

Gold Mining & Milling Co., Ltd., of Victoria, B.C., is another Camp McKinney property upon which prospecting was done for a while until financial difficulties necessitated a stoppage of work. Three shafts were sunk, the depth being 129, 65 and 59 feet, respectively. Drifts on the vein have shown it to be quartz mineralized with iron pyrites and galena and assaying up to \$65.00 in gold. Its width where opened up is four feet in places. A 30-h.p. locomotive boiler, 6x8 hoist and a sinking pump were installed on the property several years since. Efforts have recently been made to resume work.

**KAMLOOPS.**—The Kamloops is another claim that had attention for a time, the Kamloops-McKinney Gold Mining Co., of Montreal, Quebec, having in 1899-1900 sunk a shaft 100 feet and at that depth drifted on the vein besides prospecting it elsewhere on the claim. The plant put in includes boiler, hoist, pump, machine drill, etc.

**EUREKA AND OTHERS.**—Among other claims are the Mammoth, Shannon, Dolphin, Wharton, Teazer, Vernon, Eureka, etc. The last named is stated to be owned by some of the Standard Oil Co. officials. No work has been done on it for years, but it is reported that between \$25,000 and \$30,000 was spent in prospecting it in the early days of Camp McKinney. Two or three miles east of McKinney are the Lemon group, Victoria, Old England and other claims. Between these and the camp a number of claims are on a mineral-bearing formation of an entirely different character to that occurring where the quartz veins are met with. These latter include the Dayton, Le Roi, War Eagle, Jim Crow, Night Hawk, and many others, in some of which iron sulphides carrying values in gold and silver have been exposed in deep trenches and prospect holes.

**LEMON GROUP.**—The Lemon group consists of the Lemon, Pennsylvania, Last Chance, Gold Standard and Galena, owned by the Lemon Gold Mining Company, of Omaha, Nebraska. On one of these claims a shaft has been sunk 228 feet on the incline, with drifts run at 125 and 210 feet depth in white quartz mineralized with iron sulphides. The plant here includes a 25-h.p. vertical boiler, hoist, sinking pump and steam drill; also a 5-stamp mill with a 50-h.p. engine to run both the stamp mill and a saw mill put in near by. This property, like most others in the district, has been idle for several years.

**VICTORIA GROUP.**—The Victoria group is owned by the Rock Creek Mines, Ltd., of Victoria, B.C. The claims are the Victoria, Queen, California and Astor. About 1,000 feet of development work was done in 1896-7 under the direction of Mr. C. B. Bash, who still resides on the property. This work consisted chiefly of an incline shaft sunk 110 feet on the vein, two cross-cut tunnels, drifts, etc. It is stated that the returns from 30 tons of ore shipped were: gold \$50, silver \$2 and lead 2 per cent. The cost of transportation, however, is too high for the property to be worked. The company has money in the treasury and will

resume work when a railway shall reach the neighbourhood.

### THE STEWART RIVER GOLD DREDGE.\*

(By A. W. Robinson, Montreal.)

THIS dredge was built in 1902 from the writer's designs for Mr. William Ogilvie, ex-Governor of the Yukon, for the development of claims on the Stewart River, Yukon. The hull was built and machinery erected by Mr. W. M. Ogilvie, and the machinery was supplied complete by the writer under contract for a lump sum. This dredge is a special design for exploration purposes, being very light and strong and capable of working to a depth of 25 feet. It nevertheless has sufficient capacity to enable it to do effective work and to handle free material at the rate of 75 cubic yards per hour. In this way if there is any reasonable amount of gold in the ground to be prospected it can be made to pay although, of course, its earning powers will not be so great as a dredge of larger capacity. For the development of our Northern rivers the writer believes it to be good policy not to make a very heavy investment at the outset in a large expensive dredge until the paying qualities of the ground have been thoroughly demonstrated. There is undoubtedly a need for a light and strong dredge of this type which will be primarily a prospecting dredge which can be built and placed on the property for a comparatively small amount of money and yet has the strength and capacity to enable it to make money if money exists.

The writer believes that the class of machinery that has heretofore been built for work of this kind has been entirely too heavy and cumbersome to send to such remote regions where the cost of freight is so high and the loss from breakdowns is great. This is due to the fact largely that the dredges have been built by manufacturers who naturally put into the machine the class of materials and workmanship which suited them best, and which may not have been in all cases to the interest of the purchaser and user. The Stewart River dredge is designed and built entirely in the interest of the purchaser and user and it is as light and strong as it can possibly be made. To this end all important parts subject to strain are made of the best quality of steel forgings or castings and as little cast iron used as possible, in fact, almost the only cast iron parts used in the outfit are the engine cylinders and the grate bars. These are of cast iron because no other material will answer the purpose so well. The arrangement of the parts is such that the various movements are accomplished with directness and simplicity and so that all the operations are under the control of one man. For facility in shipment the parts are sub-divided into convenient size and weights.

In carrying out the idea above outlined many radical departures from the usual construction were made

\*Paper read at Annual Meeting Canadian Mining Institute March, 1903.