

used was simple enough. The ore was crushed by stamp in batteries, and concentrated with Frew belts. The concentrates were then placed on a drying floor over a furnace, and from there went to a revolving cylinder furnace. The ore was discharged at the lower end of the furnace, and placed in amalgamators, and amalgamated with mercury, and the gold extracted from the mercury by the ordinary retorting process. While the ore was in the cylinder the fumes passed in three arsenic chambers, and thence through a 90-foot brick flue to a stack 20 feet high. The arsenic was deposited in the chambers, and zinc and sulphur and other fumes passed out. The process now in use for the treatment of arsenical ores, said Mr. Stewart, will extract more gold from ore, but leaves the arsenic in the crushed ore or tailings for future treatment which will involve a separate process. Ore from both the Craig and Bannockburn mines had been treated successfully at Malone, and proved to be good ore. Mr. Stewart said that one great trouble with assays was the fact that owners sent "specimens" to be assayed, and based their calculations as to the value of the mine on these specimens and the assay. A vein assaying \$6 to \$12 per ton he considers to be a good one if the ore is uniformly the same, and the vein from 3 to 4 feet wide. Mr. Stewart thinks that the outlook for both arsenical and free-milling ore is generally good, and they will pay well if properly worked. As an instance he cited the case of a mine in North Carolina, which has been worked for 20 years, and averaged \$9 per ton from a vein 4 to 6 feet wide. From his own practical experience the mines would pay by proper treatment, as the ore is of a uniform richness in both gold and arsenic, and in the largeness of the veins, and there is enough ore in sight to warrant expenditure.

BRITISH COLUMBIA.

A company is being incorporated to supply electric light to Rossland and Trail.

In the provincial estimates just brought down the revenue from mines is placed at \$90,000; last year it was \$75,000.

The proposed new mining bill before the Legislature has been withdrawn and a committee appointed to draft a new bill.

An arrangement has been entered into between Mr. Harry Symons, of Toronto, representing an English syndicate, of which Mr. J. H. Rothschild is one of the chief promoters, and the City Council of Vancouver, to erect a smelting and refining plant at that point on condition that free water and exemption from taxation were granted. The work of construction is to be commenced within three months, and the smelter is to be capable of treating at least 500 tons of ore per day, while the refinery is to be equal to treating the output of the smelter. The plant is to cost \$600,000.

WOULD CONTROL KOOTENAY.

There is a rumor on the streets that the Canadian Pacific Railway Company has obtained an option on the Nelson & Fort Sheppard and Spokane Falls & Northern railway systems. The purchase price is said to be seven and a half million dollars.

The purchase of Mr. Corbin's railway would give the C.P.R. the entire control of all transportation lines in Kootenay until the Nelson and Bedlington road is built to connect with the Great Northern railway at Bonner's Ferry.

VANCOUVER COKE.

The Hall Mines Company has contracted for a few carloads of Vancouver Island coke which will be used as a sample and if found satisfac-

tory may be extensively used, providing satisfactory arrangements can be made with the colliery owners.

There is a probability that the Dunsmuir's colliery will establish coke ovens at Alexandria, about five miles south of Nanaimo.

COAL MINES.

The report of Mr. S. Dick, inspector of coal mines, gives the output as:

	Tons.
The Nanaimo Colliery.....	320,575
The Wellington Colliery.....	339,896
The Union Colliery.....	233,610
The West Wellington Colliery..	800

Total output for the year 1896 894,882
The export in 1896 was 634,237 tons.

SOME REMARKABLE FINDS.

The Gold Commissioner at Barkerville, in his report on mining in the Cariboo district just published, says: Some 250 leases have been applied for during the season and some very promising finds have been made. At Pleasant Valley creek from ground 25 feet square and 15 to 20 feet deep \$1,000 was obtained. At Big Valley, dirt running \$2 to the pan was obtained, and on Bear River is reported a find of \$4 to the shovel. The Cariboo Hydraulic Company's lease has turned out \$127,000 for the season.

ROSSLAND STOCK EXCHANGE.

The main features of the proposed by-laws for the stock exchange are:

That the stocks called in the exchange shall be selected by the listing committee.

That the exchange shall be open with a call at 11 o'clock and that there shall be another call at 2.

Commissions shall be charged and paid in all transactions, and the minimum rates shall be: Stocks selling under 50 cents, $\frac{1}{2}$ cent per share; selling at 50 cents and under \$1, 1 cent per share; at \$1 and over, 2 cents. No commission on any sale is to be less than \$2.

All purchases and sales shall be settled for on delivery, and all deliveries, unless otherwise provided, shall be made before 11 a.m. on the first business day following.

Any member who shall neglect to pay his dues or fines for five days after they became payable, shall, after due notice, be suspended until they are paid, and if not paid at the end of three months he shall no longer be considered a member, and his membership shall be forfeited to the association.

Rossland.

In three weeks Rossland and Spokane will be connected by telephone.

Strikes are reported on the Iron Horse, Fairview, Great Western, Flossie L., and Evening Star.

An option on the Jumbo gives the mine a valuation of \$500,000. In 1893 it was bought for \$500.

Fears are entertained of a shortage in Rossland's water supply, and there is a penalty for wasting it.

A twenty days' extension of the option on Commander for a quarter million, granted to the Gunnis-Neame syndicate, has been given.

The extension of the Jumbo option at a half million has been asked, but it has not yet been decided whether it will be granted. It is expected that the Commander deal will go through.

"It has been stated that the reason the War Eagle mine was sold was because it was played out," said a well known mining man recently. "This is not true; the War Eagle is a great property. I visited the mine a few days ago, and know, Mr. Hastings, the new manager,

has blocked out a large amount of ore since he took charge. At the Josie the company has now two power drills sinking in the main shaft, and it is the intention to go on with this work. The shaft is now down 130 feet."

Justice McColl has decided that the Grand Prize Company is entitled to the Grand Prize ground, although the stakes were on adjoining claims, as the company was in possession of the claim when Buffalo was located. The action brought by the latter has been dismissed.

A strike of rich ore has been made in the Aaron group at Waterloo camp, a few miles above Trail, on the east bank of the Columbia. The property is under bond to the Lillooet, Fraser River and Cariboo Gold Fields—sometimes called the Horne-Payne syndicate—and development work has been going on steadily since early last summer. A tunnel has been run several hundred feet and the present strike was made at a depth of 150 feet. The ore body found is said to be four feet wide, and the value \$72 per ton.

The gallows frame of the gigantic Le Roi hoist is now up and the foundations for the big drum and cylinders will soon be completed. The plant will probably be in operation within 30 days.

"The Le Roi mine is one-third bigger now than it was three months ago," said W. J. Harris to the *Spokane Spokesman*. "Five new drifts have been opened up within the past 60 days, all of which show a solid face of sulphide ore from five to 15 feet in width. Never in its history has the mine looked so well or its future so flattering. The most important work which has been done is the Peyton tunnel, on the west end of the Le Roi ground, and about 800 feet west of the old workings. The tunnel driven 45 feet shows a continuous chute of ore, and at this point there are four feet of solid sulphide ore and 10 feet of mixed ore. It is at this place that the company will sink a double compartment shaft, and it is believed by the management that the chute of ore is fully as large as that in the old workings. This being true, with the new plant now in successful operation, and hoisting from 150 to 175 tons of ore daily, and the recent exploration of the mine showing up large bodies of ore, why is not the Le Roi mine worth \$10,000,000 to-day, instead of \$5,000,000?"

Trail Creek.

Mr. Heinze's representatives have purchased the Columbia and Kootenay group at Rossland for the sum of \$500,000. This is the second largest sale made in the district and the property has been secured by Mr. Heinze that its ores may be used to supply his smelter at this point.

Quoting from the *Rossland Miner*:—The Trail smelter is a tremendous institution. It and its associated enterprises now represent an investment of over \$1,000,000. In August, 1895, the hill upon which the smelter now stands was a bare, untouched piece of ground. To-day it is the busiest spot in the whole Dominion of Canada, and is destined to be one of the greatest smelting and refining centres in the world."

The contract has been awarded for the erection of a Prospector's Exchange, for the purpose of advancing the interests of prospectors having bona fide prospects. It is the intention to investigate all properties submitted to the exchange for sale, before placing them before the public for investment and the exchange thus resolves itself into an institution for the protection of the general public as well as that of the prospectors. Only claims and mines of merit will be handled, and there will be no opportunity for "wild cat transactions."