REPORT

ON

THE

FINCH GROUP OF MINES

SITUATED

IN MAGNOLIA MINING DISTRICT

BOULDER COUNTY COLORADO

Ву

Wm. M. Rule 1890 WITH MEMORANDUM BY

D. L. Finch

1910

Report furnished by Dr. E.M.Finch,

COLORADO SCHOOL OF MINES
GOLDEN, COLORADO

REPORT ON THE FINCH GROUP OF MINES, SITUATED IN MAGNOLIA MINING DISTRICT, BOULDER COUNTY, COLORADO

The Finch Group of Mines, located at Eagle Rock, Magnolia Mining District, Boulder County, State of Colorado. The property consists of the following lode Mining Claims: Viz.-

Lawrens, Anna Eliza, Otego, Oneonta, Edith May, Fairplay and Birmingham Lodes, all in one compact group and accessible for development by the oversight of one man. The property is about 10 miles from Boulder west, and 6 miles from Crodel, a station on the Salt Lake, Greeley and Pacific Railroad, where the ore can be shipped to the Boulder or Denver Ore Markets.

The property has an altitude of about 8,000 feet above sea level, on a beautifully wooded mountain, the scenic excellence of which is unsurpassed. These mines are situated in the great telluride belt, which runs nearly north and south for miles, extending over a vast area, and cutting through our best and most productive mining districts of the Country.

These mines or lodes, are strong, well defined fissures, and can be traced on the surface by open prospect pits, tunnel on the course or trend of the wein, Adits, (cross-cuts) and shafts, for several hundred feet in length. The strike of these lodes is North east, and South west, with a general dip North, as are all the best producers in this section. The gangue or matrix, is quartz of a dark color. The walls, where reached, are good and well defined. In many places the walls have not been discovered, and only one has been followed this being of granite.

The metallic contents of the veins, are gold and silver. The lode claims are 1500 feet long by 150 in width each, and four of them are patented, forming two claims, 3,000 feet long by 300 feet wide, continuous as shown in the Plat of the Finch group.

The property is finely situated for tunneling on the vein, and extensive operations, with a never ending supply of timber for mining purposes, on the patented land immediately adjoining the property, and surrounding it.

NATURE OF THE ORES.

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The gold and silver occurs in the telluride ore, which also carries a percentage of sulphur etc. The width of the lodes in many instances has not been ascertained for reasons above given. One wall of the vein not yet discovered. And to make myself more clearly and thoroughly understood, I had better take the claims separately, giving the development of each as near as possible.

DEVELOPMENT

The OTEGO LODE is the most south easterly of the four patented claims and well situated for tunneling in on the trend of the lode, from the gulch. The ore body is about 3 feet thick between the walls, and looks very promising indeed. The ores is telluride of gold and silver, and assayed as follows: 14,4/10 ounces gold, and 11,1/10 ounces silver, to the ton. Perhaps we may have taken the best of the mineral for these separate samples and assays, but it is hardly possible I should have done so in every case where samples were taken, as no care was exercised in selecting the best ore.

The mine is capable of great results by development and careful expenditure of capital in opening out the ore bodies. A series of tunnel levels on the vein, about 4 in number, would reveal immense ore reserves, and supply any desired quantity of stamps, but I must take the next vein, or my report will be too long and cumbersome. North of the Otego Lode is situated the,

ONEONTA LODE, of the same character and grade of mineral, and the very same method of development should be employed. The ore matter is opening out wedge-like, with the point in the upper part of the tunnel (roof) and at the floor or bettom of the level, it is 12 inches thicker, being 18 inches in the back, and 30 inches thick in the bettom.

The indications for an immense ere body are most flattering, to say the least. To enter into the possibilities and probabilities of the future, with such a vein, would open up a world of speculative figures that would become amazing in results, therefore I shall only give what was revealed to me, and may be seen by any other mining engineer and expert, by visiting the group under consideration.

This lode is also opened by tunnels and shafts and prospect pits, with the selfsame advantages for a course of Adits or tunnels on the vein as that of the Otego. Perhaps however, it will be well to remark in passing, that it is the purpose of Capt. D.L.Finch eventually to run a cross-cut tunnel from Eagle Rock on Boulder Creek, to tap the Oneouta Lode, and from this point to form a network of excavations 800 feet below the surface, and mine the entire group through this one main tunnel, except perhaps the two most Southern lodes, Fairplay and Birmingham.

At a point near the entrance or mouth of the projected tunnel, a millsite is owned by Mr. Finch, where he will place a mill for the purpose of testing the ore by running it out through this main tunnel in ears, and dump the mineral into the mill. The scheme is a grand one and worthy of consideration by those who may become interested in these mines.

EDITH MAY LODE, is the extension on the west of the Otego and shows an immense vein of quartz thrown up on the surface. The size of the vein has not yet been fully ascertained, as the walls have not been found and defined. The lode has been explored by tunnels, and shafts, and open cuts on the vein, and runs made from the mineral extracted during these developments, ran 5-6/10 ounces gold, 10-4/10 ounces of silver: 2nd class gave 2-6/10 ounces gold, and 3 ounces silver, to the ten of 2000 lbs.

Assays from this same sample (first class) were sent to Washington, D.C. for a test of its value, which was as follows: 22 ounces gold, 6 ounces silver, to the ton, or a total value at that time for the value contained in the ore of \$461.34 per ton. Comments on the above are unnecessary.

Anna Eliza Lode, is directly west of the Oneonta, and continuation of the same, being included in the patented group. The center stake of this group is the corner stake of the 4 separate lodes.

This wein has also a shaft on it, 30 feet deep, with a 30 inch ore streak in it exposed. The mineral is of the same character as that of Edith May, with a richer ore coming into the bettom of the workings, which reasts out free gold in globules over the piece of mineral. Of course the test is a very crude one indeed, but is nevertheless continually practiced by prespectors and miners, when desirous of knowing what is contained in the ore and vein matter.

FAIRPLAY LODE, is a continuation of the Birmingham Lode, and is developed by a tunnel and shalf. Vein of mineral exposed in shaft and tunnel, 3 feet thick, that mills \$30.00 per ton, without assorting. From the samples selected by myself, as broken down from the vein exposed, the assay gave \$47.65 gold, and a few dollars silver, to the ton. This was made for my own satisfaction, and is not known to Cap. Finch, at this writing.

THE BIRMINGHAM LODE, an eastern extension of the Fairplay, has a tunnel on the vein, 35 feet long, which has opened out an ore body 8 feet thick. An Immense out-cropping stands above the surface, a short distance above this tunnel, that I believe would certainly pay a big profit to treat in some cheap process, or even a stamp mill erected on the property, and near this point in the small creek that runs at the base of this small mountain. If a tunnel were run on the trend of the lode, into the mountain, a back of about 400 feet would be realized, i. e. a shaft sunk from the apex of the mountain on the back of the ore body would connect with the tunnel when at a depth of 400 feet below surface.

This is the only claim, the ore from which has not been assayed or a mill run made from it, for the reason that the ore was so much like that of the Fairpley, that it was regarded as a waste of time and money.

A huge perphyry lede crosses the entire country just above the breast of the tunnel, and when the dike is encountered, good ore may reasonably be expected.

THE LAWRENS LODE, is the most western of the group, and has been developed by a shaft, 22 feet deep. From the surface to its present depth, good ore has been a characteristic of this vein, although the vein matter has been much scattered, showing fine particles of talluride disseminated through the entire lode. When 20 feet had been reached, the vein matter had become more concentrated, and a sample was taken and assay made by Colvin and Cowie of this City, which gave the following results: $45-\frac{1}{4}$ cunces gold, and $19-\frac{1}{4}$ cunces silver to the ton.

The ore vein, at this writing, is 8 inches thick, and continues to open out with every foot of development, and when this vein becomes more solid and carries its regular course of solid ore, great results may be expected from it. As it now stands, the water is too quick and abundant for economic mining, when it is removed by a windlass and man power. Other means must be employed and machinery erected to work this shaft successfully and to a profit.

Elegant streams of water are constantly flowing from three Springs near the Lawrens Lode and a neat cabin is erected, in which Mr. Finch and wife spend the summer months, secluded from the busy world.

To mine these lodes successfully, a mill must be built, when the ore can be cheeply utilized, and the immense bodies of low grade mineral can be concentrated by some cheap process, and the gold and silver saved. I have already speken of the tunnel scheme on page 4 from Boulder Creek, where abundance of water may be had for all milling purposes. See sketch showing elevation and Millsite. A wenderful amount of ore would stand exposed above the level of this mill-site, when a tunnel from the creek taps the vein.

COST OF MINING

The rock in this district is about the same hardness in all the large veins, and can be mined for about the following prices, - Drifts for \$500 and \$6.00 per foot; shafts sunk for \$10.00 per foot and back-stopping for about \$14.00 per fathom.

Thus by careful and judicious management, I see no reason why this group of mines would not be an elegant investment. Each week would give greater development to the property and the ore become more valuable and concentrated as depth is attained.

QUANTITY OF ORE IN SIGHT To estimate the amount of ore now exposed is wish to purchase. I make the above statement for the

To estimate the amount of ore now exposed is left for those who wish to purchase. I make the above statement for the reason that such fabulous statements are being constantly made by experts all over the Country, of the wealth in sight, which is rarely, if ever realized from the mine by actual working.

The proper estimate to make and set forth the amount of ore mined already from a given number of feet, from the same size vein, and as no estimate whatever can be obtained and no account kept of the amount of ore mined, it will be better to figure, if at all, on the size of vein in sight, and price per ton as given above from Millruns and Assayers of ability and known integrity.

This group may be called a prospect, and not a fully developed enterprise, and should not be regarded in any other light.

The possibilities for the future are great for these ledes, yet the fact remains the same of their being prospects that will require money to develop them into mines. The outlook however, is very flattering for these mines, and I have no hesitancy in saying there seems to be a bright future for them.

ADVANTAGES

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lst. The property is situated on a slope of the mountain, where tunnels can be run on the course of the vein without the aid of expensive machinery for hoisting, etc.,

2nd. There are large bodies of ore exposed in all the excavations, ready to be stopped and utilized in the mills.

3rd. The wirgin state of the property, and each opening on the lode shows a large body of ore, except in the Lawrens shaft, where the vein 8 inches thick of \$460. ore.

4th. The never ending supply of mining timbers and water for milling purposes, on Boulder Creek.

5th. A perfect title to all the property, with four lode claims patented, and the work done on the others regularly.

6th. One of the best mill-sites and tunnel-sites in Boulder City to Caribon, the great silver camp of the Country.

Any other information that I may have omitted at this writing will, if desired, be gladly furnished.

Very respectfully,

Wm. M. Rule, M.E.

Boulder, Colorado, March 20, 1890

Boulder, Colorado, June 10, 1910.

The Finch group of mines containing seven claims 150 feet by 1500 feet each in Magnolia Mining District, Boulder County, Colorado, ten miles from Boulder City in the Telluride Belt, all true fissure voins. The claims are covered with timber suitable for mining and building purposes. The claims all have more or less a development work done on them and are named as follows.

The Oneonta, The Otego, the Annie E. and the Edith May, all patented; and the following unpatented claims: Mohawk, and Little Joker; and the Lawrence, a patented claim. You can locate them by the accompanying map. The Lawrence has a tunnel 90 feet in and a shaft 25 feet deep and I have taken out mill runs and assays of ore which run from \$20.00 to \$800.00. There are four large springs of never failing water on this claim and confortable cabins and other out-buildings. Mohawk has two tunnels, one 90 feet in and the other 606 feet, with iron track and ventilating pipes, and a blacksmith shop and some other work on the surface to ascertain the width of the vein, which is from six to eight feet.

In running the tunnel we cut am ore schute in which the cre runs 210 os. in gold. The joker has a shaft about 30 feet deep and assays \$20.00 The Edith May has a shaft 20 feet deep and a tunnel 80 feet in length, and I sent ore from this claim to Washington, D. C., for an assay by the Government, which runs \$461. to the ton. The Annie has but little work- a shaft 25 feet deep exposing a vein 30 inches wide. The Otego has a shaft 40 feet deep and a tunnel 50 feet in length, with a vein 36 inches wide, with ore that assays from \$14.00 to \$290.00. The Oneonta has a shaft 75 feet deep and a tunnel 30 feet in length with a vein 36 inches wide. These last two mines can be worked by tunnels one above the other.

The mountain is so steep that there can be six tunnels run in at 50 feet rise each. The tunnel site located on Boulder Creek, as you will see by the map, will cut the veins of the group from 900 to 1000 feet deep, and there are three or four strong veins the tunnel will cut between the creek and the group or claims which would belong to the parties who run the tunnel. There is a good mountain road to the property.

The mines are all gold-bearing, and will bear inspection.

(Signed)

D. L. Finch,

COLORADO SCHOOL OF MINES
GOLDEN, COLORADO