

The local papers call it the greatest gold mine in the world and openly invite contradiction. The shaft is now down 432 feet, and shows a solid bottom of ore, which the owners say will average \$200 to the ton in gold easily. At the bottom drifts have been run both to the east and west, and with cross-cuts have opened up an immense chute of ore, nearly thirty-six feet of solid high-grade ore. The diamond drill has been at work on the east 350 ft. level, boring to the north. It is unofficially stated that a parallel vein of ore, twenty-two feet wide, that averaged fifty-six dollars per ton in gold, has been cross-cut in several places. This vein only lies thirty feet to the north of the present workings. The stock of this mine is hard to get now at \$4 per share.

The War Eagle is working but few men, doing very necessary development work. The ore shipments from the mine are practically nil. The new 20-drill compressor is now in place, all parts fitted together, and the trial run was made on Wednesday last, and the machine in every way worked most satisfactorily. With the exception of the pipes connecting the reservoir with the compressing cylinders everything is ready to begin work. It is by long odds the most handsome piece of machinery in the Trail Creek camp, and is every way up to date. It is a Canadian built machine, being made by the Rand Drill Co., at Sherbrooke, Quebec. It is a compound 20-drill compressor. The engine has a 12-foot fly-wheel, Corliss valve gear, with a vacuum cut off. The low pressure cylinder has a diameter of eighteen inches, and the high pressure a diameter of thirty-six inches. In addition to the ordinary valve gear acting on the cut-off, there is a connection with the air tank also, affecting a governor. The two compressing cylinders have their valve motions controlled by the eccentric, thus insuring a minimum loss in the opening and closing of the valves.

The Homestake, which is owned by a Canadian Co. of Vancouver, B.C., is looking exceedingly well in the lowest workings. The contracts in the shafts have been completed, and a drift connects the No. 1 and No. 2 shafts at a depth of fifty feet, thus insuring good air and safe exit, in case of accident, to the miners. A drift has been started to the west at the fifty foot level, and in the face there is a showing of solid iron sulphide ore, that the officials of the company say has a total value in gold, silver and lead of \$35 to the ton. It is a most noticeable fact the silver and lead values (i.e. the galena) is disappearing with depth, and the gold value becomes greater. A contract for fifty feet of work has just been let in No. 2 shaft. Development work will be kept up all spring, though no more ore will be shipped until the completion of the tramway.

It is a matter of regret that the initial attempt to matte Trail Creek sulphide ores, though not a failure, was by no means a success. The test run of the Trail smelter was made wholly on LeRoi ore, and at this time there is a quantity of ore, very silicious, that has a very good gold value, and right here is the place the difficulty lay. Silica is the exception and not the rule with Trail Creek ore, and it was the excess of silica that caused the trouble. So the freezing up of the Trail Creek smelter can not in reality be called a proof that the sulphide ores can not be successfully matted. The smelter officials also say the blame lies with the coke, which was of very inferior quality. However, lack of iron need not stand in the way of the matting of ores from this camp, as there are mountain masses of it here, with a small gold value, that are easily obtainable.

Before C. W. Callahan left Trail Creek, he examined the Deadwood claim in the South Belt, and was so much "taken" with the property that he, in conjunction with C. D. Rand, took a year's bond on the group, which consists of the Old Abe, Junction and Deadwood claims for \$35,000. The Deadwood is a high grade galena proposition, with a small gold value. The mine is developed by a tunnel 102 feet in length, from which tunnel a winze has been sunk 30 feet, in which there is a showing of ore. Messrs. Callahan and Rand bond themselves to at least expend \$25 per diem in development work, until the expiration of the bond, which is in February, 1897.

It is a most problematical question, where the north boundary of the famous Trail Creek District really is? The identical formation found in Trail Creek has been found twelve miles to the north on Murphy Creek, and it is a well known fact that there is no radical change of formation in the intervening scope of country. The ore is very similar, and there is a series of fissure veins in the Murphy Creek district with most wonderful surface showing. The Murphy Creek camp is practically in the same condition that Trail Creek found itself in five, even four years ago, isolated and unknown. However, considerable pressure is being brought to bear on the Provincial government, and it is almost a certainty that an appropriation will be made in the estimates for the construction of a wagon road along the north bank of Murphy to the Columbia river, a distance of nine miles. The construction of this road will open up a region, the limit of whose gold-bearing capabilities is yet unknown.

Champion Creek district, on the opposite or eastern side of Columbia river, is rapidly coming to the front as a first-class camp. A winter's work on half a dozen claims has proved the existence of large deposits of sulphide ore. Men have been at work all winter on the Free Coinage, Eliza Bell, Ethel, No. 1, Leblanc and Blackhawk claims. An especially fine showing is reported on the shaft of the Blackhawk, and in the tunnel and open cuts on the Leblanc and Ethel respectively.

Work on the Montreal claim, which is situated right in the town, still continues. The shaft is down twenty-five feet in plenty of ore. Surface water is becoming very troublesome.

Work on the Gopher, in the South Belt, is going on apace. Contracts for drifts both ways from the shaft at a depth of 50 feet, have been let. The Gopher has a large chute of ore, that runs especially well in copper.

Assessment work on thirty-two claims was recorded during the month of February.

Men crowding into the camp, looking for business openings of all kinds. Rents have taken a decided jump in thirty days.

Mr. George Johnstone, Collector of Customs at Nelson, B. C., courteously sends us the following:—"The ores of this district are not known by the names of gold and silver ores, but are classed as galena, copper and pyritic, the precious metals being contained in them. The galena carries silver and lead, the copper silver and gold, and the pyritic also carries silver, gold and copper, as well as iron, which is not of any value except as a flux.

ORE SHIPMENTS FOR YEAR 1895.

Gold	Value—\$822,008
Silver..... 1,176,360 ozs.	" —\$736,841
Copper..... 1,856,653 lbs.	" —\$117,788
Lead	" —\$351,463

Total value—\$2,028,100.00. Total tonnage—28,202 tons.

Slocan District.

In the Summary Report of the Geological Survey, just issued, Mr. R. G. McConnell writes:—

A number of mines and prospects in the district were visited during the progress of the work and brief notes were taken, some of which may be of interest here. The granite area south of the main Slocan mining camp, hitherto somewhat neglected, was prospected pretty thoroughly during the past season, and a large number of claims—some of considerable promise—were staked out. Among those visited in this section were the Arlington, celebrated for the richness of its ore, the Nancy Hanks, Tamarac, Dayton and Enterprise.

The Arlington, on Springer creek, located in 1894 by C. E. Fielding, follows a zone of shattered rock, which as shown in the single opening so far made, has a width of from six to eight feet. The ore occurs mostly in siliceous stringers, ranging in width up to four or eight inches, which run in an irregular manner through the shattered and altered granite, but is also found disseminated through, or in small bunches, in the granite itself. It consists principally of native silver, galena, gray copper and argentite. The lead strikes in a north-easterly direction and is reported to be traceable all the way to Ten-mile creek, a distance of over ten miles. Claims have been staked on it for this distance.

A large boulder of altered granite, holding stringers of ore resembling that of the Arlington, occurs on the Speculator, the third claim north of the Arlington. The Tamarac is situated on Whittaker creek, a branch of Springer creek. The workings here have exposed a quartz seam, from twelve to eighteen inches in width, holding grains and bunches of galena, argentite, and ores of copper. The seam is very regular and has been uncovered for a distance of 250 feet. The Dayton and Nancy Hanks are somewhat similar in character.

The Enterprise, situated on the northern slope of the ridge separating Springer from Ten-mile Creek, was located in 1894 by R. Kirkwood. This claim is crossed by a well-defined fault-fissure, running in a north-easterly direction and dipping to the south-east at an angle of 80°. The fissure has a width of twelve to eighteen inches and is filled partly with ore and partly with a quartz gangue. The ore consists mostly of galena with some gray copper, and in common with other ores in the granite belt is high grade in silver. A large number of claims have been staked out in the vicinity of the Enterprise, but little development work has so far been done on them.

The claims on Eight-mile Creek, north of Ten-mile Creek, occur mostly in an inlier of hard, rusty slate or schist, several square miles in extent, inclosed in the granite. The L. H., Baby Ruth, Los Vegas, Mountain View, Granite Mountain, Daisy, and a number of others are situated on this strip. The L. H. is a gold claim of a somewhat peculiar character. The slates are fissured along an east and west line, and the schistose country-rock adjoining the line of fracture on the south has been altered, silicified, and impregnated in places with ore, along a zone varying in width from 20 to 40 feet. The alteration varies greatly in intensity, in some places being scarcely noticeable, while in others the rock has lost all traces of its original character. The ore appears to consist mostly of native arsenic, mispickel, pyrite, and pyrrhotite, distributed through the vein in an irregular manner. Assays from samples taken at intervals across the whole width of the lead (40 feet) are stated to have averaged \$23 in gold to the ton, and others taken across a selected band seven feet in width, to have averaged \$125 to the ton.

The Baby Ruth, situated on a branch of Eight-mile creek, about half a mile below the L. H., shows a well defined fault fissure a couple of feet in width, filled with a quartzose gangue and bands of residual clay. The Granite Mountain and Mountain View leads appear to consist of narrow tongues of slate penetrating the granite. The slate is partly altered and mineralized to some extent with pyrite, blende and galena. The Los Vegas and Daisy, both reported to be valuable claims, were not examined.

Small inliers of slate occur in the granite in what is known as the Galena Farm, a plateau south-east of Silverton, so called on account of the numerous galena boulders scattered over it. The principal claims examined here were the Noonday and Currie. The workings on the Currie consist of a small shaft and a short tunnel, both inaccessible at the time of my visit, on account of water. The lead, where uncovered, has a width at the surface of 10 to 15 ft., and consists of a brecciated mass of quartz and angular fragments of slate, mingled with galena, blende and pyrite. It appears capable of yielding a large quantity of concentrating ore. The Noonday, situated near the junction of the slate inlier with the granite, is somewhat similar in character. The known area of the mineralized granite belt was greatly enlarged during the latter part of the season, and now includes all the country drained by the various branches of Lemon and Cedar creeks, and probably extends even further to the south and east. The rough character of the country, and the almost total absence of trails, has prevented much development work being done on the various lodes, beyond that required for assessment work, and it is highly desirable that readier means of access to this promising region should be opened up. A short account of some of the principal mines in the main Slocan mining camp was given in my summary of last year's work. A number of others were visited during the past season, but it will be impossible here to make more than the briefest mention of these. This camp has passed the doubtful stage, and is now in a thoroughly prosperous condition. The workings on the older mines have proved the continuity in depth of the lodes in most cases, and new outcrops are constantly being opened up. Several tramways and concentrators are in course of construction, and two lines of railway will this winter compete for the rapidly increasing output of ore.

The principal mines in the Slocan district are situated on the slopes of the long, irregular ridge separating Four-Mile creek from the south fork of Carpenter creek, and on the ridge separating the south fork of Carpenter creek from Seaton creek, or the middle fork of Carpenter creek. The former ridge is known as Silver mountain, and around it are grouped the Alpha, the Reed and Robertson groups, the Canadian group, the Mountain Chief, the Alamo, Idaho, Cumberland, Yakima, Wonderful, Ruth, Slocan Star, Ivanhoe, and many others.