

and the purchases and sales, should be in the hands of the cash or property shareholders. Capital and labour would thus be brought into closer communion, and made to lean on each other. To this end the requirement of a cash or property capital would be in part dispensed with, and instead of it an obligation to labour accepted. The share-workman must have the means of living while he is earning the price of his shares. He must be enabled to live as cheaply as possible, by having his supplies furnished at the lowest price. He must have fair wages, and withal reasonable maintenance, and the prospect of bettering his condition by becoming a participant in the profits of the combined labour and capital. But all concerned should have the power of superintending the conduct of the workmen, choosing between applicants, and dismissing the idle or incompetent, recompensing them, of course, for what they have already earned and saved."

To such of our readers who may be interested in this subject, we commend a recent contribution by Mr. C. R. Iorns, to the Manchester Association of Engineers, in which much interesting data is given.

In the matter of the relative cost of fuel for glass factories between coal in a coal country and gas at 5 cents per thousand feet, Secretary A. L. Strasburger, of the Model Glass Company, at Findlay, O., states that his company was using 300,000 feet per day in its 14-pot factory, which made the fuel cost \$15 per day. This was about 50 per cent. cheaper than oil, and about 10 per cent. cheaper than coal in the Ohio Valley. If they could secure a steady supply of gas, they would be entirely satisfied with the present rates as they had made a careful test and found that through a meter they were using less fuel than they had anticipated, and could make money under the present arrangement.

There is hardly a country on the face of the globe that does not produce its samples of asbestos, and in newspapers, from time to time, we see items concerning this and that fibre which has been found, all of which is stated to be very fine, but which upon investigation proves to be worthless to the manufacturer. Good asbestos requires four prime qualities, infusibility, tensile strength, fineness and elasticity, and if one of these be lacking it is useless in a commercial sense. Australian asbestos, for instance, is very brittle, and cannot be spun or woven. African asbestos lacks the principal requisite, the fire-resisting quality. Russian asbestos, which for a long time was considered worthy of attention, had to be abandoned, and so on, until there are only two varieties which are practical, Italian and the Canadian. These are different in their texture, but each has its uses. The Italian variety has a long coarse fibre, is a greyish brown, and is soapy, while the Canadian consists of fine somewhat elastic fibres in color, varying from almost pure white to greyish and greenish tints, and in length

averaging from two to four inches with a soft silky aspect looking very much in fine specimens to floss silk.

At the present time there are over one hundred varieties of goods made from asbestos; twelve years ago there were no more than four, and twenty-five years ago it was a curiosity of the laboratory. It is now found in almost every workshop where steam is employed and its use is constantly extending.

MINING NOTES.

[FROM OUR OWN CORRESPONDENTS.]

Nova Scotia.

Caribou District.

It is reported that the old Lake Iode workings are to be unwatered and the high ground on both sides of the deep shaft tested. Rumor has it that a working bond from the owners has been obtained, and that work will begin in July.

The Turo company are confining their operations chiefly to dead work. The main shaft is sinking towards the roll, and some work is doing in the old shaft.

Fifteen Mile Stream.

Reports from miners coming from this district is that a new and high grade vein has been cut and is now being opened. This report lacks confirmation from headquarters, but we hope it is true.

Oldham.

On the night shift on the 13th inst., a large open seam was cut by a shot in the shaft of the Rhode Island Co. on the Dantrack lode. The water came in very fast, and on Thursday the 15th, the shaft was abandoned until machinery can be erected. The men were put to work on a drive running west, and the management hope to keep the water at that level until pumps get running.

The Columbia Mining Co. have re-arranged their stamping machinery under the direction of L. J. O'Shaughnessy, formerly with the Oldham Gold Co., and better results are confidently expected. Mr. Stephen has replaced Mr. Whidden as the foreman of the company.

The Standard Gold Co. (Taylor & Huntman), are sinking a shaft upon a new lode called the "McDonnell." The shaft is now down over 40 feet and shows a seven or eight inch quartz vein carrying copper, galena and gold.

Stormont.

The North Star Co. have found a new lode on the western end of their property, which promises to become a high grade producer. The vein, when cut, was about two inches thick, and the first bunchful of quartz raised was pronounced 40 oz. rock. Later analyses say that the lode resembles the old North Star lode in its palmy days, some spots being very rich, others poorer, but the whole making a high grade rock.

The Richardson Co. now have twenty stamps pounding, and expect a large haul for June. The quartz continues to yield from 7 to 10 dwts. per ton, and looks fair to be the largest producer of the province for 1893.

Renfrew.

Rumor has it that D. A. Macdonald, (known familiarly as "Chummy"), has uncovered some pay quartz on the old New Haven property. Mr. Macdonald is prospecting the property for a Pictou organization, and is confident of success.

Mt. Uniacke.

A new ten stamp mill is to be built on the property owned by Curran, Prince and others, formerly the British and Colonial Co.'s ground. It will be built near the mill torn down by John Nicholls, and is designed to thoroughly test the ground abandoned by Capt. Nicholls. M. Thos. Prince is in charge.

Mooseland.

During the past year much good work has been done at Mooseland on the property of the Mooseland Gold Mining Co., Ltd., under the direction of H. G. Stenshorn. In the eleven months ending May 31st, about \$80,000. have been won, principally from quartz obtained in opening up the mine. The main shaft has sunk 112 feet and levels driven to the east and west for 100 feet each way. The pay chute runs easterly and is cut by the

east level. But little stoying has been done, leaving a considerable body of reserves available. The mine has paid all expenses of development and has something to the good. The company is to be congratulated on the success with which Mr. Stenshorn has managed the property.

Ontario.

The Mutual Gas Company, of Port Colborne, Ont., which supplies the Erie Glass Company with gas for manufacturing purposes, and supplies many local consumers, found last winter that it was unable to meet the demand, owing to the large drain made by the glass works. It therefore decided to put down a new well to get an adequate supply. The attic pit was looked forward to with much eagerness by the Provincial and the Erie County companies, who supply Buffalo with gas. The result has been a great disappointment. The well has proved a failure. The drill was pulled at a depth of 554 feet, having pierced the second gas sand into the test shale.

Mr. J. R. Gordon, C.E., superintendent of the Creighton Gold Mining Co., (Ltd.), operating in the Sudbury district, was in Ottawa the other day attending a meeting of the directors of his company. He reported that good progress was being made with the work of opening up the company's mines; the machinery installed gave good satisfaction, and the construction of the mill was well advanced. About 20 men were employed.

North-West Territory.

"We learn," says the Calgary Herald, "from a reliable source that a considerable move in mining in the Alberta slope of the Rockies is likely to take place shortly. Competent mining men assert that Alberta is quite as rich in minerals as British Columbia. The only reason why our resources in this direction have not been developed seems to be that they have never been brought before the notice of capitalists. Efforts are now being made to call the attention of those interested in mining matters to the field which Alberta offers to enterprise and capital in the development of her mineral wealth, which will in all probability stir up our long neglected mining interests considerably in the near future."

British Columbia.

The New Vancouver Coal Co. made its "record" day's output on the 30th May, when the yield was 2,300 tons. It is expected that even these figures will be beaten, when the Protection Island shaft is in full working order and No. 5 shaft is again opened.

The New Vancouver Coal Company is still carrying forward its very desirable scheme of providing five acre homesteads for its workers, on easy instalment terms of purchase. Roads are now being built and a large area of land laid out for this purpose at Starks' Crossing, about 8 miles South of Nanaimo, near the No. 5 mine shaft, and on the line of the I-land Railway.

The Kanaka Bar Gold Dredging Co., of which notice of incorporation appears in our companies column, intend by means of a patent centrifugal pump, to seek the gold lying under the waters of the Fraser River, for a distance of some three miles at Kanaka Bar, in the neighborhood of Lytton, B.C. The pump to be used will, it is said, suck up 200 tons of river bottom daily, catching up with other matter the particles of gold underlying the stream. The company thus hopes to make excellent money returns upon the capital investment, which the undertaking involves. Dr. Dawson, (Geological and Natural History Survey of Canada,) gives the data upon which the company bases its hopes of success, in the following passage: "Gold has been gradually concentrated in the river bottom by the action of the stream, while in many places paying deposits have been left upon the surfaces of 'benches' at various levels. Thus when the work of 1858 and 1859, began, the miners obtained with comparative ease and in a short time a large quantity of gold. How much gold has been obtained from the Fraser it is impossible to ascertain, but it may be stated that practically the entire output of the Province for 1857 and 1858 with the greater portion of 1859 was derived from this river, and by far the larger portion from that part of the Fraser extending from Hope to Chusnetic. The aggregate yield for these early years alone can not be placed at less than \$1,700,000. The mode of working these gold deposits was comparatively a simple one. Then so-called 'bars' were nothing more than portions of the riverbed, which being left bare at low water could be reached by the miner. They varied in richness not only in different parts of the length of the river, but also in correspondence with the local relation of the current and set of the stream. They were worked generally to a very low limited depth, being often merely shamed over in consequence of the trouble from water, most of the work was accomplished with the primitive rocker. In the bed of the river itself at each season of flood a