

Antigonish Company's mine at Country Harbour, the Pictou Development Company's property at Renfrew, and the Golden Lode Mining Company's mine at Uniake. Mr. A. A. Hayward has given the writer the following of the latter mine:—

During the last three years 200,000 dollars worth of gold has been extracted, the average yield being over 10 ozs. per ton, the vein is eight inches wide, and dips 32 degs. The maximum depth we have reached is a little over 500 feet, on the incline where the quartz is as good as ever. The capital of the company is 30,000 dollars, and dividends are being paid at the rate of 5 per cent. per month or 60 per cent. per year.

Amongst other improvements in the methods of mining is the use of machine drills, worked at pressures of from 60 to 100 pounds per square inch. A low grade dynamite (about 40 per cent. of nitro-glycerine) has almost universally superseded blasting-powder; no attempts have been made to use the higher grades of dynamite gelatine-dynamite or blasting-gelatine. Dynamite has been considerably handicapped, as there is a heavy provincial import duty on it, and miners are unable to get it from the upper provinces, where it is manufactured, on account of the Government prohibiting its transit over the Intercolonial railway. However, through an agitation last year amongst mine-owners the local manufacturers have considerably reduced their prices, and a 40 per cent. dynamite can now be obtained at 16 cents per pound.

Perhaps one of the most notable features in the gold-mines of Nova Scotia is the lack of tramways from the pit-heads to the stamp-mill, the ore in many cases being hauled long distances by carts; this is due to the want of sufficient initial capital. Indeed, the want of capital is seen right through the gold-fields; it prevents the proper exploiting and development of the mines, and consequently when a difficulty is met with, such as a fault cutting off the vein, a good mine is often closed. The mines are not opened sufficiently, nearly all the profits going to dividend account, instead of some being reserved for development.

In attempting to interest capital in Nova Scotian gold mines, one is often met with the statement, "The veins in Nova Scotia are narrow, and the quartz is expensive to extract." The writer wishes to distinctly place on record that the first part of this statement is only partly true, and that the latter part is wholly untrue. Anyone starting mining operations in Nova Scotia may have the choice of narrow rich veins, varying from ½ inch to 18 inches in thickness, and carrying sometimes over 100 ounces per ton, or they may content themselves by working the big low-grade belts, from 10 to 70 feet wide, carrying from 2 to 8 dwts. of free-milling gold, and often as much as 5 dwts. in arsenical iron pyrites besides. Such belts occur in the Goldenville and Wine Harbour districts, and offer legitimate investment for capital. The second part of the statement is best refuted by Mr. Hardman's experience in working a 12 inches vein for 1 25 dollars per ton at the Waverley mine.

Labor in Nova Scotia is cheap, good miners commanding from 1 25 dollars to 1 75 dollars per day, laborers from 1 dollar to 1 25 dollars, and skilled mechanics from 1 75 dollars to 2 50 dollars per day. Coal may be obtained from 2 50 dollars to 3 dollars per ton at the pit-head, and wood can generally be had for 2 dollars per cord at the mine, stores explosives etc. etc., are also moderate. Nearly all classes of mining and milling machinery are made in the province, and are equal to anything that can be imported, and mining machinery not made in the province may be imported free of duty. Most of the gold mines are within 12 days from London and four days from New York, while many may be reached in two days less. Many of the mines have valuable water privileges. The winters, though long and severe, never interfere with mining operations other than surface prospecting. The climate is healthy, and sport with both gun and rod is good.

The writer is satisfied that the gold mines of Nova Scotia offer a legitimate source of investment for capital, and with proper and economical management, remunerative returns may be looked for. Prof. Hind gave nine reasons why failure and collapse in place of continued prosperity have characterized some mining properties in Nova Scotia, and they are as true to-day as they were twenty-five years ago; they were:—

1. The absorption of all returns to pay large dividends.
2. The small size of some of the properties.
3. Insufficient working capital at the outset.
4. A uniform neglect in preserving records and plans in detail of work.
5. Inadequate machinery and appliances to save gold.
6. The want of labor-saving machinery.
7. Ignorance respecting mining operations, the gold streak, or "chimneys," or "pipes," or zone of auriferous quartz.
8. General neglect of the contract and tribute work.
9. And as a necessary result of the foregoing the frequent incompetency of some so-called managers.

As a typical instance of the way some mines are mismanaged, on a visit to one mine, which has since collapsed, the writer found six pumps in one shaft and the mine full of water, while a neighboring mine was being kept free with one pump.

The following table gives the returns from the different gold-mining districts for the year ending September 30th, 1894:—

District.	No. of Mines.	Day's Labor.	No. of Mills.	Tons Crushed.	Yield of Gold per Ton.	Total Yield of Gold.
					Dwts. grs.	Ozs. dwts. grs.
Tangiers and Mooseland	2	5,118	2	1,469	7 6	464 7 0
Caribou and Moose River	4	21,657	3	9,727	5 17	2,779 16 17
Renfrew	1	5,020	1	757	15 14	590 0 0
Sherbrook	3	8,414	2	708	17 0	552 16 12
Fifteen-Mile Stream	1	8,354	1	1,171	9 9	552 0 0
Uniake	3	10,797	2	1,544	18 1	1,394 8 1
Waverley	1	19,397	1	9,310	3 23	1,360 1 0
Whiteburn	1	4,846	1	555	12 3	336 8 0
Malaga	2	3,649	2	1,688	12 13	1,060 11 0
Lake Catcha	2	12,522	3	2,387	14 8	1,715 6 0
Stormont	5	16,768	6	6,628	5 23	1,980 4 18
Salmon River	1	5,496	1	1,467	3 16	271 5 0
Oldham	2	3,623	2	981	11 3	546 17 16
Unproclaimed districts	5	13,479	6	939	18 15	876 5 12

It would be impossible to close a paper on the gold-mining of Nova Scotia without a reference to the Government Department of Mines. More than half the revenue of the country is derived from its mines, and yet there is much the country might do for the miner which it leaves undone. (1) There are no plans kept of the workings, consequently when a mine is shut down the plans are often lost, and if at any time

anyone desires to reopen it, the task is rendered difficult and dangerous, all the information obtainable often being what can be obtained from the miners. (2) In what is known locally as the Blue Book (which is a yearly record of the mining industry) there is a vast amount of room for improvement. The Blue Book of 1894 is infinitely inferior to that of 1870; it contains many inaccuracies, and instead of being a means of interesting capitalists in the mines of the country, it is calculated to have exactly the reverse effect. (3) Proper surveys and maps should be at once made of all the mining districts, distinctly marking existing and old workings; these would meet with a ready sale amongst mine owners and mining engineers.

The Government has lately given a grant to the Mining Society of Nova Scotia, which institution is doing much to promote the mining industry.

As a rule, if anything is properly laid before the Government, they are willing to move in the matter, and many of these omissions are blameable to the mine-owners themselves for not bringing the matter properly to the notice of the Government.

NEW BRUNSWICK NOTES.

Since writing you last, no very decided change in regard to mineral matters in this province has taken place. Here and there you hear of some anticipated sale or development of a mining property, but nothing really tangible has as yet been shown. What the next few weeks may bring forth in this respect is hard to say.

Within the past few months some areas have been worked on in Albert Co., near the Goose Creek locality. A syndicate of Moncton gentlemen, and a Mr. Robt. Dryden, reported to be a practical Californian miner, have been opening up some quartz leads, assays of which, it is said, have shown tests of gold, silver and copper. There is some doubt as to its being a genuine gold-bearing and yielding lead, but the indications and appearances of copper are very good. In the meantime the promoters have taken out letters patent for incorporation with a fairly large capital and headquarters at Moncton, N.B. The unfortunate experiences of some of the Monctonites in the Memramcook Gold Mine is not calculated to cause any very great rush for stock in this venture, I predict.

Work of what might be called an initiative or inquiring character has been quietly prosecuted with a view to placing the salt works near Sussex in a first-class state of production, with suitable plant and machinery of most approved character. It is to be hoped the efforts may be finally successfully.

The promoters of the Gold Prospecting Company of Woodstock have been pushing forward their operations quietly yet energetically. The exact location of the company's property is in Northumberland County, near the borders of Victoria, on what is known as the Serpentine. With much hard work and at considerable cost they placed their 5-stamp mill at the point named, and have since been crushing and testing the rock from various leads on their areas. Some of these have been very satisfactory and show such good evidences of the yield of gold that the owners and promoters have been greatly encouraged. The company covers and controls mining interests in this locality embracing something like 10 miles in extent. There are about five buildings on the claims, including test mill, 14 x 16 ft. While every person in the province will be glad to know of the pluck and energy of these gentlemen and should be willing to give them all possible credit, and should not object to the Government treating them generously as to mining rights, etc., will it not seem a little too much of a good thing and somewhat after the dog-in-the-manger policy, to know they have absolute control over 10 square miles or = 6,400 acres of territory? Where is the inducement for other prospectors and capitalists if the impression gets abroad that these gentlemen have it all?

It was reported in July that immediate work of boring or prospecting for coal would take place on the Shives property at Dunsinane on the I. C. Ry. between Moncton and Sussex, but as yet no decided move in this direction has been made.

The gypsum property reported sold to New York capitalists some months ago still remains on the owners' or promoters' hands. A Mr. Sellock, who poses as the representative of New York capitalists, has been back and forth several times, but as yet no signs of his capitalists being ready to pay over their money. Whether it is that they doubt the genuine qualities of the properties they have made overtures on, or simply are playing a waiting game, hoping to eventually buy them cheaper, is a conundrum to be solved. At any rate the faith in the great New York capitalists who were reported in Moncton and vicinity has been seriously shaken of late.

The sale of a block of coal land in the Grand Lake coal fields recently is reported. The area was formerly owned and worked by Walter MacFarlane, of or near Fredericton. The property was sold through efforts of Dr. J. E. March, of St. John, and F. W. Wedderburn, Esq., of Hampton, to New York capitalists, through a Mr. Wallbridge and Mr. Mulholland, both of whom are bright, shrewd business men and had personally visited the property this summer. It is said plans will be arranged to work the areas on a liberal scale.

Reports of prospecting for iron in the vicinity of Lepreaux, and coal on the Oromoncton, and several other ventures in different parts of the province, are prevalent, but nothing definite is known. When it is more fully known, steps will be taken to advise you of the facts.

The Richest Mines in the Empire.

BRITISH CAPITAL WANTED FOR BRITISH COLUMBIA'S MINERAL DEVELOPMENT.

Attention has often been called in our columns to the fact that the rich mines of British Columbia are, many of them, becoming the property of enterprising United States capitalists. Mr. Clive Philipps-Wolley now writes from Vancouver to the *Times* deploring this fact, and urging British financiers to send experts to the province to see its wonderful richness. He says in the course of his letter:

The minds of all English mining men appear to be so engrossed in South African ventures at present that they will pay no attention to anything else. One of the most deplorable results of this is that they are allowing the first-fruits of perhaps one of the richest mining fields in the empire to be reaped by aliens; nay, more, they are allowing a province of Canada to become American in men, manners, money and sentiment.