

YUKON.

Very promising quartz developments seem to be taking place at Windy Arm, not far from Cariboo Crossing, where a Mr. J. H. Conrad is opening and equipping several properties, including the construction of an aerial tram line, four miles in length. Already a quantity of ore has been shipped to the Ladysmith smelter, Vancouver Island, which has been found to be exceptionally rich.

Already from the Northern Gold Fields, including those of both United States and Canada, gold to the value of fifteen million dollars has been brought down and deposited with the United States Assay Office at Seattle. It is probable, however, that not more than a third of this amount has been derived from British sources.

The recently re-organized Five Fingers Coal Company has procured from the Government the use of a diamond drill plant, which to prospect the property during the winter. Coal from this property has already been used in Dawson, and has been found to be of an excellent quality. Providing the exploration work proves satisfactory it is proposed to equip the mine with modern machinery.

It is reported from Dawson that the Government surveyors who are now in the field securing information for a proposed Government water system, will continue their investigations for some weeks yet, after which information will be compiled and submitted to the Ottawa authorities during the winter months, to admit of the commencement of actual construction operations in the spring.

A correspondent, writing on the developments in the Windy Arm quartz section, states that up to the present time more work has been done on the Montana mine than on other properties. Here a tunnel has been driven to a distance of over 250 feet, mostly through ore which gives extraordinary high values. This is now being shipped to the Coast smelter. Adjoining the Montana are the Mountain Hero and Glacier claims, and on the latter and 1,550 feet from the Montana tunnel is being run into the mountain side, which will tap the Montana tunnel.

The chief operator in this district is Mr. J. H. Conrad, who has re-organized a number of companies to operate the respective properties.

During August two new dredges in the Yukon, one, the larger of the two, on Bear Creek, and the other owned by the Canadian Dredging & Mining Company, at Ninety Below on Bonanza Creek. This dredge was constructed by the Risdon Iron Works at San Francisco, and is equipped with a 60 H.P. engine and a 70 H.P. locomotive boiler. There are 35 buckets, each of which carry 2 1-2 cubic feet of dirt. A special appliance on this dredge is an arrangement of nozzles, which are used to wash the buckets as they are emptied, in order to save the fine gold. The nominal capacity of the dredge is 2,000 yards per 24 hours.

A nugget, said to be worth \$614, has been found at Livingston Creek in the Big Salmon district. This is believed to be one of the largest nuggets found in the North for some time past.

ZINC IN BRITISH COLUMBIA.

Mr. Jno. L. Retallack has addressed a letter to Mr. Phillip Argall, one of the Zinc Commissioners, in British Columbia, containing the following information in respect to the zinc resources of that province:

Zinc ores occur in commercial quantities in the following districts of this province; although production has been practically confined to the Slocan region:

West Kootenay:—In the following mining divisions: Ainsworth, including Ainsworth and Blue Bell camps, Kaslo district, and perhaps some of the creeks draining into the Lardo and Duncan rivers, Slocan, Nelson, Arrow Lake, Lardeau and Trout Lake.

East Kootenay:—In the Fort Steele and Golden mining divisions.

Coast—Lynn Creek, near Vancouver, and on Texada Island.

Vancouver Island:—Quatsino Sound and Hesquoat Harbor.

Mention is also made of occurrences in the Kamloops, Kettle River, and Similkameen mining divisions of Yale districts, which appear to deserve further enquiry.

So far as known zinc ore does not occur in commercial quantities in the following mining divisions. Windermere, Yale, Osoyoos, Revelstoke, Illecillewaet, Vernon, Ashcroft; regarding New Westminster, whilst the report of the mining recorder is negative, Lynn Creek and Texada Island are in this division.

As regards the detailed list of properties, I cannot give you my opinion as you request, but I believe that all the undermentioned deserve investigation. As before stated, I make no claim that this list is complete:

Ainsworth Mining Division.—Ainsworth Camp, Krao, United, Arkansas, Chief, Glengarry, Union, Last Chance, Tariff, Libby, Laura M., Gallagher, Ayesha, Blue Bell Peninsular, Blue Bell, Kootenay Chief, Comfort, Crawford Creek, Silver Hill, etc.; Kaslo district: Cork, Providence, Montezuma all on south fork of Kaslo Creek, Whitewater, Whitewater Deep, Wellington, Jackson Mines, Bell, on the south fork of Kaslo Creek, and some prospects in the vicinity of the last named property.

Slocan Mining Division.—Lucky Jim, Dardanelles, Rambler-Cariboo (not for its zinc values, but as an example of what is, here, deep development), Payne, Washington, Surprise, American Roy, Last Chance, Gray Copper, Slocan Star, Ruth, Ivanhoe, Monitor, Idaho, Mountain Chief, Bosun, Hewitt, Galena Farm, Wakefield, Enterprise, Emily Edith, Hartney, Sorinth.

Nelson Mining Division:—Molly Gibson mine and prospects in that vicinity.

Arrow Lake Mining Division:—Deposits on Bald Mountain, Pingston Creek, on west side of upper Arrow Lake, and prospects at Burton City.

Lardeau Mining Division:—Sirdar on Goat Mountain, Beatrice on Mohawk Creek.

Trout Lake Mining Division:—Various properties near Ferguson which, in producing a marketable silver or silver-lead product, have difficulty with the zinc tenor of their ores.

Fort Steele Mining Division:—St. Eugene Mine and Aurora on Moyie Lake, Estella group on Tracey Creek, Watson and Kootenay King on Wild Horse Creek. Some prospects and the operation of mines near Kimberley, might well enter into this inquiry.

Golden Mining Division:—Old Lanark Mine at Field, Giant on Similkameen Mountain.

For the Similkameen, Kettle River, Kamloops, New Westminster and Quatsino mining divisions, please see correspondence. The Lynn Creek deposits near Vancouver and the Peerless property on Murray Creek, Quatsino Sound are especially mentioned.

THE NEW ZINC REDUCTION PLANT AT FRANK.

The new zinc smelting plant at Frank is now completed, and it is expected that the works will be in active operation within the next few weeks, when a general custom business will be conducted, while also ore from the Company's own properties in the Ainsworth district will be treated. In this connection the Sandon Mining Standard remarks:

The establishment of a domestic zinc smelter at Frank will by no means force the treatment of the zinc ores at home. Although the freight rate on the crude ore will be less to the home plant, the distance to market will be a serious item, and the difficulties attending the acquirement of a settled metallurgical practice will be many. When the freight to market is considered, with the expenses of marketing, the nearer market in the States, coupled with the competition of the plants who have the market at their door, will be a serious factor.

Already the local plant is realizing this, and is protecting itself by taking options on zinc ore prospects. This will render it independent of a source of supply by purchase. The natural tendency in tariff matters in the United States will be toward the reduction of duties on raw mate-