek is admitted to be beyond a doubt, and great mines are paying great dividends, the successful launching and subsequent failure of even a few ill-founded mining schemes, may shake confidence not only here in the East, where capital is not very plentiful, but in London and in Europe generally. And then Rossland, sitting on its golden hills, may mourn and have time to reflect on the shortsightedness of cupidity and selfishness. Any set-back should be avoided by avoiding the causes.

A MILLION MORE OF PEOPLE.

THE British Columbia *Mining Record*, edited by that veteran journalist and historian, Mr. Alex. Begg, of Victoria, says:

"We note that several estimates of the increase in population during the next few years have been made. One sanguine individual has put it at an even million in ten years. Was that individual over-sanguine in his estimate? We do not think so. Take a few of the towns, such as Rossland, Trail, Nelson, Kaslo and Sandon. Each of these, at the rate they are now going, may easily have from fifty to one hundred thousand people in ten years' time. Then there are many other places, such as Greenwood City, Fort Steele, New Denver, Slovan City, Nakusp, Ainsworth, and others we have not space to enumerate, which are growing very fast in population. The Columbia river will be lined with small towns during the next few years, and, in addition to these centres of trade, there are the numerous mines with their army of miners and workmen. Taking it all in all, and looking at the fact that we are on the eve of vast development in many districts now sparsely populated, we do not think that a million in ten years is an over-estimate."

Does not this estimate seem rather too sanguine in view of what mining has done in the States to the southward and in South Africa, and even Australia? But then

NOTES AND COMMENTS.

WE claim that the character and extent of the circulation of THE CANADIAN MINER makes it as valuable a medium of advertising anything connected with mining, as any journal in Canada.

As is natural, just after the holidays, the sale of mining stocks is not as active as it was before. Nevertheless Mr. E. L. Sawyer disposed lately of many hundred thousand shares of the Eastern Mining Syndicate's stock.

WE have too many lawyers graduating. We hope that the gold mining development now proceeding will tempt many young men inclined to enter the legal profession, in which they will make but a precarious living, to devote a little attention to the study of practical mining.

ARRANGEMENTS are being made to put on an additional line of steamboats to ply between Collingwood and Port Arthur to meet the expected rush next summer of people for the gold fields of North-Western Ontario. A considerable portion of Toronto's population will go if the price is made low enough.

MR. J. D. LEWEN, M.E., manager of the Little Bess, has received a commission from London and Paris capitalists to examine and report on several mining properties in the Lake of the Woods and Seine River districts. Mr. Lewen is regarded as a thoroughly practical miner, and has had large experience in South America, Mexico and California.

AN American staying at one of our leading city hotels noticed the CANADIAN MINER stock bulletin hanging in the reading room. After looking at it for some time, he was heard to say: "Well, Canadians have wakened up at last. They will soon know the importance of the great mineral wealth of their country. Mining has done more, so far as profit on each dollar is concerned, to increase the wealth of the United State than has anything else."

THERE is some talk in this city of forming a Miners' Club, where mining men and those interested otherwise in mines may meet and discuss one with another mining affairs. The idea appears to be a good one. There are numbers of strangers visiting the city for the purpose of looking into our mining matters with a view to investment. Such a club would be of value in making them acquainted with our mining men, and of facilitating their work of inquiry and comparison.

WE are credibly informed that a few nights ago, at a meeting held in connection with one of our city churches, the buying of mining stock came up for discussion, and the minister, being curious to know how many of his flock had invested in mining stocks, asked all those who had not invested to hold up their hands. There was only one who responded to the request. She was at once questioned about her exceptional position, and her reply was that she had not bought stock because she had not the money to do so.

THE facts as to the large extent to which mining operations have been carried, and are being carried in the Lake of the Woods gold field, given in the present issue by Mr. R.

H. Ahn, of Rat Portage, will be a revelation to some of our readers. The activity manifested in development and the preparations made for extensive workings for next summer are encouraging. The mines around the Lake of the Woods district employ at present from 30 to 60 men in each mine. A large number of mines are now to be opened and will give employment to many hundreds more.

THE mining stock market at present is marked by an attitude of great caution on the part of investors. Buyers and people wishing or solicited to buy are seeking information from every available source. We have already had several of such inquiries, and it is almost superfluous to say that we shall always endeavor to give unbiased opinions to inquirers. There appears to be a very considerable amount of capital awaiting the opportunity for profitable investment in enterprises which afford reasonably good security for returns. Gold mines, of course, benefit investors on account of the very large returns they sometimes yield, but in the present mood of our commercial centres mine owners and mining companies must really have something to show that justifies any claims they make on behalf of any mining property, or their chance of enlisting capital to any large extent, in Toronto and other of the larger cities, is not great.

THE very limited spare capital of Canada is wholly inadequate to overtake the task of developing the extraordinary richness of the gold and silver fields of the country. What we have cannot be withdrawn, however profitable such withdrawal might be to individuals, from other enterprises, without serious temporary injury to business, an injury which would react on our mining industry unfavorably. We wish that Canadians could own their own mines and derive the profits that accrue from them. But the undertaking is too large. We need British and foreign capital for our mines. Canadians are generally, with few exceptions, sellers of the mines. The money received from selling a prospect is added to the country's wealth and develops industry in general. Besides, often the prospector or developer retains an interest in his property and shares in the dividends. What we need now is rapid development.

THE Toronto Evening Telegram is, without a doubt, a "bear" on mining stocks. While wholesome adverse criticism is to be highly commended, and is necessary wherever unwonted interest in gold or silver mining exists, adverse criticism may bear so undue a proportion to favorable notice of what is sound in the business, that the effect on the public mind may be to prejudice many against what is or may be distinctly to their benefit and that of the country at large. A general onslaught on mining stocks is not unlikely, yes, is almost certain to injure worthy concerns, and might be unfortunate for people doing an honest mining business. General condemnation in this case is merely wordiness, and the reader can take it for what it is worth, or what it can prove. We commend to the Telegram Pope's lines, very fitting in its present attitude:

"Launch not beyond your depth, but be discreet
To mark the place where sense and dullness meet."

IN Rat Portage the value of property is advancing by bounds. No doubt the mineral development in the Lake of the Woods country and the inrush of people certain to take place in the spring justifies a large increase in the value of real estate. A "boom" seems im-

Colorado and the western group are barren regions, and the South African fields not very much better, and far from populated regions, while British Columbia has great forests, considerable agricultural and grazing lands, a moderate and favorable climate, and is not very far from the crowded Eastern America. If British Columbia can have a million of a population in ten years, or about ten times its white population in 1891, what may not the free-milling regions of northern and north-western Ontario look forward to in the same time? The Sultana, worth over a million dollars already, seems to be but the first developed of many more gold mines equally rich, if not richer—and development and equipment have proceeded almost as far here as in British Columbia, and nearly all within a year or two. We look for a million more to be added to our population in Ontario through development of its northern mineral resources alone, but would be inclined to allow at least a year over the ten Mr. Begg gives his province before the figure is reached. We should really be moderate in our expectations. Mr. Begg, however, may be right. Such things do happen, especially where a variety of industries may be carried on under favorable conditions.

MORAL BENEFIT OF GOLD MINING.

GOLD mining is, in a sense, more moral than the ordinary merchant's calling. In the latter there is the struggle to get ahead of another by competition which leads oftentimes to bankruptcy to say nothing of the moral degradation involved in the process. In gold mining the element of competition, at least, is absent. The success of your neighbor's gold mine does not provoke rivalry. It actually enhances the value of your own. Gold is sold at a uniform price; it is not like haberdashery or grocers' wares, in this respect. There is a wild thirst for gold, but in these days it is the man who is in business, or out of it, but trying to be in, who suffers from it most. Gold miners are not rivals. They are noted for being friends, except when they fear some one else may jump their claim. A sermon on the comparative morality of gold mining is now in order. It would be a "timely topic" for several of our city churches.

GOLD mining will be a national stimulus to our new country. It will do much to supply the lack of courage in commercial enterprise, which has marked the past. Gold mining on a large scale has come to stay with us, and we will be none the worse, so long as quieter interests, such as agriculture, are not neglected. If gold mining should attract to it tens of thousands of those who leave our farms to take to the more-risky-than-gold-mining, petty trading of our towns and cities, it will be a gain all around. We have a plethora of so-called business men, who live largely on trampling down others in fierce and ignoble competition. If many of our small merchants sell out, which they can, and with due forethought transfer themselves to occupations which develop our natural resources, they and the country will be the gainers.

pending. All sorts of improvement are in progress or decided upon, and even a theatre is amongst the latest projects of the thriving little capital of the new gold region. But too much of a boom is bad. We, in Toronto, know it. The growth and increased wealth of the magnificent south-western peninsula of Ontario with its more than a million inhabitants, justified a large increase in the population and real estate values of Toronto. But the boom was overdone and the city has suffered the inevitable reaction, with the result that the men in Toronto who are naturally leaders in enterprise and could do the city great good under ordinary circumstances, have either lost all they had or are holding on to their property as best they can, instead of being able to aid in pushing healthy enterprises. Rat Portage will soon be a large town and even a city, but care should be taken not to make real estate higher than the population of the district surrounding Rat Portage justifies.

ON the 11th inst, the School of Practical Science began a six weeks special course for the instruction and training of prospectors and miners. The fee for the course is \$8.00. No doubt the course will be well attended, for the number of men actively engaged in prospecting and mining, or intending to so engage must be large.

MR. W. HAMILTON MERRITT, F.G.S., Associate of the Royal School of Mining is soon to issue a little volume on field tests. The work will be valuable to prospectors, miners and assayers. It will be well illustrated and will contain a glossary of geological and mining terms. The small size of the pages will make the work a convenient pocket volume, ready for reference to on the field and in camp, and we have no doubt will be appreciated by the many engaged in practical work on our mineral lands.

THE Dominion Parliament, it is thought, will at its next session pass an Act conferring large powers on mining companies. The issue at low values on the dollar of non-assessable stock will, it is said, be legalized or placed beyond question, in fact the new Dominion charters will be made as liberal as almost any in the world. The reason advanced for the supposition that such an Act will be passed, is that a large proportion of the members of Parliament are interested in mines as investors at least, and some of them as directors of mining companies.

THE *Buffalo Express* recently said "The Carnegie Steel Company is again charged with furnishing the Government with poor armor plate, and a commission of inquiry has been ordered. If convicted this time the Carnegie Company should not be permitted to get off so easily as it did before." The charge should be thoroughly investigated. The offence charged is one which not only defrauds the country but, directly and indirectly, may endanger life and property in unusual measure. The previous failure to turn out nickel steel plate equal to the sample successfully tested, has depreciated the value of such armor over the whole world, and other nations are pausing to see the results in the United States before extensively adopting the plates themselves. Why does not the United States Government make its own armor plate? The cost may be greater than at present, but it may be better to incur that cost than to trust to manufacturers whose aim is to make as much money as possible out of Government contracts.

A DEVELOPMENT COMPANY DIVIDEND.

MINE development companies are novelties in Canada; we know of but one in existence before last summer. Within the past two months several have been formed in Ontario. The oldest company, the Golden Gate Mining and Development Company, is just a year old. It has been well managed by Mr. R. H. Ahn, of Rat Portage, and has now declared a dividend of 50 per cent. Mr. Ahn's view of the situation is that Canada has not enough money to spare for the full development of our mines. To pour too much money from our eastern parts of the Dominion into our central and western gold fields is not altogether to the good of the country. There is enough here, however, to secure sufficient development of prospects to justify the investment of the capital necessary for mining on a large scale. The money for extensive mining must come from countries that have considerable surplus for investment. The Golden Gate Company has attracted a very considerable amount of that capital by the work it has done, and will proceed immediately with development work on one or more properties to be placed on the London market in the spring.

PERSONAL.

MR. KENDAL, who is one of the pioneer settlers of the Lake of the Woods district, was recently in the city for a few days. He says the prospects for the coming season in his district are very bright. Mr. Kendal was one of the owners of the Cornucopia mine that is proving to be a remarkably rich property.

MESSRS. SAWYER, MURPHY & Co., mining brokers, 43 King street east, are enjoying a rapidly increasing business. They now occupy the largest suite of brokerage offices in the city.

NUGGETS.

GOLD talk has affected the small boy and his thoughts revert to it on slight provocation. A lady who felt drowsy in church the other Sunday, had occasion to open her mouth wide and a small boy setting beside his father, whispered the remark: "Pa, that lady has got a gold mine in her mouth. I wonder how much she would sell for."

* * *

THE other day, amongst a group of mining men discussing Lake of the Woods mines and prospects, so many of which are held by individual owners, was noticed a man with an unusual limp and a correspondingly painful expression on his face. "Have you got a corn?" was asked of the mine-interested limper, whose mining speculations on prospects had not been the brightest. "A corn!" replied he, then realizing, as he moved his foot: "A corn! Well, yes; but I wish I had a Cornucopia."

* * *

EVERY newsboy around the streets discusses the gold question. Queer ideas some of the urchins have. Two newsboys were overheard discussing how they could form a mining company, and one of them proposed the following plan; "I'll tell you," said he. "Get a five dollar gold piece. Grind it up to powder. Then take it down to Scarborough Heights and spill it over some rocks. Then pick up a piece of the rocks and get it assayed—be sure to keep it a dead secret where you found it—then somebody will come along and offer to put up money to develop the ground. Then you can get the mayor or some of the aldermen to become president and float it for more-n-a-million," "S'pose the president would catch on?" "Oh, there's no fear; he doesn't know any more about it than you do, nor half so much."

BRITISH COLUMBIA NEWS.

Rossland and Trail Creek.

"THERE are," says the British Columbia *Mining Record*, "fourteen mines at Rossland which may be termed shippers, and this number will probably be increased to twenty or more during the season of 1897. Mr. Wm. A. Carlyle, in his report on Trail Creek, made mention of the following:

Le Roi	California
War Eagle	Nickel Plate
Iron Mask	City of Spokane
Virginia	Georgia
Poorman	Red Mountain
Centre Star	Cliff
Idaho	Jumbo
C. & C.	O.K.
Columbia & Kootenay	Great Western
Josie	Enterprise
Monte Christo	Evening Star
St. Elmo	Iron Horse
Mayflower	

"And on the South Belt near Rossland:

G. R. Sovereign	Lily May
Crown Point	Deer Park
R. E. Lee	Commander
Maid of Erin	Palo Alto
Homestake	San Joaquin

"Most of these were reported upon as in good condition and with considerable development work done. Fourteen, as already shown, are looked upon now as shippers, although some of the others might be placed in the same category. Since Mr. Carlyle's report other claims have come into prominence, of which we may mention the following: Caledonia, Consolidated, Mugwump, Homestake, Nest Egg, Silverine. Of the forty mentioned we do not think that we are going too far in saying that half the number will be shipping ore in 1897."

A YEAR'S RETROSPECT.

The Rossland *Miner*, in the course of a review of the past year, says:—

Turning to the past year we find that the camp has nothing to be ashamed of in its record. Owing to inadequate transportation facilities the output of the camp was comparatively light until within the past few months, and even now the second railroad has only begun to take ore away. Despite this fact, we find that at the end of 1896 nearly 40,000 tons of ore have been marketed as follows:—Le Roi, 27,665 tons; War Eagle, 10,000 tons; Iron Mask, 705 tons; Poorman, 340 tons; Josie, 574 tons; Crown Point, 150 tons; Mayflower, 100 tons; Cliff, 75 tons; Evening Star, 25 tons, and other smaller shipments amounting to about 50 tons. The average value of the ore per ton was close up to \$40. At \$35 per ton it makes the production for the year worth \$1,400,000.

At the present time, and for the past two months the shipments of ore have averaged a little better than 200 tons per day, the only means of transportation being the narrow gauge line of the Columbia and Western Railway. Were this average maintained throughout the year it would reach a total of 70,000 tons in 1897. We are well satisfied, however, that this average will be greatly exceeded. In our opinion, after a careful survey of the field, it will exceed 300 tons per day, and may even reach 600 to 700 tons. The production for 1897 is not likely to fall below 100,000 tons of the value of \$3,500,000.

A TRAIL CREEK SMELTER.

Says a writer in The London, (Eng.) *Mining Journal*: I dare say many of your readers are amused at the way in which from time to time I lecture you capitalists and investors. But the laugh is on my side, after all. Week by

week, and month by month, my words become translated into hard facts. To-day I have to report that yet another smelter company has been formed and is as certain to make a vast fortune for its incorporators as can be predicted of any human enterprise. It is composed of Spokane men, in alliance with sundry mine-owners in the Trail Creek and Rossland districts. We are positively getting ahead of you and your ground, you see. And a fortnight ago we gave Rossland a direct continuous rail communication with Spokane by the completion of the Columbia and Red Mountain Railway, which is an extension of the Spokane and Northern.

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Another link in the chain of capture is being forged by some of our people who have of late been visiting your Trail Creek and Kootenay camps and arranging to establish concentrating works for the supply of our smelters in Washington. Up to the present time little or no attention has been given in those camps to ores that have not gone over \$10 per ton. All such mineral is now being contracted for at nominal prices; and as there is scarcely a prospect of a mine in that country that is not producing more or less of such ore, it will not be difficult for contracts to be made which will keep the concentrating works running for many years. It is estimated, and with reason, that there are fully 2,000,000 tons on the dumps ready for concentration and reduction. The cost of treatment need not exceed \$2 per ton, so it requires no great amount of figuring to show that we shall once more spoil the Egyptians to a pretty good tune.

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Kamloops' Camp.

THE Kamloops (B.C.) district is looming up. Items of recent date in the *Inland Sentinel* state that work is to begin in earnest on the Lone Star and Whale, on Sugar-loaf mountain. An offer was made, it is said, two weeks ago by practical men to sink a 100-foot shaft, on a claim on Copper Flat, below the Iron Mask; the workers to retain the ore excavated, which is said to reach \$40 a ton on the surface. The Scott property has not been sold as reported. R. H. Lyons and George Macdonald are beginning development on the Bonanza and Pothook. The surface ore is purple copper. A short option has been given on the Bonnie Etta, no cash down, but work to be carried on continuously to an agreed depth.

F. P. Coney, of Rossland, has bonded five claims, surrounding the Lucky Strike on Coal Hill, for \$25,000. Work on several is to be commenced before the end of January.

Sixteen claims and six transfers were registered in the last week in December, within 7½ miles from Kamloops.

At the general meeting of the L. F. R. & C. G. F. Ltd., held in London, Horne-Payne, the managing director, in the course of his remarks made the following statement of interest to Kamloops camp: "The company own a group of cinnabar or quicksilver properties, located for them by one of their own prospectors. They were immediately adjoined by the properties of the Savonas Cinnabar Mining Company, and they were awaiting the results of the extensive development work now being carried on by the company. He understood that by an elaborate process of diamond drill tests they had proved the existence in their property of a very large number of tons of good-paying quicksilver ore, and they had recently put in construction and, he believed, nearly finished a large plant capable of retorting 150 flasks of quicksilver a day." Mr. J. A. Mara of this city was elected to fill a vacancy on the board of directors. Forbes George Vernon, our "agent general" attended the meet-

ing. He is one of the directors. Forbes George should resign his Government job if he is going to mix himself up with mining companies in an official capacity.

Work on the Iron Mask property, now transferred to the British and Canadian Gold and Silver Mine Company, goes steadily on. An important discovery was made one day lately at this mine, the ore being found on the west side of the dyke which was cut through on that day. This is one of the features of the Rossland veins; the dykes do not displace the vein, but ore is got as soon as the dyke is cut, on the opposite side.

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Around Barkerville.

AWAY up north, in the mountains of British Columbia, Barkerville is a promising centre of a gold mining district to which much capital has not yet been applied for its development. And then owing to the great elevation the cold of winter is often intense. A correspondent of the *Inland Sentinel*, of Kamloops, gives a few recent notes of work in the district. J. Marsh, well-known in the Cariboo district, has just started several men to work on a ledge three miles from Barkerville, and is also to open up the Black Jack ledge. On Island Mountain the Dupont and Dunlevy Co. are running a tunnel on the side of the mountain, and expect to strike the ledge within 25 feet. A stamp mill is in readiness to crush ore. On Stout's gulch J. Winthrop and the Houser brothers are working their tunnel and taking out gold. The pay gravel on the face of their tunnel and on the bed rock is said to be very rich. E. Shephard, on Shephard's creek, about five miles from Barkerville, did little last summer, having no water on account of the drought in the Cariboo, but made expenses. This winter he has five men running a prospect drift on each side of the creek, on side hills. He was building a reservoir, dams and ditches all summer, so as to be ready for next season. He said his record last summer was eighteen days hand-racking, \$400; twenty-five days shovelling in 288 ounces, and one month's work in a tunnel for one man, \$395.66. His wife in leisure hours, after attending to household duties, panned out within two months, \$273.50. Mr. Shephard says he has been offered sums in the tens of thousands, but has refused to sell. The ground is a basin with gradually sloping benches, and he says "the gold runs from the grass roots down."

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Alberni's Mines.

MR. C. A. GIBSON, of Victoria, B.C., in Toronto on a visit, was interviewed the other day by the *Toronto Mail and Empire*. He is largely interested in Kootenay mining. In regard to the Alberni district on Vancouver Island, he speaks highly. He says:

"The coast must be considered a great mining section, comparing favorably with the Kootenay. The Alberni district, which is situated about 140 miles north of Victoria, I consider to be just as good a location as the Kootenay, but lacks development. This, however, is being rapidly pushed forward, and a few weeks ago a test of the Alberni Consolidated Company gave \$18 per ton in free gold, besides sulphurets, which bring the value up to \$100 a ton. The Happy Day is close to the Alberni Consolidated and Minerva Consolidated. They belong to the Pacific Consolidated Gold Mining Company, and are among the most notable properties that are being worked on Mineral Hill. The Ace of Spades and Last Dollar are also being worked. The Quadra group, on Mineral Hill, has considerable development work going on. The Missing Link and Champion have the same rich vein as the Alberni, showing, however, a larger surface. The Mountain Rose is

having a 100-foot tunnel driven, and gives every indication of becoming a paying mine.

"On China Creek, the Duke of York mine, on which many thousands of dollars have been spent, has put in a perfect hydraulic plant, with shops and all complete. This mine promises to become the greatest on the coast.

"The mines of Alberni are very accessible, as they can be approached on all sides by the water. Most of the claims are also connected with the town of Alberni. On the west coast, by a fine waggon road. A new town site is in course of location at Alberni, and three or four new hotels are being erected. It is predicted that in a very short time Alberni will be another Rossland.

"The mines of Texada Island, in the Gulf of Georgia, are also profitable coast investments. They are situated about fifteen miles from Nanaimo, and eighty miles from Victoria, by water, and are controlled largely by Victoria and Chicago capitalists. The ore, which is mostly copper, runs as high as sixty and seventy per cent. The Van Ada is now shipping to the Tacoma smelter, and the results warrant even greater development work than is being carried on. Besides the Van Ada there are numerous other mines on the island which are rapidly coming to the front. Other mines on the coast than those at Texada Island are located in Philip's Arm and Howe Sound."

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Pannings.

NELSON. B.C., erected last year buildings to the value of \$138,750.

THE owners of mines in the Copper group, Boundary county, are to erect a private smelter.

FOURTEEN mines are shipping in the Kootenay, and the number is expected to rise to twenty-five or more by the 1st of April.

IN the Ominica district of the Cariboo Country, two companies are operating, the Cariboo Hydraulic and the Horse Fly, which cleaned up last season \$146,000.

THE Slocan Star silver mine paid \$50,000 in dividends in 1895, and \$250,000 in 1896. This beats the LeRoi at Rossland. The Slocan Star workings are down 400 feet, and a tunnel is being driven, to tap the ledge at 600 feet.

THE Golden Cache mine, about 150 miles from Kootenay, was selling stock last spring at 15 cents. The stock is now quoted at \$1.80. The mine is said to be very promising. The Mayflower adjoining, is said to be developing well. The section is close to the C.P.R. line.

ENGLISH capital is beginning to flow into the Sandon, B.C., district. The Victoria mine has been bonded for \$25,000. Mr. Foster, an Englishman, recently bought two-thirds of the Ruth mine, which is about 1,000 feet above Sandon to the south. It was located in 1892, has been worked less than two years and Mr. Foster's purchase was on a basis of \$250,000 value for the four claims; Ruth, Ruth Fraction, Hope and Despair.

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THE total output of coal by the Vancouver Island collieries during the past year amounted to 854,269 tons, divided as follows:—Wellington Colliery Co., 321,530; N. V. C. Co., 320,900; Union Colliery Co., 202,839. The output is close on 100,000 tons short of that of the previous year.

AGENTS WANTED.

Advertising Agents and Canvassers for subscriptions, are wanted by this Journal in Halifax, Montreal, Ottawa, Vancouver and Rossland, B.C. The terms are liberal. Any one experienced in the work and willing to act for us should write to The Canadian Miner and enclose references.

ONTARIO'S GOLD FIELDS.

THE RICHEST IN THE WORLD.

What Mr. R. H. Ahn says.—The Wonderful Wealth of the Lake of the Woods Country.—A Dividend of Fifty per cent. for the Golden Gate Co.
—North-west Ontario will Astonish the World.

MR. ROBERT H. AHN, of Rat Portage, who has played a very prominent part in the development of Ontario's mineral wealth for several years, is in the city. Mr. Ahn's experience in mining has been extensive, covering as it does a large part of his life since manhood was reached, and embracing years of experience in Australia and California.

THE CANADIAN MINER interviewed Mr. Ahn at the office, in the Canada Life Building, of the Golden Gate Mining and Development Company, of which company he is manager, and learned much of interest in regard to the great developments and immense mineral riches of North-western Ontario. We give the substance of Mr. Ahn's replies to interrogations. Besides being manager of this company he is manager of the Rat Portage Reduction Works, and of several of the leading mines in the Lake of the Woods district and of the development work proceeding on a large number of prospects.

In regard to several of the more important mines of the Lake of the Woods country, Mr. Ahn furnished the following information.

THE GREAT MINES.

The Cornucopia he had recently sold to an English Company, known as the Anglian Mining and Finance Company, for \$100,000, of which \$20,000 was cash down. Mr. Ahn is to continue in the management of this mine. The Cornucopia was purchased only six or eight weeks ago, but already the main shaft is down 75 feet, a lot of the machinery is on the spot, and a run of 24 tons of ore taken from the shaft has been put through the stamp mill. The result of this run is highly satisfactory; in fact, it gives the heaviest showing to the ton ever known in Canada. Already, also, several other shafts have been sunk, and all, including the main shaft, are to be sunk as quickly as possible to a depth of between 300 and 400 feet. An Ingersoll compressor plant, a 20-stamp mill of Fraser & Chalmers' make, a hoisting plant, and all other machinery for a complete outfit will be added early in the spring.

Work on the Mikado property is being pushed rapidly, and a complete plant will shortly be erected. The mine is owned by an English company, the Mikado Gold Mine Company, which is acquiring a large number of other mining properties in the district.

A 50 PER CENT. DIVIDEND.

The Golden Gate Mining and Development Company, of which Mr. Ahn is manager, is now in a position to declare a dividend of 50 per cent. This is on one year's business and preserves the capital intact.

THE GOLDEN GATE MINE.

This mine has just been disposed of to an English syndicate, through negotiations carried on by Mr. Ahn. The shaft on it is down to a depth of 45 feet, and the purchasers intend work to be pushed at once under the management of Mr. Laycock, an English gentleman, who inspected the mine for the purchasers. They have too, bought the Standard Mine on Echo Bay, and also a property in the Manitou district. The three properties are to be worked at the earliest possible date.

Sir Roderick Cameron has visited the district and has purchased two properties which have been developed under the supervision of Mr. Ahn. Mill runs have been made from these properties with very satisfactory results.

THE RAT PORTAGE REDUCTION WORKS.

The Reduction Works, of which Mr. Ahn is the manager, are doing a large business, and have proved of considerable value to the Lake of the Woods mines. Seven mines have been sending their ores here for reduction. The mill has 20 stamps, and in the spring the works will be completed by the addition of a chlorination plant, a cyanide plant and a plant for treating concentrates by the electric process. Parties sending their ores to these works can rely on it getting thorough and satisfactory treatment. A mine sending in ore can send its own amalgamator to superintend the entire treatment of its ore, in fact may have the management of the mill for the time, or may leave it to the management of the Works. The charge for reduction of ores is \$5 per ton for quantities of less than 100 tons, and \$4 for quantities in excess of that number of tons. The work done is so thorough as to allow of the extraction of all free milling gold, and the production of the gold brick-ready for deposit in the bank. The ores treated at the mill have a remnant varying in different cases of from 1 to 3 per cent. of concentrates, which will, when treated, yield \$30 to \$50 per ton.

MANY SALES IN LONDON.

During the past twelve months Mr. Ahn has succeeded in selling no less than 60 mines and mining properties in this district, and most of them in London, England. Most of these sales in England have been made to four companies and from all of them Mr. Ahn has received instructions to begin development work on a large scale, as early as possible. Mr. Ahn has now under his charge half a dozen mining camps and on his return to Rat Portage within a few days will form and take charge of half a dozen more.

MORE ABOUT THE MINES.

The Gold Hill and Black Jack mines, both under Mr. Ahn's management, have each 2 shafts and these are carried down to a depth of 250 feet. The ore is very satisfactory. The Regina mine has turned out well and struck very rich ore. It is 200 feet deep. The Scramble mine is fairly developed and it is probable that an extensive plant will be erected there this summer. The adjoining property which is owned by the Gold Explorers' Co. of Canada, a London, Eng. company, which owns 20 properties in the district, is getting on well in development. The company is also beginning to develop several of its other prospects. All over the district many new camps are being started.

A CROWDED MINING CENTRE.

Of course, all this activity means much for Rat Portage. The town now has a population of 4,500. There is not a house to let in the town and scarcely a room at either house or hotel. When spring opens and with it the rush into the district of prospectors, mining men and others attracted by the extraordinary riches of the country, tents will be resorted to to accommodate the crowd, though no doubt shanties and other hastily constructed frame buildings will be run up.

CHARACTER OF THE MINES.

A general characteristic of the veins and beds of ore in the district is their increasing in width and richness as depth is attained. This is not always the case; sometimes on sinking a shaft the ore becomes poorer for a distance of a score or so of feet and then becomes as rich as or richer than before, but the rule is: the deeper down the better the vein. Asked as to the nature of the veins—whether bedded or fissure veins, Mr. Ahn said he thought that the numbers of each were about equal.

As to feathers, or stringers, which occurred with

both bedded and fissure veins. They were mined by some people, but being only fractures leading to the true veins they petered out very often or became twisted and unworkable.

In answer to an inquiry in regard to an item in one of the papers stating that in one mine on the Lake of the Woods gold is found in considerable quantities in the rock for 50 feet from the side of a vein, Mr. Ahn said that in the Standard mine a fahlband is so rich in gold that he has been working it.

Rich mines in the district occur in many different ways. The best generally are contact veins or veins not far from granite. The Mikado, Sultana and Regina veins are contact veins.

A WIDE GOLD REGION.

In speaking of the extent of the gold regions around the Lake of the Woods, Mr. Ahn said that it extends much further than had been thought a short time ago. It reaches into Manitoba on the west, and prospectors had there found promising surface indications. To the north it reached at least 60 to 70 miles.

THE MANITOU AND SEINE DISTRICTS.

Mr. Ahn visited the Manitou and Seine River districts last summer. In richness these districts are about like the Lake of the Woods country, and he had bought properties there. In the new Manitou fields, several camps are being started and Manitou ore is being treated at the Rat Portage Reduction Works.

Referring to the Seine country, Mr. Ahn said, he thought very highly of the Foley property. It ought to be a well paying mine and it is managed very carefully and judiciously. The Saw Bill, Lake Harold and Hawk Bay mines are excellent properties, and also the Ferguson. The Lucky Coon is a good property, but is lying idle owing to a difficulty between the owners.

THE RICHEST GOLD FIELDS ON EARTH.

In answer to inquiries regarding the richness in gold of North-western Ontario compared with other parts of the globe, and the degree of development attained, as compared with British Columbia, Mr. Ahn said he thought North-western Ontario the richest gold mining country in the world. Neither in Australia nor South Africa had he seen anything to equal it, and he thought British Columbia inferior to it also. "Before a year is over

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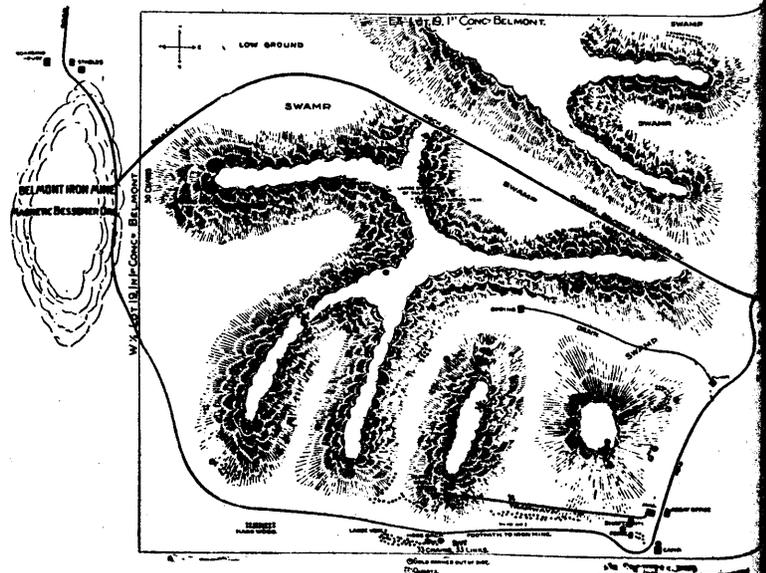
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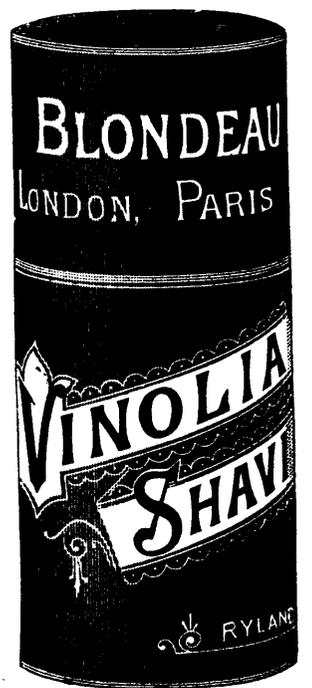
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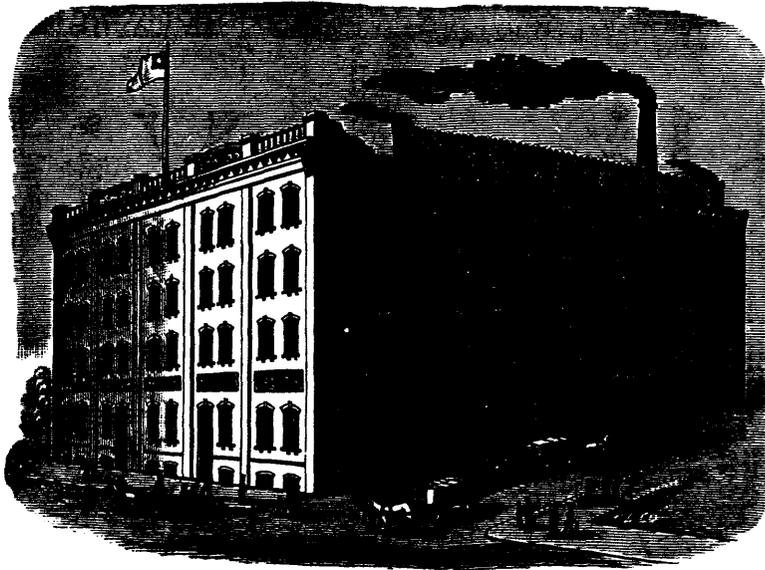
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THE CANADIAN MINER.

Vol. 1.

JANUARY 23, 1897.

No. 2.

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NAME OF STOCK.		NAME OF STOCK.	
Bondholder	\$0 17	Josie Mack	0 10
Big Three	0 12½	Jumbo	0 60
Columbia and Ontario	0 10	Kootenay London	0 12½
Caledonia Consolidated	0 10	Kelly Creek	0 15
Colonna	0 22½	Lily May	0 20
Commander	0 30	Le Roi	7 50
Crown Point	0 43	Lloyd Gold Mining and Development Company	0 06
Cariboo M. M. C.	0 50	May Flower	0 17½
California	0 15	Monte Christo	0 18
Eldon	0 10	Morning Star	0 12½
Elise	0 15	Monarch	0 10
Evening Star	0 15½	Novelty	0 10
Ethel Group	0 10	O. K.	0 30
Eureka Consolidated	0 10	Old Ironsides	0 15
Enterprise	0 20	Phoenix	0 15
Great Western	0 17	Pug	0 17
Gertrude	0 15	Poor Man	0 11
Gold Hills Exploration and Develop- ment Company	0 10	Queen Victoria	0 10
Golden Queen	0 10	Rossland Red Mountain	0 25
Good Hope	0 10	St. Elmo	0 12½
Hansard Gold and Copper Mining Company	0 10	St. Paul	0 12½
Heather Bell	0 15	Silverine	0 12½
High Ore	0 07	Silver Bell	0 15
Iron Mask	0 60	Virginia	0 19
Iron Colt	0 20	West Le Roi and Josie	0 27
Iron Queen	\$0 04	War Eagle	1 57
Josie	0 60	White Bear	0 10
		Zilor	0 15

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Cornucopia (Lake of The Woods)	\$7 50
Mikado " " "	7 50
Gold Exploration Company of Canada (Seine River)	5 00