

UTILIZING SOLAR ENERGY.

With solar radiation is the great fountain of terrestrial energy. Together easy to utilize direct total amount of radiant energy by the earth may be roughly at the equivalent of no less than 60 horse power per acre, more than enough to satisfy requirements of industry. Ericsson was the first engineer to seriously as a practical problem of utilizing this enormous with his customary dogged persistence did not rest until he had a solar engine that would do work. The result he attained production of one horse power per square foot of exposed collector surface—a figure that has been reached by other investigators which may, therefore, be taken as a basis of reckoning. The method used by Ericsson, and by those who have followed him, was to concentrate the solar rays upon the boiler by means of a large condenser, thus compelling the sun to do the fuel and serve as a stoker. The process worked well, both with the inventor's great hot air engine and with ordinary steam engine. The most practical type of such apparatus erected and in service in California consists primarily of a mirror forming the frustum of a hollow cone, with its base turned to the sun. The cone is lined with aluminized glass, perhaps two feet long or eight inches wide, set in a metal framework by means of bolts and washers. The frame is supported between two skeleton piers in a position capable of being moved in any direction along the arcs shown in the drawing a little above the mirror, so as to follow the seasonal changes in the altitude. This adjustment is readjusted by hand every few days as the sun's position changes.

Journal motion is given by clockwork. This is not continuous, as in the case of the sun, but by stops and starts, the driving mechanism being locked during the intervals to reduce the danger of vibration. The boiler is a coiled water-tube affair of blackened copper pipe, equipped with a superheater and placed at the center of the mirror. In the example shown, the mirror is 12 feet in diameter, and contains about 100 feet of silvered surface. The boiler carries 200 pounds pressure in steam, and is good for 10 horse power. Flexible couplings enable the boiler to be readily led to the engine. The boiler structure can be stripped down, and put together in a matter of out-of-the-way place with very heavy parts, so that the problem of transportation in a difficult country is comparatively simple. The absorption of solar heat is so great that when the sun is near the horizon the apparatus cannot be worked, but in clear sunshine it is available for at least eight hours. Getting up steam after the sun is at work is about an hour's task, when the engine will drive steadily until the approach of sunset.—Cass Magazine.

afford at the car shops of the Pacific railway at Hocheville. Six men were injured, and Jean Eribeols, probably the estate of the late T. H. Macdonald, ex-M. P., is valued at \$73,617, which is divided among four children except \$2000, which goes to Miss Drummond, a niece of the testator.

MINING INVESTMENTS

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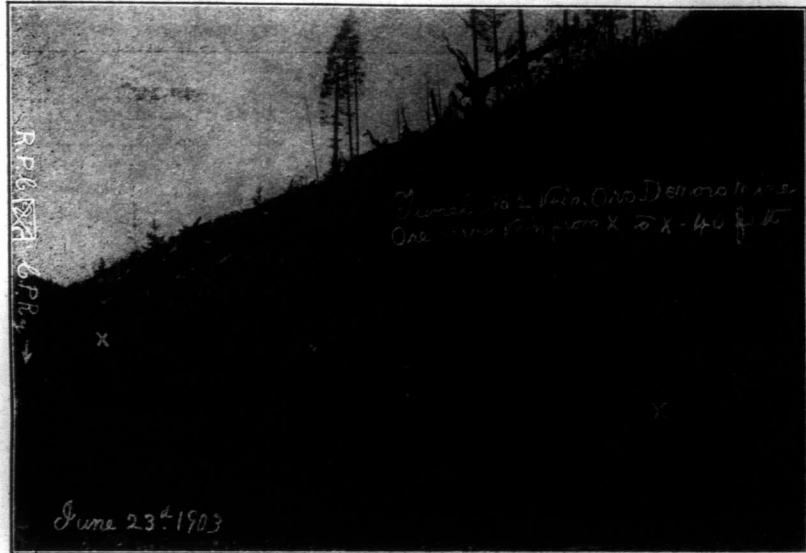
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THE ROSSLAND MINER.

THE ORO DENORO MINE.



NO. 2 VEIN, ORO DENORO MINE—ORE ACROSS VEIN FROM X TO X 40 FEET.

The quick transformation in a few months of a prospect into one of the big mines of the Boundary country has begun to attract a good deal of attention in mining circles and the Miner presents a reliable statement of the salient facts for the benefit of its readers. The property in question is the Oro Denoro at Denoro township on the C. P. R. Phoenix branch line and being two miles from Eholt and three miles in a direct line from the famous Phoenix copper-gold camp. The Oro Denoro was located eight years ago by William Corbett, who later obtained a crown grant. Mr. Corbett dug a great many prospect pits and trenches showing ore over acres of the claim so that it was often spoken of as a mountain of ore and has always been counted on to make a mine. A thousand feet of tunnel and shaft work had been done when operations ceased three and a-half years ago.

In January last Smith Curtis was instrumental in organizing the Denoro Mines, Limited, and became managing director. This company acquired the Oro Denoro and in the middle of April last, six men under the superintendence of R. H. Anderson (now superintendent of the Le Roi mine at Rossland, B. C.) began development work. The previous underground work has not yet been utilized but it can later on be made available. Hence the recent work done is as if the Oro Denoro were largely an undeveloped prospect. Three ledges that were known to intersect the C. P. R. line, which crosses the property were attacked and stripped of earth and rock capping with a view to shipping by quarrying the ore. In a few weeks tons of thousands of tons of pay ore were exposed. It is safe to say that after \$1,000 had been spent the property was able to take care of itself, one of the rare cases where a large low grade property would pay from the grass roots. The values are in order of value, copper, gold and a very little silver. The status of the property after ten weeks of development will be best understood by quoting Superintendent Anderson's report to the directors and a reference to the photo-engravings on this page.

REPORT.

To the Directors of Denoro Mines, Limited: Work under my superintendence was begun on the Oro Denoro mineral claim in the middle of April, 1903, and has proceeded continuously since upon three large ore bodies known as the Magnetic Iron Vein, No. 1 Tunnel and No. 2 Tunnel Vein.

MAGNETIC IRON VEIN.

Starting at the railway track this vein has been stripped for a width of 60 feet, with ore still dipping to the north under an altered limestone capping giving promise of a still greater width. In blasting across this vein for railway siding a face of twelve feet in height has been made. The ground rises rapidly away from the track and the stripping has been carried upward and has proven the continuity of the ore body. A trench across the vein a considerable distance above shows that the ore body maintains its width and that a large tonnage above the railway track is assured. Assays taken several times across the vein as the work has proceeded convince me that practically all the ore disclosed is profitable shipping ore.

NO. 1 TUNNEL VEIN.

This ore body has been stripped on the upper side of the railway track,

and so far a width of 70 feet of shipping ore has been shown up. The vein with further development may show a greater width. The ore body has been traced and partly stripped up the hill from the track 75 feet, and is being still continued. It is shown on the surface below the track for about 50 feet, when it disappears under the soil.

This is an excellent showing and promises large tonnage, the assays showing pay ore all across the vein. A railway siding 270 feet long has been graded in front of this ore body and the nearby ore body of No. 2 tunnel, affording plenty of room for shipping on a good scale.

NO. 2 TUNNEL VEIN.

This vein has been faced up and some stripping done and shows 40 feet of ore in width. Some stripping has been done showing the ore body extending up the hill, but how far is not yet known. A considerable portion of the ore is of shipping quality, but will require some sorting. The railway grade for siding in front of this and the previous vein is now ready for tracklaying.

GENERAL REMARKS.

It is expected that railway sidings will be put in immediately by the C. P. R., as already arranged. Shipments can then begin, but will not exceed 50 tons per day until the installation of your seven-drill compressor plant, which it is hoped will be ready for work upon 1st September next, when shipments can be quickly increased to 200 tons and upwards per day. The proposed compressor plant will be capable of breaking down 350 to 400 tons of ore per 24 hours, and the mining will really be quarrying and the cost will be correspondingly low.

I feel quite safe in saying that with ore values persisting the ore bodies so far stripped will yield ONE HUNDRED THOUSAND TONS of merchantable ore and that I have every confidence of the work showing more and more tonnage as it proceeds. This tonnage is not, however, blocked out—"in sight," in the technical sense. The ore shown justifies the compressor plant and your pushing development on a larger scale than heretofore.

Denoro, B. C., 23rd June, 1903. R. H. ANDERSON.

The directors had Mr. A. I. Goodell, superintendent of mines and smelters for the Montreal and Boston Copper Co., also examine the property and he endorsed Mr. Anderson's report as follows:

"I have been over the ground referred to, made some assays and analyses and am satisfied the above report is correct. The ore is a desirable smelting ore."

ALBERT I. GOODELL, Supt. Montreal and Boston Copper Co., Ltd.

Subsequently a contract was made with the Boundary Falls smelter which is claimed to be the most favorable rate ever given to any mine in the province, the rate being on a sliding scale downward, according to the excess of iron, and on the last ten shipments for which returns have been received, the smelter rate was less than sixteen cents per ton. The ore is also rich in lime so that it is not only self-fluxing but is capable of fluxing a large proportion of silicious ore.

The excellence of the Oro Denoro ore will be apparent when compared with the self-fluxing ore of the Granby company at Phoenix, the actual net cost of smelting which that company states to be \$1.35 per ton. As the smelter is doubtless making a good profit on its contract for the Oro Denoro ore by using it to flux other ores for which it would otherwise at considerable cost have to buy iron and lime to flux them, these being refractory ores for which the smelter charges a high smelting rate, there

fully examined the work done on the "Oro Denoro" mine since I ceased on the 8th inst. to be its superintendent (I having on that date taken the superintendence of the Le Roi mine at Rossland, B. C.). Meantime the work has been carried on under the foreman, Mr. Fred Curtis, and has been well done and the showings of ore continue to improve.

All the work done since my former report, on 23rd June last, has much enhanced the property and confirmed the statements then made by me.

SHIPMENTS.

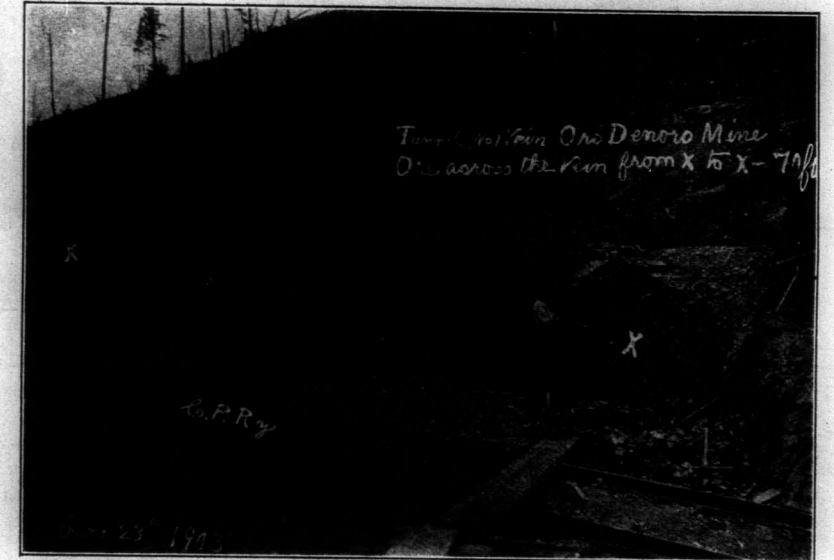
Two shipping spur tracks were, after considerable delay put in by the Canadian Pacific Railway company and shipments were begun in the middle of July. To date some 2400 tons of ore have been shipped, the output now being about 100 tons per day of ten hours, the ore being broken down by hand drilling.

COMPRESSOR PLANT.

The seven-drill compressor plant purchased by you in July will be delivered on the ground in ten days, where the foundation for its reception is approaching completion. The plant should be in operation by the end of September and will enable you to double your ore output and to mine the ore at a greatly reduced cost.

ELECTRIC LIGHT PLANT.

Should you close the pending negotiations for the electric light plant (80 lights of 16 candle power) you



NO. 1 VEIN, ORO DENORO MINE—ORE ACROSS VEIN FROM X TO X 70 FEET.

line of demarcation between the capping and the ore. I suggest that the ore body be stripped further down the hillside below the railway track and a tunnel driven in under the ore body and upraise made to the ore body now being quarried, when the quarried ore can be dropped to the tunnel and taken out. This "glory hole" method will necessitate another spur track from the railway being put in at the base of the hill, where ore bins and chutes for rapid and cheap loading in cars should be built. This proposed spur will serve the other quarries in the same way.

MAGNETIC IRON VEIN.

Shipments are daily made from this vein; the work done showing constant improvement in the ore. There is a capping similar to No. 1 vein covering the real ore body, and the only development work required is to remove it.

NO. 2 VEIN.

No work has been done on this vein, but when a compressor is installed a considerable increase in tonnage can be got by opening this ore body up.

GENERAL REMARKS.

The shipments from the real ore body show a good profit—somewhat greater than I expected. This is due to the excess of iron in the ore, for which, under your contract with the Boundary Falls smelter (owned by the Montreal & Boston Copper company), you are allowed a deduction. The returns for the last ten shipments (1350 tons), for which assays have been received, show that the SMELTER CHARGE AVERAGE ONLY 16 CENTS PER TON. The fluxing qualities of your ore are excellent and make it highly desirable and much sought after, especially by the lead smelters. The showings made to date at so small a cost for development and the large tonnage now practically assured warrant the opinion that your property is a very valuable one.

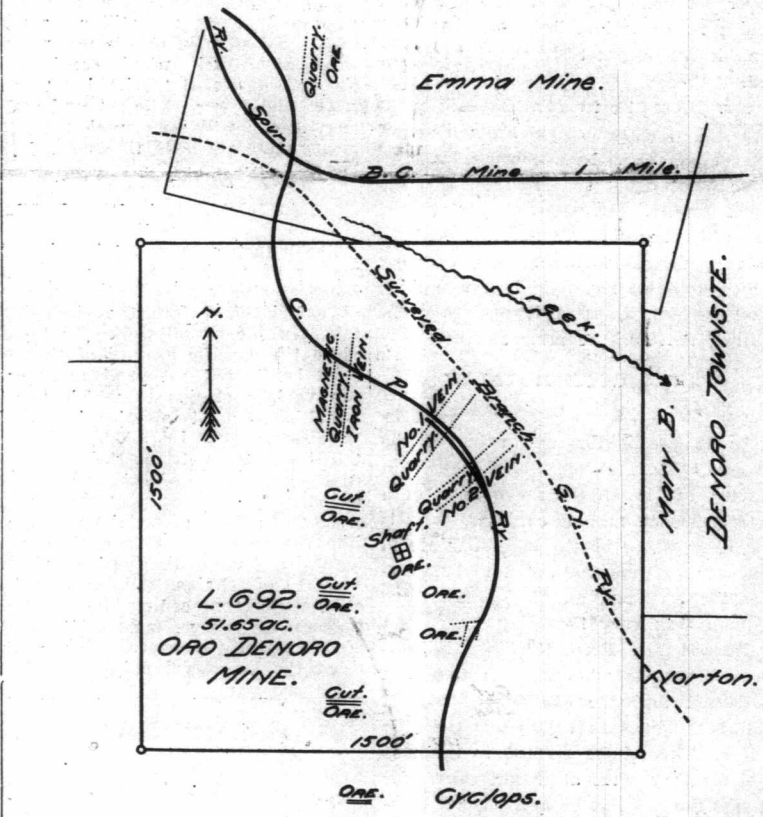
It is necessary, however, that a large amount of the vein stripping should be done in the next two months so that quarrying may be carried on all winter at the smallest expense possible.

There are now twenty men engaged upon the property.

(Signed) R. H. ANDERSON, Rossland, B. C.

NO. 1 VEIN.

The most of the shipments have been from this vein. In June it showed a width of 70 feet; the width is now 92 feet, and the full width has not yet been disclosed. The real ore body is overlaid by a few feet of mineralized capping, part of which will pay to ship. The removal of this capping is the only development work required above the railroad track. There is a clear



should be no real cost for smelting Oro Denoro ore but a bonus in it.

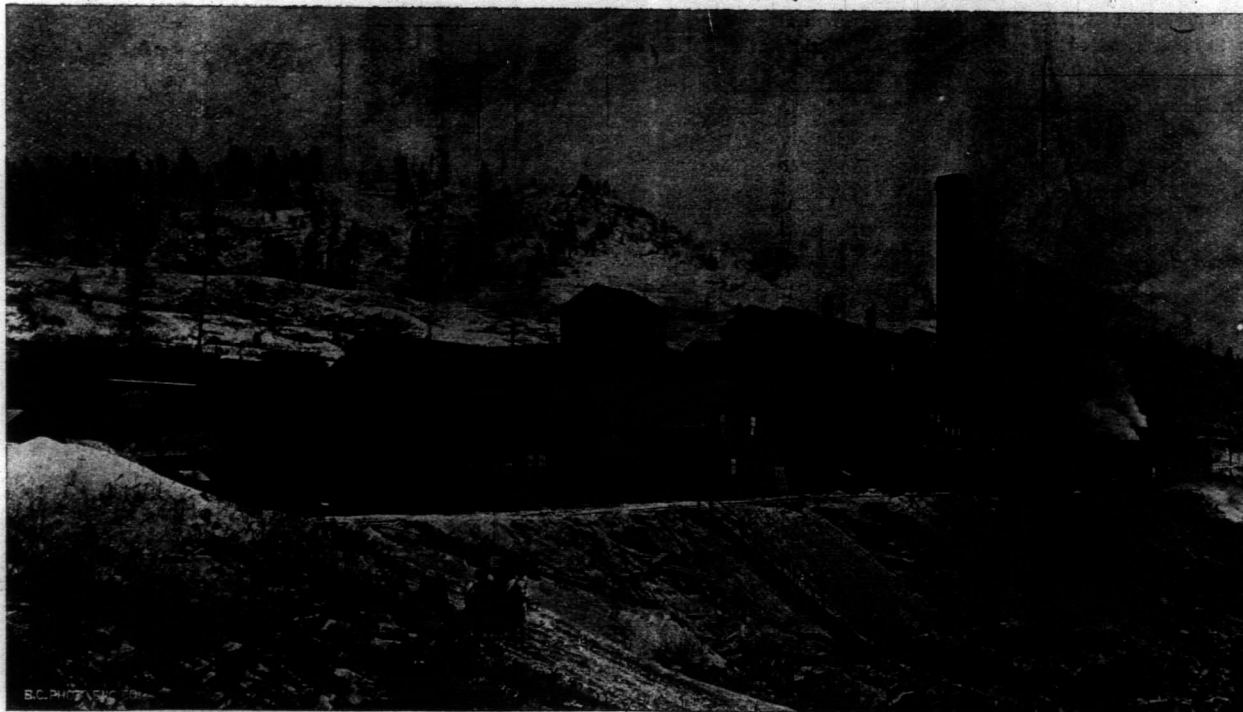
Shipments began in the middle of July and already over 3,400 tons have been sent out to the smelter and ore is now going out at the rate of over 100 tons per day and will soon be largely increased.

The present state of the mine is shown in the subjoined report of Mr. R. H. Anderson which is being sent to the shareholders.

REPORT.

Rossland, 29th August, 1903. To the Directors of the Denoro Mines, Limited. On the 25th and 26th instant I care-

could carry on mining operations at night and still further increase the output.



GRANBY SMELTER, GRAND FORKS, B. C. CAPACITY 2200 TONS PER DAY.

This report has been endorsed by Mr. S. F. Parrish, mining engineer, who as manager for some years of the "B. C." mine is thoroughly acquainted with the geology and ore formations of the Boundary, as follows:

I examined the "Oro Denoro" mine on 26th August, 1903, with Mr. R. H. Anderson, and endorse his report as given above.

Rossland, B. C., 29th August, 1903. (Signed) S. F. PARRISH, M. E., Rossland, B. C.

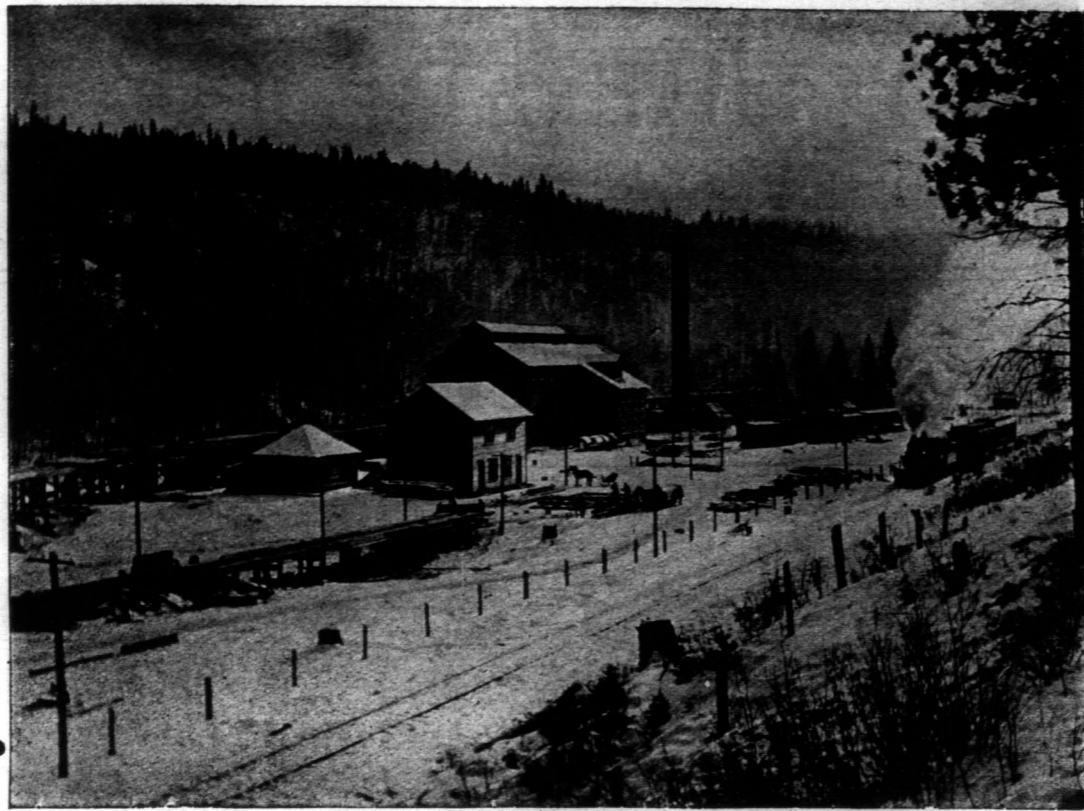
The ore bodies of the Oro Denoro cutting as they do up and down the hill (see plan) are as easily quarried as any in the world. For a great many years to come no hoisting or expensive machinery will be necessary. The Provincial government Bulletin No. 11 on "Mining in B. C." (1903), states (page 136) that in the Boundary district "mining by the quarrying system is carried on at a cost of between 30 cents and 60 cents per ton at the larger mines."

With the cheapest quarrying and the lowest treatment charges and with excellent pay values it should not be long before the Oro Denoro becomes a dividend payer.

Copper mines have always been an attractive investment, because as a rule they are more permanent than other mines and pay larger dividends. The Tio Tinto copper mine in Spain has been worked over 2000 years and is still the largest producer of that metal in the world. Taking the present working mines of the United States that have paid over \$5,000,000 in dividends, it will be found that 7 of them are copper mines that have paid \$153,000,000 profits or an average of \$23,300,000 and five of them are gold, silver and lead mines that have paid \$44,800,000, or an average of \$8,960,000.

Altogether too much emphasis has been laid upon the Boundary copper ores being low grade. The contained metal values are less than in many other mining districts, but the costs of mining and smelting are also very much less. The expression therefore should be a relative term. In fact all the big dividend paying mines of the world with very few exceptions, whether gold, silver, copper, iron or coal make a profit of but \$1 or \$2 per ton and many of them a less profit, but their big inexhaustible tonnage counts. No one thinks of calling the Butte (Montana) copper camp a low grade one, yet its \$10, \$12 and \$14 ores owing to their refractoriness and to expensive deep mining are not so valuable as \$5 to \$8 ores in the Boundary, and be it known that there are but four of the large mines in Butte that make on their ore a larger profit per ton than is made by the Boundary copper mines, and two of these four at most make only a few cents per ton more profit. For instance, the big Anaconda mines, capitalized at \$30,000,000, and which have paid \$23,000,000 in dividends, made for the year ending 1st June, 1903, \$1,602,800 profit on 907,227 tons of ore or \$1.78 per ton, but this includes profit on smelting, converting and refining, all of which are done by the Anaconda company. Had it to send its ore to reduction works and pay out extra freight rate on its metals to the New York market, its profit would be less than \$1 per ton of ore. Other Butte dividend-payers made during the year a profit of 90 cents, 83 cents and 18 cents per ton on their ores respectively. Mr. Walker recently in the Boston Commercial figured that the big Boundary mine owned by the Granby company can make \$1.80 profit per ton of ore.





BOUNDARY FALLS SMELTER. CAPACITY 1000 TONS PER DAY.

Taking as a guide the last ten shipments of ore from the Oro Denoro for which the assays are known it is expected that the net profit to the mine after its compressor plant is in operation will approach the two dollar figure per ton of ore. With its own smelting and converting works the profits would be still further enhanced. Altogether the outlook for the success of the Oro Denoro is very bright indeed. The action of the management in procuring at every step the highest and best expert advice is most commendable, and if followed by other companies in the initial stages of the development of their mines would result in great good to both the companies and the country.

The shipments from the copper mines of the Boundary are rapidly reaching very large proportions. Last year 500,000 tons of ore were shipped; already this year the 400,000 ton mark has been reached. In another month the output will be near 4000 tons per day or two and a half times the output of a year ago. And this is only the beginning. When it is remembered that the copper mines of Butte have given that city a population of nearly 60,000 and Ann-

thers for lots has sprung up. The miners and residents of the various Boundary towns are applying for the shares of the Denoro Mines and large blocks of shares are being sold to them. The well known business men now directing the company and the highly satisfactory way in which the work has been done to date rightly inspires the full confidence of the investing public.

### A Vancouver Man's Opinion.

In a recent issue of the Vancouver News-Advertiser, Mr. A. Prescott, one of the leading citizens of the Terminal city, had the following to say about the Oro Denoro mine, after a trip throughout the Kootenays, which included a thorough inspection of the property:

Mr. Prescott said that he had been profoundly impressed with the province's great mining future and the benefit to be derived by the Coast cities from the exploitation of the mines of the interior and the coast.

Arriving in Rossland last Monday he accompanied the executive committee

ers, but Mr. Prescott had to cut himself loose from the festivities and his way to the

### ORO DENORO MINE.

in the Boundary district, near Eholt, in which he is interested, and to visit which was the special object of his trip. He was accompanied by J. S. C. Fraser, president, and Mr. Smith Curtis, managing director, of the Denoro company, which owns the property.

As a result of his visit to the mine, Mr. Prescott was more than satisfied with what he saw, as all that had been told him about the property had been understated. For instance, the largest body of ore has been represented as 70 feet wide, but the tape line was put on it and showed 92 feet of ore, and the whole width was not yet disclosed. Other veins were 40 and 60 feet wide, and still other surface showings were not yet touched. The ore was being quarried and shipped at the rate of over 100 tons per day. A compressor plant is being installed, and this will enable the output to be greatly increased.

Mr. Prescott saw Mr. Goodell, manager of the Boundary Falls smelter, which treats the Denoro ore, and satisfied himself that the mine was making good profits. Mr. Goodell has visited the property, and said that the ore was a very desirable fluxing one, carrying high excess of magnetic iron and lime, and he would, were it necessary, be willing to lease the mine and

### PAY A GOOD ROYALTY

for the ore.

As to possibilities and value of the property Mr. Prescott was fortunate in having the benefit of the opinion of a widely-known mining engineer, who is manager of one of the biggest mines in the country, who happened to be visiting the property, and his conservative opinion was very flattering to it, and confirmed Mr. Prescott's own impression. Everyone who visits it thinks it is bound to make one of the biggest and best mines in that district of big mines. The miners seemed to think so too, for they were after Mr. Curtis for shares the moment he arrived, and purchased a big block of them. The people in the neighboring towns are all after the stock, and they ought by this time to know a good thing. There are twenty men now employed on the property.

Mr. Prescott visited Phoenix and was greatly impressed with the big quarries and plant of the Granby company, which is greatly increasing its output next month and will employ an additional 100 men.

Everybody in Phoenix is hopefully looking for the Great Northern to build its V. V. & E. line in there before many months, and for a great increase in business. The big mines think the C. P. R. should reduce the rate on ore and that the new railway will mean a lower rate and a consequent stimulation in the ore output.

### TO LIVE A CENTURY.

Speakers at Longevity Banquet Say Vacations Help.

At the Majestic hotel, New York, the Hundred Year club dedicated its annual banquet to the subject of "Vacations," as viewed from the standpoint of their effect on longevity.

Mr. John Rich, who is 94 years old, president. Mr. Albert Turner, who has never tasted coffee or tea, was the toast master, and Dr. Elizabeth H. Jackson, who has not taken a dose of medicine for fifty years, responded to the first toast.

The vacation spirit was rampant among the diners, and even the vegetarians, raw food devotees and other dietitians, who make up a large part of the membership, played truant to their particular diets long enough to eat appreciably of the conventional banquet fare. As one vegetarian confessed, "I ate everything but the fish and meat, and I stepped over the line enough to take a bite of the fish and a taste of the meat." Longevity rules prevailed, however, in

the matter of drinks, and the toasts were all drunk in cold water. Neither was smoking permitted, but this, it was announced, was due to gallantry rather than prudence, as the women members of the club were present. The decorations were evergreens, in token of the club's hope.

Mrs. Jackson, who was announced as being a close student of the art of living wisely in this country and Europe, said that Americans tried to crowd into one day that to which Europeans would devote two days. "All Europeans take more vacations than Americans," she said. "That is why they live longer."

Mr. F. M. Heath, who responded to the toast, "Vacations at the Mountains," spoke on the Adirondacks, which, as the oldest portion of the world, he said deserved the interest of the Hundred Year club.

Mr. L. S. Brown, "who has been a dweller in tents for forty years," spoke on vacations in tents, and said that tent dwelling adds greatly to the probability of living one hundred years.

Mr. George Ende, the last speaker, talked of travel, and told the Hundred Years that they should all go to see Harnessed II.—New York Herald.

### VULGARIZING NATURE.

(Chicago Tribune.)

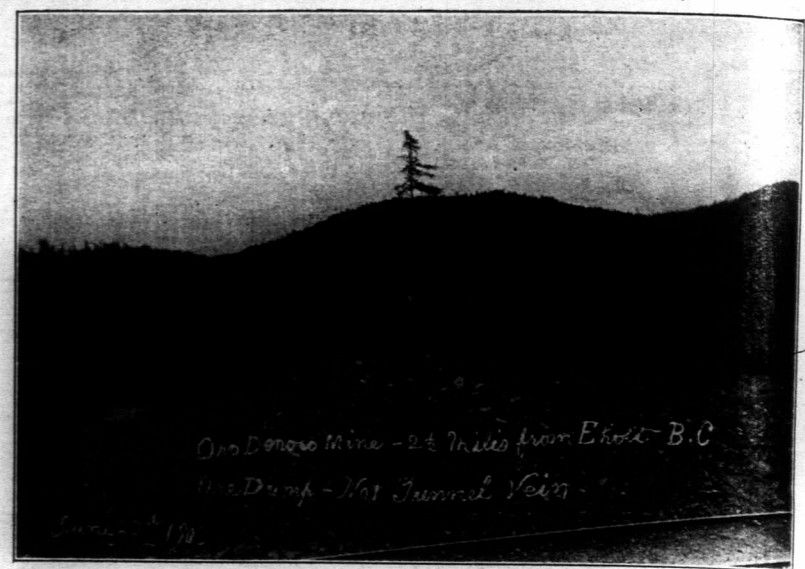
The London Graphic says a protest is being made against the construction of mountain railroads in the Alps, and especially against the railroad now slowly creeping up the Jungfrau. It says: "The Wengern Alp, once sacred to the beautiful blue gentian, is speckled with the shells of hard-boiled eggs, rows of ladies read penny society papers at the edge of the Elker glacier, and at Sheldack a gramophone has taken the place of the 'Ranz des Vaches.'"

This protest recalls the eloquently indignant one made by Ruskin against the railroads and factory chimneys which marred his beautiful landscapes, but these were necessary accompaniments of great public utilities. How much more indignant would he have been had he lived to see the railroads climbing the Alps not in the interest of industrial utilities, but only to subserve the interests of public curiosity and private profit. And yet this seems to be the fate of natural beauty everywhere when it is left unprotected. Indeed, nature is fortunate if it is not defiled by vulgar visitors with worse things than eggshells, tin cans and paper bags—their usual offerings at its choicest shrines.

Happily there are some places left where nature is undisturbed because under government protection. This is the case with our Yellowstone park, but how long would that spot be left undisturbed if the troopers were withdrawn? How many animals would remain in it if seals were not placed upon the locks of firearms brought in by tourists and campers? There are still some resorts of the old style in remote places, or off the beaten track, which are known to the unprofessional tourist, but these get fewer and fewer. The railroad and the electric car will soon reach them. This means more eggshells, tin cans and paper bags.

### LAUNCHING A BIG SHIP.

The launch of a vessel is primarily a matter of mathematics. In a ship of immense size it calls for a vast amount of calculation before the first step is taken in the actual work. In the first place the specific gravity of the vessel must be figured out so as to allow for the various strains to which the hull is subjected on its slanting journey into the water with its sudden plunge as the bow drops from the ways. An enormous amount of data must be collected to fix the centre of gravity. The weight of all the material that has gone into the vessel up to the time of the launching, the distribution of this weight, of chains and anchors, and other material placed on board, preparatory to the launch, must all be considered. When the centre of gravity is fixed the successful shipbuilder knows



ORO DENORO MINE—TWO AND ONE-HALF MILES FROM EHOIT, B. C. ORE DUMP NO. 1 VEIN.

just how to build his launching ways, and just where to strengthen them. He knows, then, by a little calculation, how much of the vessel will be subjected to certain strains and how to best prepare for them. He can figure almost to the second how long the ship will be in sliding into the water. — Franklin Matthews in September Outing.

### A SHARP CHINESE EDITOR.

(San Francisco Wasp.)

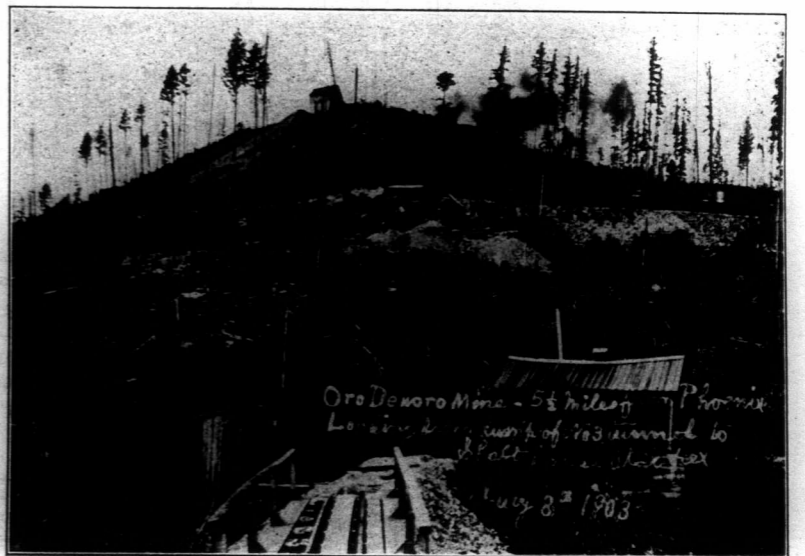
The editor of the Chinese Daily World, published in this city, is a graduate of Yale, and while retaining all the characteristic reticence of his race he is, nevertheless, rather clever at repartee, as was recently instanced when a rather dapper young fellow called at the World

amulets to bring good luck is well known to the bathhouse keepers, to whom patrons turn over their valuables before taking a dip.

According to these authorities, the belief in charms is widespread, silver and bits of metals stamped with quaint markings, little strips of sheepskin or leather bearing a couplet or the symbol of a heavenly body are deposited along with money and keys and other valuables, to say nothing of rabbits' feet, four-leaved clover, wishbones, and other witcheries in one guise or another.

And the wearing of these avengers of evil is not confined to any one class or nationality. The well-to-do woman and the well-instructed is as apt to have the quaint goods upon her as the untutored.

More mascots in the form of orna-



ORO DENORO MINE—FIVE AND ONE HALF MILES FROM PHOENIX. LOOKING FROM DUMP OF NO. 3 TUNNEL TO SHAFT HOUSE AT APEX.

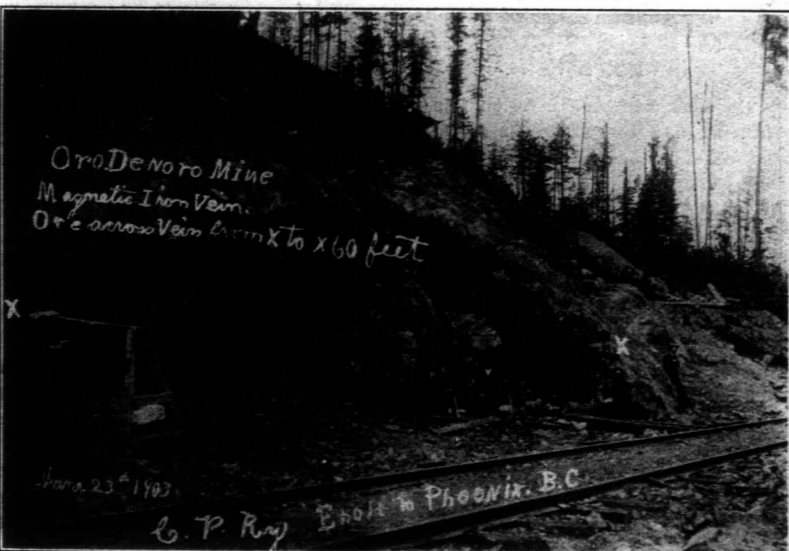
Office to sell a certain grade of paper. The editor affects the American style of dress, and the paper house drummer thought he would be smart and opened the conversation by impudently asking, "What kind of a nose are you—a Japanese or a Chinese?" The editor smiled blandly, and with a courteous bow retorted: "Before I answer your inquiry will you kindly inform me the kind of a key you are, and tell me if you are a monkey, a donkey or a Yankee?" The drummer fled in dismay.

### AMULETS WOMEN WEAR.

(Philadelphia Telegraph.) That many women habitually wear

ments, gems, and precious meals are being mounted by the jewelers all the time, and more symbols of occult meaning are ordered by customers to be set in such shape and fashion that they can be worn handily. The summer girl has her prized piece of jade or magic moonstone locked on a bracelet that cannot slip over her hand and be washed off by the waves, as a ring might be.

This sort of bangle charm is worn openly, even boastfully, as betokening a careful and cautious young person, but dozens of charms are worn secretly safe within the waist front unsuspected until injury or accident betrays their presence.



ORO DENORO MINE—MAGNETIC IRON VEIN. ORE ACROSS VEIN FROM X TO X 60 FEET.

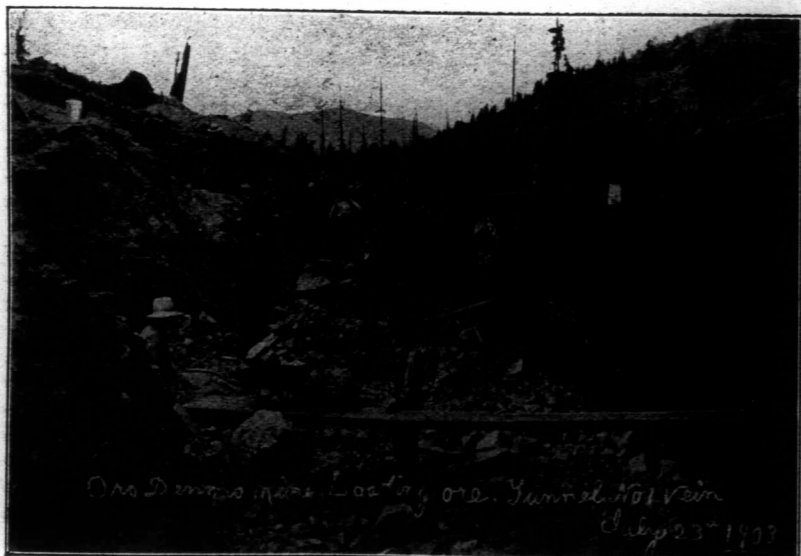
conda 15,000 there must be much future growth in store for the Boundary, and to that growth the Oro Denoro will contribute not a little, for in addition to the ore bodies already shown up, others that are indicated upon the accompanying cut will in the near future be opened up, as well as three more quarries below the C. P. R. track on veins No. 1, No. 2 and Magnetic already uncovered above that track whereby the daily tonnage within a year will be increased many fold.

The big showing already made on the Oro Denoro and the adjacent Emma mine has inspired such confidence that hotels and stores have begun to do business on the adjoining townsite of Denoro, and a brisk demand by miners and

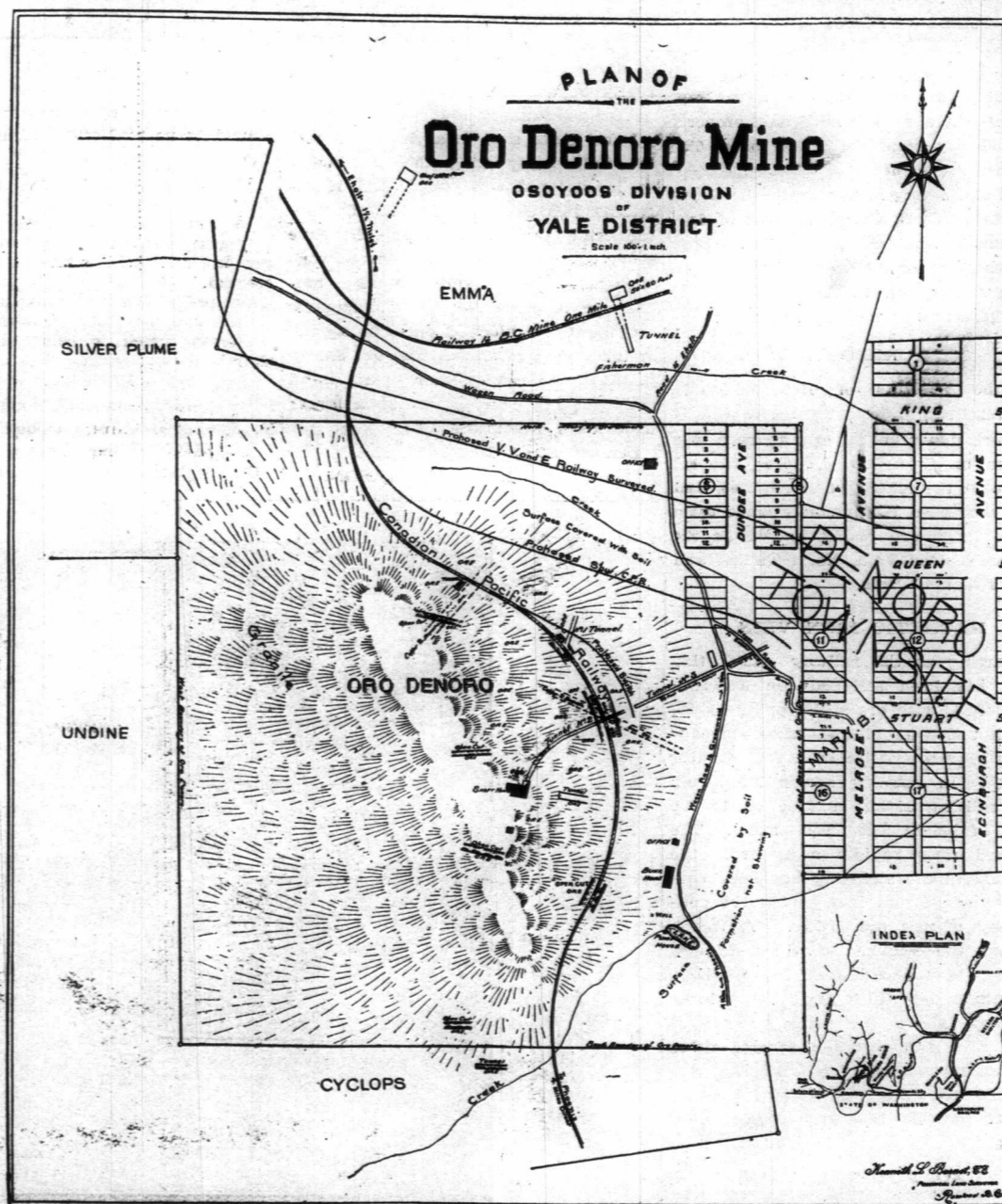
of the Provincial Mining association on its visit to the mines. They were dropped to the 1,350-foot level of the Le Roi, and also visited the War Eagle and the Centre Star, and were given by Mr. Kirby, manager of the latter, an excellent report and had a most enjoyable and educative day.

In Rossland a most hopeful feeling now exists, and after seeing these immense mines, operated by very large and most improved machinery plants, he believed the buoyant feeling to be justified. Concentration works will in a few weeks be running and will make immense bodies of low grade ores, hitherto unworkable, a source of profit.

There was a big carnival on at Rossland, attended by thousands of outsid-



ORO DENORO MINE—LOADING ORE, NO. 1 VEIN.



Per Year

PRODUCE

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Larger Min

Much Ore

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A week of unit the big mines of brought the agree suspension of oper the normal standa is probable that maintained despite the Kootenay mit regular contributi for the past four

At the mines shi sively the week feature of especial

It may be fairl suspension of oper any mine was the way in connection industry. The str the direct result of smelter charges o as the general of smelters required and could handle exceedingly low f Manager Parish will be read with be presumed, how concluded they c handle the iron sul originally concede ed charge.

Just at the mor Kootenay suspensi ate, for the minin continuous advan with the present set-back during t as much as there t the ultimate outc will be the censtr smelting or reduc interests among w will be prominent situation may eve to the interests of erally.

- THE
- Shipments from
  - for the week end
  - for the year to dat
  - Le Roi . . . . .
  - Centre Star . . . . .
  - War Eagle . . . . .
  - Kootenay . . . . .
  - Le Roi No. 2 . . . . .
  - Giant . . . . .
  - Jumbo . . . . .
  - Iron Horse . . . . .
  - Spitzee . . . . .
  - Velvet . . . . .
  - I. X. L. . . . .
  - White Bear . . . . .
  - O. K. . . . .
  - Homestake . . . . .
  - Totals . . . . .

AMONG

LE ROI. — Not est is reported in operations at the week. As will be ment of the shipment the previous week carnival holidays up. Special atten to development wa

LE ROI TWO. work is actively upper to the 700 depth the drift t lead as disclosed is making good p Present juncture straightened. Fiv employed at the mine are described as e In the No. 1 mine workings on the 8 grade ore was picki continued satisfi centration vein the vanced between 90 ore. This vein w work on the mill management is foll

CENTRE STAR various levels and the 700 drift have tly during the w incident.

WAR EAGLE. continued without the 200 to the 700 ing one of the nev agement reports th management as transp ande has transp in connection with

WAR EAGLE-C CENTRATOR. — the site for the t two companies is y ai decision was ex week, but inquiry the fact that the n The management sites are under o public will not be Ugn near Trail is, sumably the quest has been the poin situation revolved.

NO. 2 CONCEN Progress has been with the Chilean mil second Chilean mil and meantime the building for the el ceeding rapidly.