

Hotel, and J. W. Stirtan, superintendent of the Nanaimo waterworks. The Van Anda "Copper Queen" shaft is taking out some fine rich variegated copper ore, which should from all appearances run high in value. The Raven mine has now got a well-defined vein of payable ore and will soon be making regular shipments. Operations at the Kirk Lake gold mines are in full swing. The new hoist plant and pump are expected to arrive within the next few days. The directors are negotiating now for a twenty-stamp mill which is expected to be in operation not later than October 1st. The Kirk Lake Company have over 1,200 tons of ore on the dump ready for milling which from tests made from shipments to San Francisco and Tacoma shows an average value from \$22.50 to \$64 per ton. The Surprise mine is erecting hoist plant, and will sink to the 250 foot level. The Silver Tip mine shipped 100 sacks of ore on the steamer "Comox" and the Victoria-Texada mine shipped 100 sacks of ore on the steamer "Maude" to Victoria. A notable fact is that so far all veins have improved most remarkably at 100 feet depth, and the general outlook is that the island will ere long be a busy hive of workmen, as soon as a little more development work is done.—*Nanaimo Free Press*.

JAS. BREEN, manager of the Le Roi smelter, recently gave the following reasons for the selection of Northport as the site for the new plant. "One of the principal reasons is that in the operation of a smelter of 300 tons capacity it will require approximately 40 tons of limestone daily to flux the excess of silica contained in the Le Roi ore. This limestone now costs the B. C. S. & R. Company, whose smelter is located on the Columbia River at Trail, \$3.50 per ton. The Le Roi Company at Northport can deliver a superior quality of limestone to any found in Kootenay in their works for 25 cents a ton, saving approximately \$50,000 a year in this item alone. We can lay down coke in Northport for \$2.50 per ton less than in Trail, and in our smelting operations we will use about 45 tons of coke per day, making a saving in this item of \$45,000 per year. We will also save \$1.50 per ton on coal, of which we will use about 20 tons per day, making a saving of \$10,000 a year. The cost of our plant will be reduced 5 per cent. by reason of cheaper building material and freight rates, without considering the innumerable articles entering into the construction of a smelter which have to pay duty, notwithstanding that the machinery comes into Canada duty free. On renewals and repairs there will be a monthly expense of \$2,500, on which there will be a saving of \$2.50 per ton in freight and 30 per cent. in duties as against any point on this side of the line. The saving in this item alone will approximate \$15,000 a year. We will save at least \$1.50 per ton on outgoing freight. On a basis of 20 tons per day this will amount to \$15,000 per year. Taking these items and others which I have not mentioned, for instance the saving of \$1 per cord on wood, this represents roughly a saving of \$150,000 per year, or \$1.50 per ton of ore smelted. It is patent to everyone that this is just so much saved to the producers of ore in the Rossland district, and were an export duty placed on ore this saving would not be effected. It should also be borne in mind that besides establishing competition in smelting, the erection of the Northport plant secures a freight rate on ore of 75 cents per ton, instead of \$2, as heretofore charged."

In an interview with a representative of the *Toronto World*, J. A. Caldwell, proprietor of the famous Sultana mine, gives the following details about the mine. The main shaft is now down 360 feet, with 1,000 feet of drifting distributed over five levels. The vein being lenticular in form, has narrowed and at times almost pinched out; but the lead is never lost. Up to the present time the mine has been operated by a plant consisting of a few light drills and a ten-stamp mill, which latter, by the way, has come in for a lot of criticism by certain experts, for the stated reason that it did not save as much of the gold as it should, a considerable percentage passing off in the tailings; but Mr. Caldwell said that he is getting from 75 to 80 per cent. of the gold in his ore in the batteries and on the plates, and 10 per cent. more in the concentrates, or from 85 to 90 per cent. altogether, which is an extremely high and satisfactory average. Machinery of high capacity is now being installed, the capacity of the mill is to be increased five times. At present 30 head of stamps are being put in place, but room and power are being supplied for 50 stamps. The new boilers, shafting, etc., are equal to the calls of a 50-head mill. The mill is to be very complete, with the latest and most approved Gates crusher, batteries, vanners, etc., and will have a daily capacity of 80 tons of ore. A new chlorination plant will handle the concentrates. In the new mill, which is being put up on the side hill beside the old one, gravitation will be taken advantage of in conveying ore from the shaft. In order to keep this big mill going skips and a 75-horse power hoisting engine are being installed, together with pump and a compound duplex air compressor, capable of furnishing power to 20 or 12 drills. Only eight, however, will be run this fall. There is a large quantity of ore in the five levels ready for stoping, so that, with the extra drills, there will be no difficulty in getting out the necessary 80 tons per day.

From the new shaft house, now in course of erection, the rock will be run on a level tramway to the crusher. The mine has a water power system and an electric light plant of its own. Most of this machinery is made in Canada, being furnished by the Jenckes Machine Company of Sherbrooke, Que., and the Canadian Rand Drill Company.

## Electric Flashes.

ACTON, Ont., will probably have electric light in the near future.

AN electric light plant will be placed in the Jackson & Cochrane foundry, Galt, Ont.

THE Lanark county electric railway bonus by-law, which was voted on recently, in Perth, Ont., was defeated by a majority of over fifty.

THE Connecticut Telephone and Electric Company, of Chicago, U.S., have been making enquiries in reference to a telephone franchise in Toronto recently.

I. J. GOULD, owner of the present electric light service in Uxbridge, Ont., will probably extend his plant by the addition of incandescent lighting to that now in service.

CARLETON PLACE, Ont., is in favor of the Lanark County Electric Railway. A public meeting to discuss the scheme was held recently, and it was unanimous in support of it.

M. MCLEAY, M.D., of Watford, Ont., has purchased from the Rex Electric Company a 500 light alternator and the necessary transformers, and is installing an incandescent plant in the town of Watford.

G. A. CLARE, of Clare Bros. & Co. stove and furnace manufacturers of Preston, Ont., says that much of the business activity of that town is due to the freight facilities provided by the Galt, Hespeler and Preston Electric Railway.

A PECULIAR accident resulted in the burning out of the motor used to open and close the swing bridge at the beach, Hamilton, Ont., not long ago. The watch chain of the man in charge dropped in such a way as to short circuit the motor with the result mentioned.

THE Exeter, Ont., Electric Light and Power Company, recently organized to take over the lighting business in Exeter, formerly operated on a small scale by Captain Howard, has placed an order with the Canadian General Electric Company for a 1,000-light, single phase alternator, of the standard iron-clad armature compound-wound type.

LA Compagnie Electrique, of Chicoutimi, Que., has increased the lighting capacity of its plant by the addition of another 40 K. W. "S. K. C." Generator, which it has purchased from the Royal Electric Co. This addition has been made necessary owing to the growth of their power transmission work.

PAMPHINE BOIVIN, of the town of Baie St. Paul, Que., has received a franchise from the corporation of that town for electric lighting, and the Royal Electric Company is now installing for him an electric lighting plant consisting of a 500 light "S.K.C." dynamo, with the necessary transformers and material.

THE Kootenay Electric Company, of Kaslo, B.C., who have a large water power near the town, and purpose using the same for power and lighting, have placed their order with the Royal Electric Co. for a 75 K. W. "S.K.C." generator, and the necessary transformers and motors. The water will be carried in by a 42-inch stave pipe some about 1,300 feet long, which will run to the power house.

SOME years ago the Dominion Government claimed duty on all the rails brought into Canada for street traffic purposes, and compelled payment of the same after they had got a decision in their favor in the Canadian Supreme Court. The Toronto Railway Company carried the case to the Privy Council, and got a judgment in their favor, and the money paid in by them was refunded by the Government. Recently the Toronto Railway Company made a motion before the Privy Council to have the interest allowed on the duties paid by the company, and judgment was given in favor of the motion, so that the Government will be compelled to pay a further sum of \$10,000 or \$11,000 to the railway company.

THE new Electric Locomotive recently shipped from the works of the Canadian General Electric Co. to the Hull Electric Co., is the largest machine of the kind so far constructed in Canada. The motive power will be furnished by a four-motor equipment of G. E. 51 motors, having at normal current input a capacity of 80 horse-power each. The trucks are of the McGuire "L" pattern, with steel rim wheels. The body, which differs in operation and detail from the first locomotive supplied to the Hull Electric Company, was built for the Canadian General Electric Company by the Crossen Car Company of Cobourg, Ont.