

British Columbia

The Vancouver Coal Fields.

Although coal was found on Vancouver Island as early as 1831, it was not until 1851 that an attempt was made to mine it by the Hudson Bay Company. Operations were commenced by them at Fort Rupert, near the northern end of the island, but owing to the irregularity of the seams these workings were abandoned one year later. At the same time, however, coal was discovered at what is now the city of Nanaimo, and the company transferred its work to that point.

At present, says United States Consul Myers, of Victoria, in a consular report for September, there are four collieries in operation on the island. Of these, the Nanaimo, Wellington and East Wellington mines are in what is known as the Nanaimo district, while the Union Company mines are in the Comox district, which is estimated to have 300 square miles. The veins, as a rule, are horizontal, and are from 2½ to 11 ft. thick. The coal is semi-bituminous of Cretaceous age.

The Nanaimo Colliery was first owned by the Hudson Bay Co., who sold it in 1862 to the New Vancouver Coal and Land Co. Owing to faults in the strata, and other causes, the operations of this company were not profitable, the output between 1862 and 1883 varying from 20,000 to 90,000 tons per annum. In 1884 this company was reorganized with the result that mining was conducted on a more extensive and economical scale. At present the company has five mines, four of which have been in operation since 1884. Shafts Nos. 1, 3, 4 and 5 are all on the same bed, although the quality of the coal differs. No. 1 produces a gas coal, which, it is said, will yield 11,000 cu. ft. of gas to the ton. Nos. 4 and 5 furnish coal adapted to steaming purposes. No. 2, (the Northfield,) produces a coal somewhat harder than the others.

The beds dip to the east at angle of 5°. Shaft No. 1 is down 620 ft. through a hard conglomerate rock; the drifts extend under the bay, a distance of 3,000 yards. A shaft 670 ft. deep has been sunk on Protection Island to connect with these workings. The beds of this mine average 7½ ft. in thickness. The Northfield mine has two shafts and a third will soon be added.

No. 3 is about worked out. Nos. 4 and 5, known as the Southfield, are the greatest producers in the district. They are worked by a slope down 800 yds., and a shaft 508 ft. deep. The beds average from 6 to 10 ft. in thickness.

The present daily production of the mines is as follows: No. 1, 600 tons; Northfield, 500 tons; 300 tons at No. 3 and the Southfield, 800 tons.

Wellington Colliery.—This mine was discovered by the late Hon. Robert Dunsmuir in 1869. It was first opened up by a slope which was worked out in a few years. At present there are four shafts from 310 to 375 ft. deep. The beds are 2½ to 10 ft. thick, and the coal is harder than that at Nanaimo. The pillar-and-stall and long-wall systems of mining are used

in these mines. The output of the colliery averages 1,450 tons per day. Shaft No. 4 produces 550 tons, the seam being 7 ft. thick. Shaft No. 5 produces 450 tons per day, and shaft No. 6, 450 tons per day. A fourth shaft is being sunk between Departure Bay and Wellington.

East Wellington Colliery.—This mine is the property of the East Wellington Coal Company of San Francisco. The veins are from two to five feet thick. There are two shafts in operation, each about 200 ft. deep. The output averages 110 tons per day.

Union Colliery.—This mine belongs partly to the Dunsmuir estate and partly to Leland Stanford, C. P. Huntington and Charles Crocker, of California. The total output, which averages 700 tons per day, is contracted for by the Southern Pacific Railway Company. The mine is worked by slopes and tunnels, shafts being impracticable. Slope No. 4 is in 450 yds., the incline at the entrance being 1 in 7. The seam is 5 to 8 ft. thick, and the coal produced is excellent for coking. The Jeffrey electric coal cutter is in use at this slope. Slope No. 1 is down 700 ft. on a 4 ft. seam. No. 1 tunnel and No. 3 slope are of recent construction.

The output of the different collieries for the years 1888-91 was as follows.

Collieries.	1888.	1889.	1890.	1891.
Nanaimo	258,817	223,570	389,505	527,457
Wellington	193,392	272,333	174,496	315,182
East Wellington.....	30,092	51,372	44,602	41,066
Union	2,000	31,204	69,537	114,792
Total	483,301	579,830	673,140	1,029,097

These collieries furnish employment to nearly 3,200 miners, of whom 103 are boys and 510 Chinese and Japanese. The wages paid vary from \$2.50 to \$3.50 for white miners, \$1 to \$2 for boys, and \$1 to \$1.50 for Chinese and Japanese.

In the Nanaimo, Wellington and East Wellington collieries white men are employed as miners, and the Chinese, together with whites, do the work above ground. At the Union Colliery both Chinese and Japanese are to some extent employed both as miners and above ground. Eight hours constitute a day's work in all the mines.

After many years of agitation the provincial parliament in 1890 passed an act prohibiting Chinese labor in the mines, but in 1891 the act was repealed. The following are the principal points of the act regulating coal mines:

Each mine is under the supervision of a certified manager, who gets his authority after an examination from the minister of mines. Inspectors are also appointed by the minister of mines. Their duty is to examine into the state of the mines from time to time. Certified managers make reports to the inspectors. No person, either male or female, under 12 years of age is allowed to work in the mines or above ground. Boys between 12 and 14 are allowed to work, by option of the minister of mines, in mines where the seams are thin, but must not work more than six hours each day. No boy under 18 years old is allowed to operate any engine, windlass, or gin, but a boy over 12 may drive any animal operating the same. Wages are paid by the weight of the coal, deducting rocks and debris. Single shafts are prohibited. Mines must have at least two shafts or outlets separated by not less than 10 feet of natural

strata. Not less than 100 cu. ft. of pure air per minute must be supplied for each person and animal employed in the mine. Each mine is required to be divided into districts of 70 men each, and each district must have a separate current of air. Mines are to be inspected as to ventilation once a day. Mines having had inflammable gas within 12 months are to be inspected at least once a day, and all miners are to be promptly withdrawn in case of danger. The regulation as to safety lamps and lights and the use of explosives are very strict. Each mine is to have special rules, which, under its peculiar state and circumstances, appear best calculated to prevent accident. Old shafts or shafts not in use are to be fenced.—*New York Engineering and Mining Journal.*

Notes.

Building operations at Kaslo are proceeding briskly.

There is some talk in Kamloops as to the advisability of the towns seeking incorporation.

Thirteen million feet of logs are said to be lying in the Cowichan river, 6,000,000 of which are this year's drive.

The B. C. Iron Works Company, of Vancouver, recently purchased the plant of the Vancouver City Foundry and Machine shops, for \$30,000.

The quarterly meeting of the directors of the Horticultural and Fruit Grower's Association of British Columbia, was held in the Board of Trade rooms, Vancouver, on Tuesday, Nov. 1st.

The National Electric Light & Tramway Company of Victoria has decided to increase its capital stock to \$1,000,000 and has authorized the directors to raise by way of loan or debentures \$600,000.

The result of the seal fishery for the season just closed is as follows: Lower Coast catch, 4579 skins; Upper Coast catch, 24,528 skins; Asiatic Coast catch, 11,805; Indians (casual), 1,500 skins; total catch, 45,412 skins.

The Songhees tribe of Indians, whose headquarters are in Victoria, took a ballot recently to select a Chief to fill the vacancy caused by the death of Chief Scowiak, Charlie Frozio being the winning candidate with 19 votes to his credit.

The Vancouver News-Advertiser says: "The first vessel with the salmon pack of 1892, the British barque Martha Fisher, cleared at Victoria for London on Monday. She had 31,000 cases of salmon, valued at \$163,454, and miscellaneous goods valued at \$905."

The Westminster Columbian says: "Word has been brought down from the north that the Yuclataw Indians are still potlatching, but that the celebration is gradually diminishing in liberality and extravagance. The festive event commenced with 8,000 blankets, the bonfire being fed by ten canoes, while from 3,000 to 5,000 Indians danced around it. All that now remain are 500 blankets, \$1,000 for distribution, and not more than 500 red men to dance around the livid flames created by the burning of but one canoe.