

pulverizing roller will be found very useful where rusty gold is present, releasing it from its coating of oxide, and so permitting free amalgamation. When the sulphates are to be saved for future treatment, the lower tailings discharge can be so regulated by shortening or extending the position of the upper discharge that the effect of gravity on the tailings discharged automatically from the lower discharge will be such that very clean concentrates can be produced, the lighter portion passing away through the upper discharge. The amalgamator, as described above, if run in connection with an ordinary stamp mill, or with any rock crusher which is capable of reducing the rock sufficiently fine to permit of easy crushing in the grinders attached to the amalgamator, crushed rock the size of an ordinary bean or a large pea is preferable. Where a stamp mill is used, a very coarse mesh, say six to eight to inch, would give good results and enable a ten stamp mill to do the work of forty stamps under ordinary conditions.

A handy, little machine will be made on the principles of this amalgamator, but somewhat simplified and with a weight of but 150 pounds. This will be worked by hand and will handle from ten to twelve tons of sand or gravel per day. It is designed for prospectors' use and will be very portable and a close saver.

Similkameen River and Creeks.

While giving due prominence to the fact that gigantic hydraulic operation are now in progress in the Cariboo and Yale Districts, which have received great attention from the press, there are several plants in operation and in course of construction in places that have been almost overlooked because they are out of the general trend of travel and observation.

On Tranquille Creek, near Kamloops, is a hydraulic plant which last year did some work and this year has resumed operations, while another company has gone on to the ground in the same creek and is busily engaged in erecting a plant of good capacity. The gold in the creek is of excellent quality and coarse, having much the appearance of that found at Barkerville and Stanley.

Near Princeton are two or three plants in operation and in course of construction, which are to work the gravels in that vicinity. One of them, the Similkameen Gold Mining and Platinum Company, has a hydraulic plant that will compare favorably with many much talked of concerns in Cariboo and other parts of Yale District.

On Granite Creek, a tributary of the Similkameen River, extensive placer deposits were found and worked thirty years ago. The gold was coarse and of excellent quality.

The Similkameen River has been extensively worked for many years and has been a gold bearing stream clear down to its mouth at Oroville in the state of Washington.

Kruger Mountain, Lower Okanagan.

Situated in the southern portion of Yale District, some ten miles below Fairview, is Kruger Mountain, which has lately come into prominence as a rich quartz-bearing region. During the past fall and spring hundreds of locations have been made, and thousands of dollars spent in development work. The ores in appearance and quality are nearly akin to those of the Fairview Region, and the classification by scientists and assayers is nearly the same. So recently have the discoveries been made that not a great deal of development has been done, but enough to show the valuable character of the quartz has been accomplished, and a number of mills are to be erected to work the ores. The mountain is divided by

the boundary line, and a part of it lies in the State of Washington. Similkameen River flows past its southern base.

Just across the river is Palmer Mountain, about fourteen miles long, and as the press of Seattle and Spokane have always so handsomely noted the mining interests of this Province, it is with pleasure that a word is said of the prominent section covered by Palmer Mountain and the Chapacas. At Golden on Palmer Mountain is the Spokane Group of quartz mines, 25 in number, owned by J. B. McLaren of New Westminster and his associates. A substantial, ten-stamp quartz mill is in operation, and development work and ore crushing are steadily progressing. The ore is of fair assay value and the quantity in sight is immense. The Triune mill, one mile west of Golden, is also at work crushing ore.

Palmer Mountain has probably the richest surface showing of any section in the state. It was on the Rainbow Claim that a piece of quartz of about twenty pounds weight produced over \$2,300 in gold, being nearly solid. Work on the south end of Palmer Mountain near Loomiston has been in a state of suspension for a couple of years, but a big scheme is being projected to run a tunnel 4,000 feet to tap the Gold Finch Group of 17 claims. The plan is practicable and feasible, and will cross-cut more than a dozen lodes of value. The capital has been subscribed.

On Mt. Chapaca a Wisconsin syndicate has been developing the Rush Mine for some years and will this season erect a mill.

On Little Chapaca is the Wyandotte Group which is a paying and valuable property. The cyanide process will be used from now on to save the mineral.

Mining Enterprise.

A LARGE CONTRACT FOR AIR COMPRESSING MACHINERY.

The Le Roi Mining & Smelting Co. have just closed a contract with the Canadian Rand Drill Co. of Montreal for the largest and most extensive air compressor plant ever built in the Dominion of Canada.

The specifications call for one cross compound condensing Corliss air compressor of about 450 indicated horse-power. The machine is to be fitted with the latest type of mechanical air valves, which effect a considerable percentage of economy. When in position the machinery will be used for hoisting and pumping and to operate about 40 drills at the elevation of the Le Roi Mines, which is about 3,000 feet above sea level.

The machine is to be built in the new works of the contractors at Sherbrooke. When it arrives at the property it will be put on the Black Bear, which is west of the present shaft house on the Le Roi. The plant will weigh 137,000 pounds.

What a Canadian Firm is Doing.

Messrs. M. Beatty & Sons, of Welland, are doing a good deal of work in building dredgers for the Fraser and Thompson Rivers. They have just completed the Underwood dredger and now they have just closed the contract for a gold dredging plant consisting of a dipper dredge, scows, sluice boxes, grizzlies, etc., to be used on the Fraser River at Boston Bar, by a company of capitalists in Welland, most of whom are practical manufacturers and dredging contractors. They expect to have it in operation by September, if not delayed by high water too late, and think it will be the most complete and successful plant yet put in operation in B. C. for taking gold from the river bottoms.