

THE COMING POWER

Electricity is Coming Into Increased Use Here.

MUCH CHEAPER THAN STEAM

The Cost of the Plant is Less and it is Much Lighter and Therefore Much Easier Transported—Why Electric Drifts are Not Used Underground.

That electric power is largely supplementing steam in the mines and other industries of this section, is shown by the large number of mines, etc., that are now using the power or are installing plants which will use electricity as a motive power. Among these are the following:

Table listing various mines and their power sources: War Eagle, Iron Mask, Massey, New St. Elmo, Reduction plant, Getrande, California, No. 1, Josie, Giant, Nickel Plate, Great Western, Trail smelter, Miner and other printing offices, For lighting the city and the mines.

Total 2,285. Nelson is just getting ready to use 400 horse power for the propulsion of electric street cars and other purposes. The cost of the power averages \$40 per year per horse power, and when the difficulties experienced in building the line over a rough mountainous and wooded country, and the cost of the original plant are considered, this price is reasonable.

That it is much cheaper than steam power has come to be a recognized fact and the best informed mining men claim that it averages at least 30 per cent cheaper than steam. In some cases it is less than this in others it is more. Where steam is used there had to be three eight-hour shifts, with an engineer and stoker on each shift. With electric power there are two 12-hour shifts, and one man can do all the work on each shift because it is so light. There is no stoking, and all that is required is to keep the machinery oiled, cool, and clean. The work, therefore, is much easier when a plant is operated by electricity than it is by steam.

In localities which are hard to reach, like the New St. Elmo mine, the cost of transporting fuel to such a height would be considerable, while the cost of getting the electric power to it is inconsiderable. It is thought in places like the St. Elmo that the difference in favor of electrical power is about 40 or 45 per cent. The first cost of machinery, if anything, is in favor of the electric plant. Then, too, the life of the electric plant is greater than a steam plant. A steam boiler will last about eight years, while an electric motor will last 20 years with slight repairs to the bearings. This will be the case unless it is burned out through neglect, carelessness or lightning. Even lightning can be guarded against by the use of proper lightning arresters.

The electric plant has an advantage, too, which is of much importance in a country where the means of transportation are limited, and that is, it is much less bulky than a steam plant. It is usually only a sixth of the weight of a boiler and steam engine. This is a most important consideration at the inception of a mining enterprise. Usually a mining property, when it is first operated, is difficult of access, and if the expense of transporting a steam plant is too great it will not be incurred. Mine owners realize how much more cheaply an electric plant can be transported and how often causes mining ventures, which otherwise would not be undertaken, to materialize, and in this way is of great benefit to the industry.

Inquiry as to why the electric drill was not used, elicited the fact that it is not a complete success underground, but is a partial success on the surface. They are used to a considerable extent in hydraulic mines. An order was placed a few days since for a number of electric drills to be used in a Cariboo hydraulic mine. The advantage of the electric drill is its lightness and the facility, therefore, with which it can be shifted around without the necessity of connecting it with air pipe lines. It is only a matter of time when the electric drill will be made so that it can be used to advantage anywhere. The main impediment to its being used successfully in subterranean workings is owing to the greater density and heat of the atmosphere there. This causes the magnets to become overheated, and the result is that either the drill sticks or the insulation of the magnet winding burns out. The trouble will in time be obviated, to the great advantage of mining, for the reason that it will do away with the use of the air compressor and the connecting air pipe. It will be more easily handled and more pliable, and greater speed will be made with it in sinking shafts and driving tunnels, and in working winzes and upraises.

It was the consensus of opinion of those seen that the use of electricity as a motive power will so increase, that in time it will do away entirely with the use of steam in the mines and other plants about the city. This will be so for the following reasons:

- First—Because it does away with heat. Second—Flexibility of conductors which

- greatly cheapens the cost of underground operations. Third—Absence of any gas generated by the operations of the machinery. Fourth—Less cost of transportation and setting up of machinery. Fifth—It is from 15 to 20 per cent cheaper, according to conditions. Sixth—It is especially cheap as applied to traction in mines where considerable development work has been done.

HOW REPAIRS ARE MADE.

B. A. C. and Cunliffe & Ablett's Work shops—War Eagle to Have One.

In the workshops of the B. A. C., near the Red Mountain station, there is now installed about \$12,000 worth of machinery, and nearly \$20,000 has been expended on the outfit up to date. A pipe line has been laid from the compressor at the Nickel Plate, and power for some of the machinery is obtained in this way. Two of the machines, an elevator for lifting metal various sizes, and a riveting hammer being worked in this way. With a simple twist of the wrist the elevator will hoist any weight up to three tons, and when the pneumatic hammer—an insignificant looking piece of mechanism—gets to work it is liable to scare an innocent on-looker.

Mr. Fraser, the master mechanic, and his brother, who is in charge of the shops, have already turned out quite a number of ore cars all complete, and several more are nearly finished. It is in repairs, however, that this branch of the company's plant is now doing such good work. Formerly a great many vexatious delays were occasioned because the repairs necessary could not be made off hand. It was frequently necessary before the shops were running to send parts of the machinery away or to wire for pieces required. Now this is all done on the spot. It will be noted in another column that the pay roll of the shops now exceeds \$2,000 per month.

Messrs. Cunliffe & Ablett, who have now a thoroughly well fitted out establishment on Nickel Plate Flat, do all the repair work for the War Eagle and Centre Star mines, but it was stated yesterday that the management of these properties are somewhat taken with the success of the B. A. C. shops, and contemplate the immediate erection of a machine and repair shop of their own.

A DROP IN APPLES.

The Great Northern Has an Accident—A Car Falls 180 Feet Into Sheep Creek.

A refrigerator car and 540 bushels of delicious winter apples lie in Sheep creek, about two miles this side of the falls on the line of the Great Northern railway, and the railway company is out about \$2,000 in consequence. The morning freight train for Rossland left Northport as usual about 8 o'clock Thursday. In the center of the train, which was a double header, was a large refrigerator car, holding a consignment of 180 barrels of apples for Mr. M. S. Logan of this city, sent from near Goderich, Ontario. The apples being a first shipment of the kind from this point to British Columbia, were of an especially fine character, a picked lot, in fact, and Mr. Logan had already sold the entire consignment to the dealers here in advance. About two miles or so this side of the Sheep creek falls, where there is an almost perpendicular drop of about 175 feet, the car in question, without any sign of reason, left the track, and after bumping along the ties for a short distance, disappeared over the edge of the embankment and rolled down into Sheep creek, turning over and over on its way down. One pair of trucks remained on this side of the creek, but the other pair were pitched bodily over the creek to the other side. The car was smashed to pieces, hardly a trace being left of it, and the apples were scattered in every direction. There will be no salvage. A car like the one in question is said to cost from \$1,200 to \$1,500, and the cargo was valued at about \$800, so the company will have a cheery little bill to settle. Although the car which caused all the trouble, was in the center of the train when it went off, none of the other cars left the metals. The train was just recoupled after the accident and got into Rossland all right. Mr. Logan says we will have to take United States apples this winter, as it is now too late to get any more from Ontario.

JAMES NELSON'S FUNERAL.

It Was Attended by 114 Members of the Order of Eagles.

The funeral of the late James Nelson took place Thursday afternoon at 2:15 from the lodge room of Rossland Aerie No. 106 of the Fraternal Order of Eagles. The services of the order for the dead were held in the hall. One hundred and fourteen members of the order attended the funeral, 105 being in line on foot and nine in vehicles. The interment was in the new city cemetery. At the grave the services were conducted by Rev. D. McG. Gaudier. The funeral service of the Eagles was held at the grave side, with Mr. William J. Venner acting as chaplain. The deceased was the inner guard of the aerie, and was greatly respected for his many good qualities.

Major W. J. Collins Back.

Major W. J. Collins, of the British America corporation, arrived in Rossland Thursday afternoon. Major Collins came over from England about ten days ago, and stopped over at Butte, Montana, on his way to Rossland. Hon. C. H. Mackintosh, Mr. W. A. Carlyle, Mr. Haskins and some others were at the station to greet the major on his arrival. Major Collins is now installed in the quarters formerly occupied by Mr. Mackintosh, over the B. A. C. offices. No definite announcement has yet been made concerning Mr. Carlyle's successor, though it was stated on the street yesterday that Major Collins would personally take charge for the present.

Advertisement for Dr. Williams' Pink Pills for Pale People. Includes a portrait of a woman, the title 'Pale and Bloodless', and a testimonial from Miss Mabel J. Taylor. The ad describes the symptoms of anemia and how the pills cure it.

THE SISTERS' HOSPITAL.

Close of the Fair—A Good Sum Realized. Gratitude of the Sisters.

The fair in aid of the Sisters' hospital was brought to a close Saturday night. Owing to the wretched weather yesterday prevailing there was not a large attendance, but those who were there in the evening had heaps of fun. All the raffles were closed out and the goods on hand were auctioned and some good bargains were picked up. A statement will be made on Tuesday next of the amount realized, all the figures not being in last night. It is understood that the total is a satisfactory one.

THE OKANOGAN.

A Change in the Directorate—Mr. Langley Retires from the Board.

A change has been made in the directorate of the Okanogan Free Gold Mines. Mr. S. Thornton Langley has resigned his position as a director of the company, and it is stated that in future Messrs. A. B. Mackenzie & Co. will be the official brokers for the concern. The reason for Mr. Langley's retirement is because he has other interests which demand his attention. Just who will replace Mr. Langley on the board has not been stated, but an appointment will be made in a day or so.

The St. Elmo.

Mr. W. T. Newell, secretary of the New St. Elmo, and Mr. Krumb, the manager, said Thursday that they fully expected to have the compressor running in a day or so. The men from the West Kootenay Power company were to have started running the wires up to the compressor house yesterday, but were prevented. They will commence the work this morning, and it will only take a short time to complete the job, the machinery should be running by the end of the week. The main drit is now in about 500 feet, and the crosscut to the south is in from the drift 87 feet.

Chian Tea Set—Donated by Fox & Co.

raffled by Josephine Reddin; won by Miss Long, No. 78.

Satin Cushion—Raffled by Ella Cosgriffe; won by W. F. McDougall, No. 6.

Pipe and Box of Cigars—Raffled by Lily Dyer; won by Joseph Kelly, No. 108.

Card Case and Counters—Raffled by Antoinette Saucier; won by Ernest Carpenter, No. 3.

Lamp—Raffled by Mollie L. Eeryer; won by F. A. Hewer, No. 60; donated by Hunter Bros.

Gold Watch—Won by S. J. Brailo, No. 44.

Advertisement for Taddy & Co. London Eng. 'ORBIT' Brand and PREMIER Navy Cut Tobaccos. Includes the text 'ESTABLISHED 150 YEARS' and 'AGENTS FOR CANADA: JAMES TURNER & CO., HAMILTON, ONT.'

Advertisement for a Handsome Jewellery Catalogue. Text: 'That Christmas Gift problem is at hand. Birks' beautiful jewellery catalogue will help you solve the pleasant difficulty. Birks' catalogue is a work of art, it describes and illustrates Birks' jewellery, the highest quality and most moderately priced in Canada. The catalogue illustrates all sorts of jewellery, silver and plate. It shows gold rings, with all sorts of settings, as exact as colors and paper can show them. The catalogue is sent free to any one writing for it. With it you will readily dispose of the difficulty of selecting suitable holiday gifts. Henry Birks & Sons JEWELLERS AND SILVERSMITHS MONTREAL.'

THURSDAY... ROSSL... All Classes o... on the Bus... Mr. William A. Carlyle, general superintendent and of the British America of every reason to be proud meeting held at the city last Friday, when a farewell service were presented of his departure from take the general management of the great Rio Tinto mine in Spain was the gathering a large... delivered during the evening in a symposium, cordial and affectionate terms that the recipient could not deeply moved by his reply to the address spoke with much suppression it was only after he had thanked again and again, managed to speak of the camp that he regained a sense of himself. The speeches were in every instance there was not a jarring note in the proceedings. The impromptu by Mr. Isaac B. Kenty, of on behalf of the working pleasing incident not lost committee, and eventually greatly pleased Mr. Carlyle. The address presented workmanship of Mr. R. Mr. Simpson of this city, greatest credit on them. The design was sketched Nelson, and consists of an held in position by two which form the side lines. of the arch are the arms of resting on a maple leaf. are the words: "The map and the lines, "Should Auld be Forgot and Never Bro in the right and left corners are the arms of the province. In the centre of the on either side are two ex ink mining scenes, the work very creditable to the His Worship the Mayor of the council chamber at St. Carlyle on his right, and Fraser, president of the of trade, on his left. An of in the hall were the Hon. Dominion Minister of T. Mayne Daly, solicitor C.; Hon. Charles H. Mac W. J. Collins, Messrs R. the B. A. C., Charles V. War Eagle, Hector McR Kenty, the spokesman and of the miners, Frank Olive manager of the Merchants tax, John Boutbee, P. M. aid, W. J. Nelson, R. Dal Henri Roy, Anthony J. Ingram, J. B. Johnson, C. A. B. Mackenzie, Richard McMillan, John Dean, C. Harp, T. S. Gilmore, Th H. W. C. Jackson, H. Richard Flewman, Thomas Hunter, H. S. Wallace, Howard Jones, R. E. Yo others, a large portion of filled by working miners o say farewell to their d The dominant note of delivered was pride in the Carlyle, as a native Cana chosen for such a high post; coupled with that fact ability and integrity was h would successfully fill tion in such a manner as the credit of the whole fact, regret at his depart moment lost in the gratifi ed in the fact of this hono a fellow-countryman. In there was absent that d chases on such occasio would have been impossi present that the tenor of should not have talen thin the mere boundar The names of the speakers indicate this; and the eve almost historic in its sig fact that the representat ical in the Mother Coum continent had united in with the representatives miners to pay tribute to of one man. The address sentatives of the comm the town; of ex-Governor has the ear of capitalist and abroad; of Minister Dominion cabinet; of M spoke for the president, staff of the two great sit the camp; of Mr. Palm with and under Mr. Carly like Mr. I. B. Kenty, v terranean workings of the out his instructions—wer of men whose experie great number of years a of the world, and all of same note of regret at admiration of his quali gratulation at his success Mayor Goodeve, in the expressed the high este Carlyle is held by the pe and the province gener cal'ed upon Mr. W. J. N address on behalf of the land. The Adre In presenting the add lyle, Mr. W. J. Nelson It affords me the gre be the medium by whic of esteem and respect of Rossland is communic mit me to say that I de