

MINING.

ANALYTICAL DEPARTMENT.—To meet a long felt want THE CRITIC has made arrangements with a competent Analyst, who will determine the quality of all specimens sent to be tested. The fee charged will be from two to eight dollars, according to the difficulty and expense incurred by the analyst in making the analysis. The strictest secrecy will be observed, and the result of the analysis will only be known to the operator and the sender of the sample. Send samples by parcel post or otherwise, with a fee of two dollars to "Analyst," care A. M. Fraser, Business Manager of THE CRITIC. Should a larger fee be required, the sender will be notified.

The best proof that a reliable analyst was needed lies in the fact that, since THE CRITIC advertised its arrangement with a competent gentleman, ore samples have been received from all parts of the Province. If business continues to increase in a proportionate ratio the analyst will be furnished abundant employment.

MINING ASSOCIATION.—Time is passing rapidly away, the old year is near its end and it seems an appropriate season for THE CRITIC to remind its mining friends of the necessity for taking some action in regard to forming a mining association. The majority of the mining men in the Province have signified their desire to join such an association, many of them have signed a list with that intention, and yet month after month has rolled by and still no decided action has been taken. The Mines Department have shown every desire to help the mining community in reforming any defects that may exist in the present mining act, and THE CRITIC has striven by all means at its command to lay before its readers all the points of the law that require remedial legislation. The Department's hands should be strengthened in any proposed reforms by the united backing of our miners and mine owners, and if it receives this support there can be no doubt but that an amended mining act would be passed and confirmed by the next local parliament. There is no time to lose and it behoves all interested to move at once. Some radical and sweeping reforms, doing away with the present vexatious royalties are mooted, and they should be now receiving the careful attention of our miners. What is "everybody's business is nobody's business," and unless a move at organizing an association is soon made, the time will slip by and the present act, with all its defects, will still remain unaltered on our statute books. THE CRITIC will place its offices at the disposal of any parties interested in mines who may wish to hold a preliminary meeting to start the organization, and in the meantime we should be glad if our friends would send us suggestions as to the time most suitable for a meeting and of the business the association should undertake.

CARLTON, YARMOUTH CO.

To the Editor of the Critic.

I hail you this time from the land of gold and sawdust, but you must bear in mind that the latter is most conspicuous at the present moment. Still I shall be greatly surprised if I do not soon have the pleasure of sending you news of big returns. The Wiswell crusher is now fairly at work and is in charge of one of the best amalgamators in the Province. In my judgment the mine is showing up well and steady progress is being made, the ore increasing in richness as depth is reached. The main shaft is now down seventy-five feet—length of stope fifty feet. The west shaft is down 50 feet and stoping has been carried the same distance. You see that the miners in this camp have not been eating the bread of idleness, as the month of August was well advanced before actual mining operations were under way. The formation of the belt is well defined, and yet presents peculiarities, such as I have not before encountered in this Province. What most particularly attracts my attention are two waves or horsebacks, centering in the main shaft at about 50 feet from the surface. One dips at an angle of 45 degrees west, the other with the same angle dips east. Here you have a complete chimney and a study for the curious geologist and mining engineer. Instead of the frequent horizontal rolls which you find in most mines, here you will discover them almost perpendicular with a slight easterly inclination, giving strong indications of carrying gold to a great depth. In the course of another week hoisting and pumping will be done by steam power, giving increased satisfaction to owners and miners.

SNOKS.

LAKE CATCHA DISTRICT.—John Anderson has let out his seven inch lead on tribute. Messrs. Archibald and Fraser are pushing work on the Cogawell areas west block, and are meeting with every encouragement.

MALAGA LAKE.—Mr. Christie, the well-known surveyor in the employ of the Department of Mines, has just returned from a visit to the westward, where he laid out the Malaga Lake District. He reports that all the properties to the westward are looking up, and has a very high opinion of the Carlton Mine. Parties wishing the services of a thoroughly competent man either to make surface or underground surveys of mines, or to examine and report upon mineral properties, would do well to consult Mr. Christie's advertisement in THE CRITIC. We take pleasure in recommending him.

Mr. Geo. W. Stuart, the well-known mine owner, paid us a visit and we are glad to find that he coincides with THE CRITIC in the necessity for some radical changes in the mining act. We should be glad to meet our mining friends when they come to town, and we trust that they will not fail to visit us and furnish all the mining news possible.

A RARE MINERAL.—Kryolith or ice-stone can be used for a variety of purposes—for instance, for the manufacture of lye and caustic sodas, for aniline colors, and recently for the porcelain-lined hollow-ware so popular for kitchen use, and for the manufacture of the milk white lamp globes.

The mineral years ago was only found in isolated instances in the Ural

Mountains, Russia, and a piece was worth its weight in silver, mostly for cabinet purposes. About 1857 the Danish Government sent scientific men to their ice bound possession with instructions to gather up specimens of the clothing, weapons, fishing tackle, utensils, etc., of the Esquimaux for an exhibit in the Danish Museum. When this collection arrived in Copenhagen, a savant discovered that all the fishing nets were weighted with a peculiar stone. He examined the same and found them to be pure kryolith of great value. A company was at once formed for the opening of a mine, but this first company failed because chemistry had not succeeded in extracting the valuable properties of the mineral at a paying cost. It cost about \$1.03 to obtain \$1 worth, and the enterprise was doomed to failure, when Prof. Thompson made a discovery by means of which kryolith became of immense value to various manufacturers, and the mine was re-opened. The mine has now reached a depth of 400 feet, but the kryolith taken out at that depth seems to be as good as that found on top, and from calculations made the present visible supply will last forty or fifty years. The mine can be worked only in the spring months. When the average quantity has been obtained the ocean is let into the mine. An ice crust of ten feet thickness forms quickly and thereby protects the mine. When spring approaches a hole is bored through this crust and the water pumped out. If this precaution were not taken the mine would be lined with ice and could not be worked at all.

The great value of kryolith has led to many searches for its existence in this country, and an inferior quality of the mineral was found at White Peak. The president of a Philadelphia company, which uses a great quantity of the mineral, offered as high as \$5000 for a ton, but that weight of kryolith could not be collected at White Peak, and manufacturers have still to depend on the Greenland mine for supplies. Is there any kryolith in Nova Scotia?

WHITEBURN, QUEENS COUNTY.

The Philadelphia and Caledonia Mining Company are about starting their new 10 stamp mill at Whiteburn. They have been taking some very rich ore from an eight inch lead on their property. The president of the company, Mr. Parker, is at the mines and intends taking a fine brick home with him to Philadelphia. It is now in order that a fern be planted to mark the resting place of one who has sacrificed his earthly existence trying to injure the mining interest at Whiteburn.

CRANK.

The following interesting item on the state of the Nova Scotian coal trade, appears in a recent issue of the *Canadian Trade Review*: "When we had a reciprocity treaty with the United States, the Americans were the principal purchasers of Nova Scotia coal. In 1865 and 1866, out of an average of 595,000 tons mined, about three-fourths of the entire product went across the border. After the abrogation of the treaty, the American import duty upon bituminous coal of course interfered with the sales to the United States, and gradually those sales have decreased, until last year the Americans took but 34,000 tons, only a thirty-eight part of the entire product. We then protected our coal miners, and the manufacturing industries. The first movement gave the miners an extended home market, the second increased the consumption and consequently the demand for coal. Now, instead of mining only 595,000 tons annually as in 1866, or 700,000 tons as between 1871 and 1880, the Nova Scotia output has reached 1,352,000 tons, at which it stood in the year 1885. Of this quantity Nova Scotia, owing in part to the increased demand for manufacturing purposes, used 450,000 tons, while New Brunswick took 150,000. The Upper Provinces took 493,000, and the remainder was taken by Prince Edward Island, Newfoundland and the West Indies. The total sales of Nova Scotia coal in 1879 reached 688,624 tons. The total sales in 1885 reached 1,250,000, and the output 1,350,000. Thus the business has doubled since 1879. The total sales to Ontario and Quebec in 1881, two years after the introduction of the National Policy, were 268,000 tons. The total sales to the same provinces in 1885 were 493,000 tons, an increase of not quite one hundred per cent in five years."

A Goldenville correspondent says: Malcolm Cameron, who has been searching for a large lead for the past two months, succeeded in finding it, and on Saturday he mined some quartz that showed some gold freely. This is a new lead that was never worked before. The prospects are that it will pay handsomely, and we earnestly hope that it may, for men with the pluck and perseverance of Mr. Cameron, deserve to be rewarded for their efforts in keeping up the mining industry.—*Herald*.

Gold has been discovered in the country bordering the Straits of Magellan, and 2,071 claims have been taken there since August.

Below will be found the complete official returns of quartz crushed during the month of November:—

District.	Mill.	Tons.	Ozs.
Sherbrooke.....	Miner's.....	64	22½
".....	Goldenville....	289	45½
".....	Crow's Nest.....	37½	38
East Rawdon.....	McNaughton's....	404	195½
".....	Rawdon.....	250	180
Cariboo.....	Caffroy.....	21	5
".....	Moose River G.M.Co.	222	62½
Pleasant River Barrens	Pleasant River.....	146	248½
Salmon River, Dora Hill	Dufferin.....	955	297
Stormont.....	Tributers.....	27	18½
Whiteburn.....	McGuire.....	31	102
Leipsigato.....	Duluth G. M. Co. ...	108	49