

The Concentrating Co., a Duluth syndicate, owning the Idaho and Alma groups, have this summer constructed a three-rail tramway some 7,000 feet long, by which to supply their concentrator, which has a capacity of 100 tons a day.

The now famous Slocan Star will also have a tramway and concentrator put up before winter, and in time most of the principal mines will find it necessary to concentrate some of their ore, which is of too low grade to pay under the present expensive shipment, and is thrown on the dumps.

Under the influence of the improved shipping facilities it is expected that this winter's output will be much increased, as the ores can be shipped and treated at the Tacoma smelters for \$24 a ton, leaving a large margin for the expenses of getting it out, when it runs, as it usually does, from \$100 to \$200 a ton in silver with from 50% to 75% lead. These ores carry very little zinc and silica. They are usually hand-picked and shipped in small sacks carrying between one and two hundred pounds. A sack sample being made and assayed in order to check the smelter's returns.

During the last three months much prospecting has been done along the creeks flowing into the Slocan Lake from the east.

This country is composed chiefly of granite with bands of other igneous rocks, and some masses of a quartzitic nature impregnated with iron. There is an absence of the limy slates characteristic of the galena-silver basins.

This formation carries dry ores such as contain native silver, silver sulphide, argentiferous grey copper, and other mineral combinations of silver not so readily determined. With these is usually a fair showing of gold and in some the gold is free and visible, but more usually it appears to be in combination with various sulphides.

The L. H. is a property which is highly mineralized with arsenical iron. This carries gold. Along the foot wall of this band of rock there occur pockets of arsenic; these contain silver up to 1,000 oz. a ton.

Upon Springer Creek and Ten Mile Creek, which flow into the lake near its southern end, are several very rich properties which carry native silver and sulphides to the value of over 1,000 ozs. to the ton, and over \$100 in gold. These, however, have been found but lately, and it is for the future to show whether their early promise is carried out when actual mining begins. As far as can be seen at present they are true fissure veins, and being in the granite are likely to hold their size with some regularity.

These favorable locations have caused considerable excitement in the district but have failed so far to direct the attention of capitalists who steadily pour into the Kossland county.

Under the present mining laws the acquisition of claims is made very simple and easy. Any man holding a miner's certificate, (which costs \$5), can locate as many properties as he desires, provided they are not, any two of them, upon the same ledge. Each location being 1,500 feet square. By this means many claims are recorded which will not justify the expense of their development, and such are termed "wild cats." Their value being nil until the expected boom comes along, when anything showing mineral appears to sell quite readily, as the present summer's experience around Kossland seems to show. These claims being held for one year under a light assessment of development work, excuse the speculation.

Nevertheless, out of the prospectors' assays made this summer at New Denver, of which there have been some 350 since June 1st, nearly 50% of those made for silver have carried over 100 ozs. in silver, some have shown nothing at all owing to the ignorance of the locator as to what constitutes ledge matter, and many have carried gold in quantities ranging from a trace to \$150 a ton. These prospectors, as usual, are rarely able to bear the expense of the development of their claims, and yet hold them at somewhat high figures considering their undeveloped character. They are more readily dealt with by means of bonding the property, or selling an interest for cash, which latter means enables them to take out some ore, for which they can get the smelter returns and at the same time determine the character of the mine and its dividend-paying possibilities.

New Denver, B.C., 20th August, 1895.

J. C. GWILLAM.

NOVA SCOTIA NOTES.

It is with the deepest feelings of regret that we have to record the death of Mr. J. M. Reid, late manager of the Oxford gold mine, at East Chezzetcook. Mr. Reid developed symptoms of consumption last year in consequence of which he had to give up the management of the Oxford mine. He then travelled to Colorado, California, and North Carolina, where he died. Mr. Reid was 31 years of age, and was manager of the Oxford mines for 10 years, during which time he made many friends.

A company is being promoted by Messrs. C. E. Willis and G. J. Partington to take over the Oxford gold mines. Mr. Partington is the resident manager and has started work already.

All previous records were beaten at the Mines office by Mr. F. W. Christie, who has taken up \$60 gold mining areas in the neighborhood of Brookfield, Colchester Co. It is reported that these areas have been taken up for London people, who are interested in a cyanide process for extracting gold. No one is more anxious than ourselves to see a good strong English company operating in Nova Scotia, but we would like to see them in a good district or not at all, and we cannot say that we hail the venture with delight. Nova Scotia, through no fault of its own, has a bad enough name on the other side of the Atlantic. We do not think the investment of British capital in gold areas in the neighborhood of Brookfield, Colchester County, will be likely to improve it.

Mr. W. R. Thomas has relinquished the management of the Nova Scotian Gold Mines, at Montague, to take over the management of a copper mine at Puledo, in Portugal, for an English company. We congratulate Mr. Thomas, and feel sure he will be more in his right sphere now he has returned to copper mining.

Mr. George W. Maynard, M.E., of New York, has been in the province for some time investigating gold and iron properties. He is making a series of mill tests of the barrel quartz lead at Waverley, and is also examining iron properties at Middleton.

Mr. J. E. Hardman has resigned the management of the Tudor Gold Mining Co. at Waverley.

Mr. W. F. Libby still continues his success at the Brookfield (Queens Co.) mine. 648 oz. in three months is a very good record.

The Mining Society of Nova Scotia have taken a large room under the Queen Hotel, 107 Hollis Street. The room has been prettily fitted up and members appreciate the change.

Mr. A. A. Hayward has taken up 150 acres adjoining the Golden Lode mine in South Uniacke.

The Halifax Herald of Aug. 22nd is responsible for the following:—"From a correspondent in Port Morien the *Trades Journal* received a short account of a fatal accident which occurred on the Dominion Coal Co.'s railway at that place last Tuesday. Mr. Evans, the superintendent of the mine, was in the habit, so it is stated, of running the locomotive occasionally. On Tuesday, while handling the locomotive, something went wrong, and in some way Hector McLean, the brakeman, was killed. An inquest was held and the jury returned a verdict of manslaughter, and, as a consequence the superintendent was sent to jail."

It is proposed to organize a company to start a mill for the purpose of grinding the gypsum at Gay's River.

A suit for a large sum of money, nearly \$700,000, has just been started in the Supreme Court by the American Trust and Loan Co. against the Eastern Development Co., who own the Coxheath copper mine near Sydney, C.B.



The Safety of the Miner's Calling.—The disastrous effects of occasional colliery explosions is apt to lead to the belief that the miner's calling is more dangerous than any other occupation. Official statistics, however, clearly prove the error of this assumption. On turning to the collieries, which are usually regarded as the most dangerous mines, it will be found that the amelioration of the lot of the collier in recent years, owing to the lessening of the number of accidents, is most gratifying. In the 10 years from 1833 to 1842 the average number of lives lost by accidents amounted to 4.1 per thousand colliers employed. In 1853 to 1862 this proportion sank to 3.4, in 1863 to 1872 to 2.0, and in 1883 to 1892 to 1.8, whilst in 1893 to 1894 the proportion did not exceed 0.9 per thousand. In other words, since 1833 fatal accidents have decreased 75 per cent. In metal mines the mortality from accidents has remained nearly stationary, and amounts to 1.3 per thousand. Thus the collieries with their fire-damp and other noxious gases, their dust explosions, and their mine fires, present greater safety than metal mines. This apparent anomaly is explained by the fact that in the small metal mines improvements are more slowly introduced and carelessness is more prevalent than in the larger well-managed collieries where there is constant supervision day and night.

It is still more remarkable to find that coal mining is less dangerous than many other avocations. The German official statistics show that the milling trade is just as dangerous as coal mining, for the lives lost by accidents averaged 0.9 per thousand millers employed. On railways and in breweries the deaths average 1.3 per thousand, while carters and warehouse men have a still higher average—1.5 per thousand. Coachmen are subjected to greater dangers, the accidental deaths being 2.0 per thousand whilst with men engaged on river barges the average is 2.1, and in sea-going vessels 2.2 per thousand. These figures, it must be noted, do not include fishermen, whose work is the most dangerous of all. The English statistics for 1883 to 1892 show that the deaths of sailors caused by accidents on steamers were 4.8 per thousand, and those of mariners and fishermen were 7.7 per thousand. Thus the collier working underground is eight times safer than his fellow worker on the sea.

Coal mining is a calling that brings little sickness in its train. Dr. Ogle, the eminent authority on mortality statistics, brings forward evidence to show that, if accidents are excluded, the mortality of coal miners only slightly exceeds that of the most healthy class of men, the agricultural laborers. Taking the years of age between twenty-five and forty-five, he gives the following comparative figures as the mean annual death rates per thousand living:—All males, 10.16; coal miners, 7.64; ironstone miners, 8.05; tin miners, 14.77; butchers, 12.16; plumbers and painters, 11.07; tailors, 10.73; shoemakers, 9.31; and agricultural laborers, 7.13.

As would naturally be expected, breathing bad air or working in constrained positions are frequent causes of disease among miners, and Dr. Snell contends that the disease of the eyes known as nystagmus is prevalent among colliers who have to work lying on their sides. It is curious to note that as regards tendency to insanity, miners favorably contrast with persons engaged in other callings. The recently published report of the commissioners on lunacy, show that for every 10,000 miners given by the census the annual average of admissions to asylums in 1889-93, did not exceed 4.4. In the case of costermongers and peddlars, who head the list, it amounted to 20.1; flannel merchants and cotton warehousemen come second, the proportion being 18.2; then follow physicians and surgeons with 15.8; chemists and druggists with 14.1; lawyers with 13.5 and architects, surveyors and builders with 5.9; whilst in the case of navvies and railway laborers the proportion sinks to 4.8. These figures are very curious, and the position occupied by miners on the list is most remarkable. The statistics are certainly encouraging, for they show that the coal miner's calling is a healthy one physically and mentally.—*Colliery Guardian*.

Silver Smelting in British Columbia.—By the decision of the Consolidated Kansas City Smelting and Refining Company to put in a large smelting plant at Nakusp, West Kootenay, the smelting industry may be considered as soon to be put upon a satisfactory basis in British Columbia. The Company referred to is one of the most important in the United States, and would not have decided upon taking such a step unless it was perfectly satisfied that the position of things fully justified it. The inducement offered by the Dominion Government in the shape of a bonus on every ton of ore smelted in the Province, has undoubtedly had a beneficial influence in the matter. It is also a proof that the Company is satisfied both as to the supply of dry ores, obtainable in the district, being ample for its requirements, and also that it can find a market for the lead produced at prices that will be remunerative.

The smelter at Pilot Bay appears to be overcoming the difficulty which was first encountered of getting a sufficient supply of dry ores and, therefore, that may be considered as an enterprise firmly established. With the third smelter which the Hall Mines Company has decided to erect at Nelson, principally for the treatment of the