

and Mining Company, the defendants in the present action, and it is claimed that the latter appropriated the plant belonging to plaintiffs for the purpose of developing their own mine. Dansereau *et al.* are now taking action to recover the value of the following effects, alleged to have been taken from their property: one steam boiler, one Ingersoll steam drill, with pipes, steels, fitting, etc., one pipe cutter, vise and tongs, three one inch globe check valves, two $\frac{3}{4}$ inch ditto, two dumping cars, a lot of crowbars, hammers, hand drills, etc., one complete set of blacksmith's tools, comprising sledges, bellows, files, anvils, pincers, etc., six iron pulleys, three shears, wire rope, derrick irons, three mining buckets, one hand force pump, between 600 and 1,000 feet of rope, and sundry minor articles, the whole of the value of \$2,176. The defendants while admitting the taking of the above articles, answer that a number were returned. To this the plaintiffs respond that, if such be the case all articles returned were in a condition unfit for further use, and that their claim for the whole amount should lie. The case is likely to continue for some days. A number of witnesses have been examined on the plaintiffs' side, among others, Messrs. G. R. Smith, E. G. Horan and F. S. Higginson, giving corroborative testimony as to the value of the plant.

The Annotated List of Canadian Minerals, by Prof. G. C. Hoffman, which has appeared in recent issues of the REVIEW, has attracted much attention as a concise and handy reference for the mineral community. In it will be found the chief localities of occurrence of each mineral, though it should be noted that Prof. Hoffman disclaims the enumeration of all the territories in which these minerals are found. The value of the work has been recognized by the Government who have had it issued in pamphlet form under the direction of the Geological Survey.

During 1890, 6,221,518 tons of coke were marketed from Connellsville, Pa., as compared with 5,325,826 tons in the preceding year. The prices obtained in 1890 were also considerably better than in 1889, coke selling for the first two months at \$1.75 per ton, and for the remainder of the year at \$2.15, the total value of the sales being \$12,903,940. In 1889, the price varied from \$1 to \$1.75 per ton, the average being about \$2.40, and the aggregate value \$8,156,156. Oven building has been active during the year, over 1,600 new ovens having been erected and a large number re-built. In 1889 the number was 14,458, while including those approaching completion, the total ovenage for 1890 was 16,113. The shipments for 1890 show a grand total of 355,070 cars, an average of 1,147 cars for every working day in the year, nearly 100 cars better than in 1889.

The price of coke, which had been firmly maintained at \$2.15 during the last ten months of the year, has been reduced 25 cents per ton for the present, owing to the importunities of the furnace men and the depressed condition of the iron trade, but the understanding is that it will shortly be advanced again to at least \$2.

Regarding reciprocity in coal, which is elsewhere referred to, several strong arguments against it are brought forward by Mr. J. R. Lithgow, secretary of the Glace Bay Mining Company, Halifax, in a letter from which we take a few extracts. He says:

"I have received a letter from one of the best informed coal brokers in New York, and during the reciprocity treaty which ended in 1866, the largest importers in the United States of Nova Scotian coals, wherein they say: 'We do not think the market for Nova Scotian coals in the United States, would be materially increased by the removal of the present duty of 75 cents per ton. The sharp competition which exists between the different producers of the domestic coal, and the rapid growth of the facilities for supplying them, will, we think, keep the price of our domestic coals as low, if not lower, than Nova Scotian coals could be delivered in the States free of duty.'

"Not only would American coal, if free of duty, supplant Nova Scotian to a considerable extent in the province of Quebec, it would also create such a competition that the delivery prices in that province would be so lowered as to leave little if any profit to the shippers. Even with 60 cents per ton duty, delivery prices have been too low; remove the duty and of necessity still lower prices would follow and some of our collieries would have to shut down.

"In the United States their own coals are so much preferred to Cape Breton, being freer of sulphur and soot, that they are preferred at 25 to 50 cents per ton more; hence this must be borne in mind in estimating the probable net value of Cape Breton coal in the United States. Now, last year \$2.15 to \$2.25 was the f.o.b. price at Baltimore of the best steam coal, and the freight to Boston was 90 cents to \$1.15 exclusive of the cost of discharging on to the wharf of purchaser. And this, be it remembered, when foreign competition was shut out by the 75 cents duty. American consumers are said to be crying out for the removal of the duty and cheaper coal; suppose the duty were removed and the way prepared for the admission of Cape Breton coal, would not the price of American coal be lowered at least 25 cents per ton? If so, then \$3 would be about the cost of a ton of American steam coal delivered at Boston; deduct from that 50 cents and you have about the value of a ton of Cape Breton coal delivered alongside of wharf in Boston. Well, when it comes to that, I hardly know whom to pity most, those who ship the coal or those who freight it."

We recommend these paragraphs to the consideration of those who are agitating for reciprocity.

Some light is thrown on the impressions created in the minds of European investors by the proposed mining tax of three per cent. to be imposed by the Quebec Government, in the following extracts from a letter from Dr. C. Killing of Amsterdam:

"I have been sent out by a large financial syndicate from Europe to Canada for the purpose of examining whether conditions are favorable to the investment of capital in Canadian phosphate mines or not. I have made a careful study of the question and my impressions on the whole are not unfavorable. But I may say the story of the proposed Government tax of three per cent. upon the output is a great disappointment.

"Suppose for instance that the European capitalists I represent should invest \$50,000 in the purchase of a mine or phosphate lands, and the yearly output of the property was 5,000 tons; the governmental tax would in that case amount to between \$2,500 and \$3,000, or between 5 and 6 per cent. of the invested capital. Do you believe that foreign capital will be attracted to a country where, besides other taxes, 6 per cent. must be paid to the Government? I believe that not one dollar of such capital will come into the country if this tax is imposed.

"I am now going back to Europe to report on the conditions of the investment of capital in Canadian phosphate mines, but I am sure that my friends will not think further of putting money into an enterprise under these circumstances.

"Everybody in the country knows that phosphate mines with a small output lose money, and that only those which produce large quantities make any. It would be an unjustifiable wrong to impose a tax upon phosphate mined at a loss. This experiment is very dangerous as well for the future of the phosphate mines as for mines in general, because I believe the industry cannot progress without foreign capital, but must remain in its present crude state.

"The principle of the tax is not wrong; it is its application. If the Government were to place an impost of three per cent. upon all outputs in excess of 4,000 or 4,500 tons, the small miners, who are barely paying expenses, would be protected, while the Government would derive more revenue from the paying properties."

We hope to have our old cover ready from the paper maker in time for the next issue, that in the present number being purely temporary.

The change of title in this issue from the Canadian Mining Review to THE CANADIAN MINING AND MECHANICAL REVIEW will not bring about any material alteration in the matter contained therein, being merely in order to assimilate more closely some interests connected with the mining and quarrying industries.

Representations were made a few days ago to the Montreal Board of Harbor Commissioners by a deputation from the Coal Agents' Association, that the existing charge of seven and a half cents per ton of 2,000 pounds for coal wharfage was too high, in view of the large and increasing trade between the Maritime Provinces and Quebec. The Board undertook to fully consider the arguments advanced and the deputation then withdrew.

The annual report on the work done by the Geological Survey of Canada in 1890, is daily expected, though it has not yet left the printers' hands. Sufficient time has elapsed to allow of its publication, and we hope, therefore, to be able to refer to it at greater length next month. The full report on the Sudbury district by Dr. Robert Bell is expected to appear some time in March. An interesting feature will be a number of photographic views of that region.

Mr. James Cooper, president of the Ingersoll Rock Drill Company, has gone to England to further negotiations for the transfer of some mining properties in which he has an interest. Mr. Geo. R. Smith, for many years superintendent of one of our phosphate mines, and more recently extensively engaged in the mining machinery and supplies business, has also gone to England in company with Mr. Cooper. Both gentlemen are widely known and highly respected, and we are sure that good wishes will follow them from their numerous friends.

A Novel Application of Electricity to Mining.—A recent addition to the application of electricity to mining, and one which seems destined to find considerable use, is a portable device for detecting the presence and nature of a mineral where the latter is exposed in the rock or earth. This apparatus, which is intended for the use of prospectors more particularly, consists of a battery and spark coil, which are enclosed in a box, and the conductors end in two platinum points. It is evident that if these points be connected to a conducting body and the circuit ruptured, a spark will be formed, the flame and color of which will give some indication of the nature of the body which the electrodes have touched. Thus, by placing the two points against a rock containing metal in a free state, its presence may be detected by merely applying one electrode and passing the other rapidly over the surface. The machine, which was invented by Mr. F. H. Brown of Chicago, will, it is said, enable a novice or "tenderfoot" to pick up float rocks on the hills and tell instantly whether they contain mineral or not, and even the comparative quantity in a rough way. By means of this instrument, also, it is possible to find a lost "lead" in a shaft or cut by applying it to the walls. Another use to which it may be put is to the sorting of ores, the color of the flame enabling the sorter to separate the different kinds. The apparatus, which weighs about ten pounds, is arranged to be carried on the back, and can be used to explode blasts in connection with electric primers.—*Electric Engineer.*

Brown's Patent Steel Wire Chain.—The Greening Wire Co. of Hamilton have just made a very important addition to their already extensive lines of manufacture, having purchased the sole right for the manufacture in the Dominion of Brown's Patent Steel Wire Chain. They claim for this chain, that being made of hard drawn steel wire, and the links being formed without welding, a uniformity of strength is obtained that is not possible in the ordinary chain. Actual tests show a wonderful difference between the Brown chain and the welded, a test made of No. 8 wire, broke at 1,950 lbs., breaking at the end of the link, while the same size of welded chain broke at 490 lbs.