

tation to handle the output of its mines. One year ago, there were but two small hoists, a compressor and two boilers in the camp. Since that time six mines have been fully equipped with air-compressing plants, and machinery has been ordered for as many more. In the matter of transportation the advance has been no less phenomenal. Already one railroad into the camp is in operation; another will be completed in three months. This gives however, a very inadequate idea of the possibilities of the Trail Creek quartz mines.

THE MINES.

The greatest mine in the Trail Creek camp, both on account of the size of its ore bodies, and in the number and amount of dividends paid, is the "Le Roi". This property, with the Black Bear, which adjoins it on the west, both situated on one of the succession of benches of Red Mountain, is said by the well known London expert, Mr. E. Pritchard, to have the most wonderful showing of gold ore in the world. It is owned by a syndicate of American lawyers, nearly all of whom are residents of Spokane. The manner in which this magnificent property has been opened up, its rapid progress from the "prospect" class into a dividend-paying mine, reads more like a page from the stories of fiction rather than solemn, sober fact. The lucky stock-holders in this property deserve their good fortune, for they continued to suck money in development work through many a dark day when neither ore nor dividends were in sight.

The property is opened by a shaft on the Le Roi, situated nearly in the centre of the claim. This shaft is now down approximately four hundred and seventy-five feet, following the dip of the vein, and levels run both ways at the depth of fifty, one hundred and fifty, two hundred and fifty, three hundred, three hundred and fifty and four hundred and thirty feet respectively, disclosed remarkable bodies of high grade ore. The mine did not give much promise until a depth of two hundred feet was obtained. From this point, however, to the bottom of the shaft the ore body has been widening, and the grade increasing until the Le Roi is now in a position to pay at least \$50,000 a month dividends. Probably more extensive development work has been done between the 300 and 350 foot levels than in any other portion of the mine. Stopes thirty-four feet wide, the full width of the solid ore body, are being carried right along. In the East drift, on the three hundred and fifty foot level, the diamond drill was put to work, boring to the north, and after penetrating twenty-six feet of barren rock a vein, or perhaps a deposit of sulphide ore, parallel to the main ore body, twenty-two feet in width was cut through. This ore averaged, on fire assay, \$57 in gold per ton. A curious feature in connection with the ore bodies of this mine was the silica attributes from the ore down to a depth of three hundred and fifty feet. This ore was essentially a chalcopryite in a strong quartz gangue. This ore is some of the best that has been struck. Below this level the ore body straightens up, and the vein is almost perpendicular. When this change in the formation of the vein took place the quartz gangue left the ore, and the last one hundred feet shows a solid sulphide ore body. Conservative estimates of the output of this mine for the calendar year of 1896 are 45,000 tons of ore of an average value of \$40 per ton. The mine is under contract to deliver 37,500 tons of this ore a year to the Trail smelter. Since last October the mine has paid \$175,000 in dividends, and now with a market for their product, the owners declare that 50,000 dollars a month in dividends can easily be paid.

The mine is splendidly equipped with the latest improved mining machinery; there is one seven-drill compressor, one large Ingersoll hoisting engine in addition to a small hoist, a rock crusher, a diamond drill operated by electricity, one 100 h. p. boiler and one 80 h. p. boiler. In addition to this plant, the Le Roi Company have closed a contract with Eastern Machinery manufacturers for one cross compound condensing Corliss air compressor of about four hundred and fifty indicated horse power. This machine is to be fitted with the latest type of mechanical air valves, and will be used for pumping, hoisting, and to

operate forty drills in the Le Roi mine. It is a fact worthy of note that this is the largest and most extensive air compressor plant ever built in the Dominion of Canada. An order has also been placed with the Ingersoll Rock Drill Co. of Canada, for three 125 h. p. boilers and one 20 ft. x 40 ft. direct acting winding engine.

WAR EAGLE.

This mine is situated six hundred feet to the north of the Le Roi mine on a parallel vein. Like many another great mine, the War Eagle has had a checkered career. Since it was staked six years ago, it has been bonded, thrown up, condemned, reopened and again thrown up. However, there was a mine in the War Eagle ground and it only took money and practical experience to find it. The company owning it is composed of Washington and Montana men. Up to this date this company has probably the most systematically developed mine in the camp. Pay ore has been found the whole length of the claim. The work consists of two shafts, both 112 ft. deep, which connect with the number one level. From this level to the surface over 12,000 tons of ore were extracted, the proceeds of which in addition to paying for the mine, for all development work, and for the usual and necessary costs of opening up a large property, has paid \$132,500 in dividends. Another tunnel 114 feet below number one has been driven and the famous ore chute found in the upper tunnel has been struck, and found to carry its strength and grade. Another dividend of \$25,000 has been declared from ore extracted from these works. An upraise connects these tunnels. The company are shipping but little ore at present, and no stoping is going on in the mine, as an option for one million dollars, expiring the 1st of August, has been granted to D. C. Corbin, President of the Spokane Falls and Northern Railroad, on this property, and it is almost a foregone conclusion that this option will be taken care of, as Mr. Corbin is extending his line from Northport to Rossland. It is very problematical if this work would have been undertaken if he had not assured himself of the tonnage of this mine. The machinery consists of two 100 h. p. boilers, made by the Ingersoll Rock Drill Co. at Montreal, two hoisting engines, a 40 h. p. boiler and a complement of Ingersoll Sargent drills; a 20-drill Corliss air compressor furnishes the power.

JOSIE.

This mine, which adjoins the two former on the west, has a phenomenal showing. Though not quite a full-sized claim, the ground is intersected by three veins, all true and distinct. The main vein is traceable the entire length of the ground, and wherever it has been uncovered pay ore has been found. An adit tunnel has been driven 450 ft. on this vein and three distinct ore chutes have been uncovered.

Frank Loring, the owner of this property, says that there are twenty thousand tons of shipping ore actually in sight between this level and the surface. Stopers will be put to work breaking down this ore as soon as the tramway is completed to the mine. At the mouth of this tunnel a shaft has been sunk for a distance of 70 ft. on the ore chute, and at the bottom it is fully 5 ft. in width; this shaft in future will be the main workings of the mine. One hundred and thirty feet to the north a parallel vein has been found and a shaft is now being sunk on a fine body of ore. This lead will also be worked from the main tunnel. Midway between these veins a small vein of exceptionally high grade ore was cut through. During the last year the Josie has shipped in the neighborhood of twenty-five hundred tons of ore of a gross value of \$140,000, which has paid for the installation of a fine power plant, as well as for all development work. The plant consists of a 7 drill Ingersoll compressor, an 80 h. p. boiler, in addition to an Ingersoll hoist and a Knowles sinking pump.

IRON MASK.

The Iron Mask adjoins the War Eagle on the east, and together with the Virginia was originally the property of the War Eagle Company. However, a separate corporation was formed to develop it. Undoubtedly the lead on this property is the great War Eagle lead, all developments