

The Klondike Region

Report Prepared by R. G. McConnell of the Dominion Geological Survey Department.

Thousands of Streams in the Gold Belt Remain to Be Explored.

(Special Correspondence of the Times.) Ottawa, May 22.—R. G. McConnell, of the geological survey department of the Dominion, has prepared a report of the Klondike region, which is intended to form part of the annual report of the department, but in order to meet the demand for information it is to be printed separately. The report is based almost entirely on field work carried out by him last year.

Some accounts of the geology and conditions in the Klondike goldfields were given in 1898, but the present report may be regarded as the first result of a systematic and detailed scientific examination of the district.

The route, says Mr. McConnell, is the Chilcoot or White Pass to Dawson, which entailed considerable hardship and some danger in 1896 and 1897, is still followed, but under very different conditions. The pack trail of the pioneer across the White Pass has been replaced by a well-built and equipped railway, and the canoes and small boats on the rivers have given way to a fleet of steamers.

along Bonanza, Hunker, Eldorado and Quartz creeks, almost rival in importance the creek-gravels themselves. They are everywhere more or less auriferous and are very rich over wide stretches. They suffer, however, from the scarcity of water on the hill-sides, and the ruinous methods the miners are forced to adopt, when operating on a small scale, prevent any but rich claims from being worked.

Bonanza creek is the most important of the gold-bearing creeks of the Klondike district, and is the one on which gold in large quantities was first discovered. It heads in the Dome Ridge with branches of Quartz and Hunker creeks and empties into the Klondike river a mile and a quarter above Dawson, after a course in a north-northwest direction of a little over seventeen miles. It has a drainage-area of approximately 113 square miles. It is a comparatively small stream even near its mouth, where it measures, in ordinary stages of the water, about fifteen feet in width by three or four inches in depth on the bars. It flows, however, a steady stream and furnishes at least a sluice head of water throughout the season all along the productive part of the valley. The principal tributaries of Bonanza creek are Eldorado creek, Adams creek, Boulder creek, Forty-nine creek and Sixty-seven creek on the left, and Carmack Forks, Homestead creek, Gastin gulch, Queen gulch and Mosquito creek on the right.

The creek-gravels of Bonanza creek have been found productive from near Victoria gulch down into the eighties below lower discovery a distance of over eleven miles. The values are, however, not uniform and stretches occur which have proved too barren to work under present conditions. The richest and most uniform part of the creek extends from Victoria gulch down stream for about two miles. A number of claims in this stretch will yield over half a million dollars each, or at the rate of \$1,000 or more per running foot, while the product of one or two claims is expected to double this amount.

The terrace-gravels, except on one or two points, are usually quite narrow, and are consequently soon exhausted. They are not so productive as the creek-gravels, but a considerable number of the claims pay good "wages," or from \$8 to \$10 per day per man, and a few yield much higher returns. They are worked largely by rockers.

The quartz-drift or old valley deposit is of scarcely less importance than the creek-gravels themselves. Claims of varying richness, often several tiers deep, have been staked on this deposit wherever it occurs, all the way from McKay gulch down to the forks down stream from Eldorado. The lower down stream to near Boulder creek, a distance of about three miles. Pay-gravels are not, however, restricted to this stretch, as good claims, by which is meant claims that yield over \$10 per day per man, are being worked on the hill below Gavlin gulch, on Lovett gulch, near the mouth of the valley, and at a number of other points.

Bonanza creek gold occurs in coarse, rough and flatish grains in the upper part of the creek, and in heavy flakes in the lower. Nuggets are not plentiful as a rule, but occur in considerable abundance near the mouth of Skookum gulch, where they are evidently largely derived from the hill-gravels. The value of the gold is variable, but is usually about \$16.50 per ounce. The gold in the quartz-drift is lighter in color than the creek gold, is of lower grade, and is more angular and includes a large proportion of mica.

The productive portion of Eldorado creek extends from the mouth of the valley up to near Gay gulch, a distance of about three and a half miles. The gravels along this stretch of the valley are of extraordinary richness, and few breaks have been found in the continuity of the pay-stream. Some of the claims will yield more than a million dollars each, or at the rate of \$2,000 per running foot, while ground running \$1,000 per running foot is common. The pay-gravels extend practically, with varying values, all across the bottom of the valley, and have a thickness of from three to four feet. The gold also penetrates to the bed-rock to a depth of two feet or more. The upper part of Eldorado creek has so far not proved productive. Terrace gravels of moderate richness occur along the valley at intervals from Gay gulch down to the mouth. The quartz-drift is of less importance along Eldorado creek than on Bonanza creek, but has yielded good returns from many of the claims on French Hill. Eldorado gold is very coarse and is often almost unworkable. Nuggets are more plentiful than on the other creeks, and are often found in an imperfectly crystalline condition. The gold is lighter in color and of a somewhat lower grade than that of Bonanza creek.

Creek claims of varying richness are being worked along Hunker valley from claim No. 42 above Discovery down nearly to No. 60 below, a distance of about ten miles, and pay-gravels are also reported from several points lower down. A stretch of the creek about three-quarters of a mile in length, about Discovery claim, is proved extremely rich, and in places is stated to yield at the rate of \$1,000 per running foot. Terrace-gravels, affording moderate, and in one or two cases high returns, occur scattered along the sides of the valley from the Forks down almost to the mouth. The quartz-drift has not proved so rich as on Bonanza creek, but numerous claims yielding fair values are being worked for some distance above and below Gold Bottom creek and on both sides of the valley below Last Chance creek. Hunker creek gold, like that of most of the other creeks, occurs in coarse, bulky grains, with occasional nuggets in the upper part of the valley, and in flatter and smaller grains lower down. In the rich stretch near Discovery claim nuggets are fairly numerous. The gold from about claim No. 45 below down to No. 59 below is generally superficially darkened by iron.

The most productive part of Dominion creek extends from near the mouth of Lombard creek down to a point about half a mile below Lower Discovery, a distance of about five and a half miles. The pay-streak is not uniform along this stretch, and the values, according to the present workings, are very variable. In the richer portions the gold-contents of

the gravels approximate \$500 per running foot, and in the poorer parts the returns have not paid working expenses. A great majority of the claims, however, situated along the portion of the creek mentioned, promise good returns if economically worked. A nugget weighing 545 ounces was found on Claim No. 2 below Upper Discovery.

Claims were being worked on Sulphur creek at various points from No. 39 above, to 33 below Discovery, a distance of over ten miles. Claims have also been worked at a profit in the forties below and it is stated on good authority that pay-gravels have been obtained at No. 75 below, increasing the productive part of the creek to about fifteen miles. The gold is distributed somewhat irregularly. The best part of the creek, so far developed, extends from about Green gulch down to a mile or so below Discovery. It is estimated that in parts of this reach the yield will amount to and in places exceed \$5,000 per running foot, or at the rate of a million dollars per claim. Only a few of the claims promise this amount, but good ground has been proven to exist along the greater part of this stretch and but few blanks have so far been found. These, with Gold Run and Quartz creeks are the most important creeks, but others, such as Eureka creek, Australia creek and Flat creek, which have been prospect and found to carry gold to some extent.

In concluding his report Mr. McConnell says: "The outlying districts have been neglected by the old miners of this stretch. Klondike discoveries were made, and the work of the many inexperienced men who have overrun a large part of the country during the past two seasons has been mostly wasted. They followed each other in crowds up and down the main arteries, but did little effective work. As a matter of fact, less genuine prospecting has been done since the Klondike discoveries than in the preceding years, notwithstanding the rush. Thousands of streams in the gold belt stretching for hundreds of miles from Atlin to the Klondike and farther to the north, still remain to be explored, and the work of the prospector will not be completed for many years."

Mining News

Table with columns: Ship Name, Tons, Week, Year. Includes Le Roi, War Eagle, Centre Star, Iron Mask, Evening Star, Monte Christo, I. X. L., Giant, Iron Colt.

The Solid Gold group is showing up splendidly. About 3,200 feet of work has been done on the B. C. mine. John Sinclair, foreman of the Ennis-mine prospect, has just uncovered a very strong ledge of magnetic iron and iron.

The ore bunkers of the Old Ironsides, Knob Hill and Victoria, estimated to hold 8,000 tons, will be filled some day next week. On the Winnipeg some 3,500 feet of work have been done. It is expected that development on this property will be resumed shortly.

On the Snowshoe the tunnel, just off the wagon road, started a short time since, is now in 100 feet. Some nice ore has been encountered. The Jackson brothers have struck a good quartz vein on the Contact claim, and from the appearance of the ore it should carry very good values. One of the promising claims of Summit camp is the Blue Bell, occupying the space between the J. S. and Mountain View. It has a well-defined ledge, that is being exposed by large open cuts. Two shafts have been sunk 12 and 15 feet respectively.

When the Mountain View was bonded last October development was immediately started on the property, and was kept up all winter. A 60-foot tunnel was driven to crosscut the ledge, and a shaft was sunk at the old workings, from which considerable drifting was done.

time past. This will in time accelerate the approach of that period when shipments should be recommended with advantage to the mine.

Appended is a statement of the shipments for the past week and year to date:

Le Roi—The great hoist of the mine will probably be running this week. That at the 250-foot level, will, for the present, be left in position until a sufficient time has elapsed to allow it to be seen that the new hoist is running truly and without undue friction. The change has been contemplated for some time, but has not been made, although preparations have been made, because there was no immediate hurry. The change is now made in the ordinary course of events, owing to the more expensive working of the hoist at the 250-foot level.

Iron Mask—The crosscut to the north vein has been completed. It has reached the ledge and has penetrated 18 inches within the foot wall. The chute looks well, although no assays have as yet been taken. The main development shaft is down to about the 500 level, and a sumph is being cut below the 275 level on the other shaft. In other words, the present development work of the mine is entering upon its second stage. The first stage has proved remarkably successful and has established not only the presence of large ore bodies in the main vein beyond the 200 level, but also the fact that the vein in the same part of the mine in place, but has also resulted in the discovery of other important bodies of ore lying between these two whose existence was previously to the undertaking of the work begun upon last February by Superintendent Hall entirely unsuspected. And in the sinking of the main development shaft ore bodies have also been come upon which, together with those already indicated, should place the Iron Mask in the front rank of the mines of the camp.

Le Roi—Connection was made and the shaft brought down to the 900 level. Development is going on as usual. The south or Black Bear vein is being worked. This will now be broken out to its full dimensions and timbered up. In the meantime a contract has been made to sink the shaft from the 900 to the 900 level. Development is going on as usual. The south or Black Bear vein is being worked.

ENERGETIC MR. EDDY.

He is Rebuilding His Works on a Larger Scale Than Before.

The most energetic man in the vicinity of Ottawa is Mr. E. B. Eddy, head of the firm of E. B. Eddy & Co. A few weeks ago he saw half a million dollars' worth of property go up in smoke, and with it the result of his labors of years. But he took the matter like a philosopher, and saw only the future, in which he might rebuild. He dropped into No. 16 at the Parliament buildings two days ago, and although over 70 years of age, he stepped into the vim of a young man.

It was remarked by Mr. Frost, M.P., that a more vigorous man than Mr. Eddy was not in Canada. The other occupants of the room at the time agreed, and paid a glowing tribute to the man, who, at his advanced age, could, like a young man, face the battle of life anew. But Mr. Eddy is not alone in his efforts. He has a legion of friends who are now rallying around him and giving him substantial aid and encouragement.

LETTER TWISTING.

There are many Latin anagrams of unusual merit and interest. With wonderful skill and patience, and almost incredible success, the long sentence "Ave Maria, gratia plena, Dominus tecum" (Hail, Mary! full of grace; the Lord is with thee) has been transformed into "Virgo serena, piissima, et immaculata, (Virgin serene, pious, pure, and spotless); and also into "Regia nata, evidens luctum amari pomii" ("Royal offspring, escaping the sorrow of the bitter apple"); "D. Martinus Lutherus, sine deum, ut servat, ut tunc" ("St. Martin Luther, without God, to preserve, to then"); "Elizabetha Regina Angliae" becomes "Anglia libera, Iberia les" (to the English a lamb, to Spain a lioness); while "Carolus Rex" shines out as "Carus ero lux" ("to-morrow I shall be a light"), and is said to have been written by King Charles II. of the eve of his restoration.

A sad passage of her fate was found in the sentence "Maria Steuarda Scotorum Regina," which forms the anagram "Trois vi regine morte amara cadit" ("Three times by regine's death, I fall by bitter death"). The curious juggle with letters which allies the title "Supremus Pontifex Romanus" with the phrase "O, non sum super petram iustus" ("O, I am not founded on a rock"), a sentiment quite out of harmony with the claims of its crafted author, can be a slight interchange of letters be altered into the very motto which would have been appropriate and acceptable to Pope Pius Nonus, "Sum Nonus super petram iustus" ("I am Nono, founded on a rock")—Chamber's Journal.

TELEGRAPHIC TIGERS.

The London Daily Express publishes the following from Vienna: "A correspondent at Warsaw sends by mail an account of a rebellion of peasants in the Russian provinces of Kiev, Poddolia, and Charkov. The rising is supposed to have been organized by nihilists. Martial law was proclaimed, and large bodies of troops quickly suppressed the insurgents." For the purpose of ascertaining how long a balloon will remain aloft, the largest ship ever constructed is now being built at Berlin. Five aeronauts will ascend on July 15th, planning to remain aloft for weeks and to descend where finally carried.