

The gold mine area including a splendid water privilege, reported to be worth \$70,000, taken up about three months since by the New Elm mining company, has turned out to be a very rich silver mine and the property is being fitted with the most modern machinery. We understand that several capitalists are attempting to purchase the property from its present owners and have offered \$30,000 for the same.—*Lunenburg Progress*.

HOW THEY MAKE GOLD MINING PAY IN MADAGASCAR.—An Australian gold miner, who has been visiting Madagascar, gives some odd details of the way in which alluvial gold is won there. At one placer field slaves dig up the soil with a wooden tray, and then wash it roughly, the labor of 200 of them producing the large quantity of an ounce a day. The slaves have to be fed by the people in the neighborhood, so that the working expenses are nil, and all the produce goes to the Queen. In another part of the island a concession has been obtained by a Frenchman, who in one month got 660 ounces of alluvial gold, but this represented the labour of several thousands of natives. The concessionaire has to hand over 45 per cent. of the produce to the Hova Treasury, and to pay an export duty of 10 per cent., so that gold seeking is not an encouraging industry in Madagascar.

IMPORTANT, IF TRUE!—The Allan Line steamship Acadia arrived at Philadelphia, Jan. 15th, to load Bituminous coal for Halifax, Nova Scotia, for the use of the Allan line of steamships. Heretofore the supply of fuel for the vessels has come from Baltimore in the shape of Cumberland coal, but the Eureka and other coals will be tried by the Allan steamships, and if as good or better than the Baltimore coal, the future supply will come from Philadelphia. Though coal is mined in Nova Scotia, the steamships prefer the American article because of its superior qualities.—*Philadelphia Record*.

The statistics compiled by the Trades Journal places the coal shipments of Nova Scotia during the past year at 1,586,500 tons, an increase of 51,500 tons over the previous year. Of this aggregate, Cape Breton mines shipped nearly half, viz 749,500 tons, Cumberland 419,000 and Pictou 418,000 tons. There was a decrease of 50,000 tons in the shipments from Cumberland and an increase of 78,000 tons in the shipments from Pictou. The operations at Spring Hill have been retarded by fire and flood. Thorburn shipped 50,000 tons more last year than the year previously. Here are the figures for the Pictou county mines.

MINE.	Tons.
Drummond.....	145,000 1,500 inc.
Acadia.....	95,151 8,881 inc.
The Vale.....	69,488 50,968 inc.
Halifax.....	64,388 2,840 dec.
Black Diamond.....	24,000 24,000 inc.

This is the largest shipment in our history. The out-look for 1889 is excellent and we hope to reach 1,750,000 tons this year.

#### ORIGIN AND MODE OF OCCURRENCE OF GOLD-BEARING VEINS AND OF THE ASSOCIATED MINERALS.

By JONATHAN C. B. P. SEAVER, C. E., F. G. S., & Co.

(Continued.)

The dyke lodes of Victoria are certainly a most peculiar class of auriferous deposit. They consist of dykes, or what appear to be dykes, of either a decomposed igneous rock or a sedimentary one which has been very much altered. In some cases they have much the appearance of decomposed diorite, whilst in others they are described as having a slaty cleavage. The auriferous portions, however, consist chiefly of narrow nearly horizontal veins of quartz, some of which intersect the dyke at right angles to its dip, while others lie nearly parallel with the walls, occurring in strings or lenticular bunches.

The horizontal veins are like thin floors of quartz, and some of these pass out of the dyke and for a short distance into the containing walls.

There can be little doubt that in many cases these belts of decomposed or partially decomposed rock are true dykes of igneous origin, in which the veins of quartz have been subsequently formed. They have often been proved to be very rich, but are seldom continuous to a great depth, being out off in many cases by hard undecomposed igneous rock from which it appears probable that the dykes are offshoots. The Waverly dyke, and the Morning Star dyke are examples of this class of deposits.

The pipe veins are also a class worthy of particularizing as being a mode under which quartz veins are sometimes found in Victoria, and it may not be out of place to mention here that many of the quartz reefs both in that and other parts of the colonies, dip on their strike or bearing. Instances and examples of this will be given further on in treating of the New South Wales gold veins.

One of the most interesting districts in Victoria to the Engineering Mineralogist is that of St. Arnaud. This place contains a perfect network of quartz veins intersecting the strata at all angles, and occurring so close together and sometimes of such large dimensions that the question of how they were all formed, and what relation they may bear to each other, is a problem well worthy of consideration by the highest authority on such subjects.

I will mention a few of the principal of those veins that have been worked for their auriferous contents, and as I have for years been well acquainted with the locality, I can speak with a considerable amount of assurance as to the peculiarities of its auriferous deposits.

(To be Continued.)

## THE CHANDLER ELECTRIC CO.

(LIMITED.)

Having at great cost and repeated experiment and by actual comparison demonstrated the superiority of electricity as an illuminant, is prepared to enter into contracts with the citizens of Halifax to light their residences or places of business with either

### ARC OR INCANDESCENT LIGHTS

At prices which defy competition.

The Chandler Company has equipped an electric station at the North-West Arm with an incandescent dynamo of 750 light capacity, and seven of the Arc dynamos of a united capacity of 325 Arc lights of 2000 candle-power of the most improved pattern driven by water and steam power.

There is also under construction in the centre of the city a power station in which the Company propose to place, and have in full operation on the first day of February next, six incandescent dynamos of a united capacity of

### THREE THOUSAND LAMPS

Of 16 candle power, driven by three compound condensing high-speed engines.

## The Chandler Electric Co.

[LIMITED.]

Will on the first day of February have extended to any part of the city its main wire circuits, and be prepared to instal an electric light or power plant in THE STORE, RESIDENCE or WORKSHOP of any person within a radius of three miles from the Post Office.

This Company has in its employ a complete Staff of electrical and mechanical experts, ready to perform all the work necessary to instal its electrical apparatus above mentioned AT THE SHORTEST NOTICE.

The Company guarantee all the work done in such installation, and when complete will cause to be delivered to its patrons a certificate from the board of underwriters that the same conforms to the rules of the board.

The EXCLUSIVE PATRONAGE of the people of Halifax is solicited upon the following grounds:

1. BECAUSE the "Chandler" is the only company that is devoted to an EXCLUSIVELY Electrical business.

2. BECAUSE it is the pioneer Electrical Company of this city, and has devoted a large amount of capital in placing within the reach of the citizens of Halifax the only illuminant known which is at once

Perfectly Free from Dirt or Heat;

Perfectly Free from Injury to Health.

3. BECAUSE this Company instal every light subject to the approval of the insurance underwriters, of which a certificate will be given to each of its patrons and guarantees each light to be

Always of Full 16 Candle Power.

To Consume no Oxygen.

To Give off no Noxious Gases.

Requires no Matches.

And to be the CHEAPEST ILLUMINATIVE in the Market.

Estimates for wiring up, or for wiring up and lighting, or for lighting buildings, will be furnished immediately on application.

Inspection of the sample lights of this Company at its office, No. 126 Granville St., is respectfully requested.

Comparison of the same, and the installation thereof with those of any other company is desired.

The "CHANDLER"

Company respectfully request that it may be permitted to estimate, submit offers, and tender for the installation of any Incandescent or Arc lighting within the city before contracting with any other company. Attention is directed to the following, showing the efficiency of lights from different sources quoted from the paper of Robert W. Edis, F. S. A., architect, published in the handbook of health of the International Health Exhibition at London, and endorsed by the highest authorities on such subjects in England, including Capt. Douglas Galton, C. B. F. R. S., and Dr. Weymouth Tidy, in his handbook of Modern Chemistry:

Burnt to give light of 12 candles, equal to 120 grains per hour.	Cubic feet of oxygen consumed.	Cubic feet of air consumed.	Cubic feet of carbonic acid CO <sub>2</sub> produced.	Cubic feet of air vitiated (that is CO <sub>2</sub> —about 1 per cent.	Heat produced in lbs. raised 10° F.
Cannel Gas.....	3.30	16.50	2.01	217.50	195.0
Common Gas.....	5.45	27.25	3.21	348.25	78.6
Paraffine.....	6.81	34.05	4.50	434.05	361.9
Sperm Candles...	7.57	37.85	5.77	614.85	351.7
Wax.....	3.41	42.05	5.90	632.25	383.1
Tallow.....	12.00	60.00	8.73	933.00	505.4
Electric Light (Incandescent Lamps).....	None.	None.	None.	None.	None.

All applications, personal or by letter, made to the Office of the Company, No. 126 Granville St., will have prompt attention.

Chandler Electric Company, (Limited.)