

A Mountain of Gold.

BY C. S. PELHAM-CLINTON.

“**I**T'S a mountain of gold,” said Mr. Samuel Newhouse as we came in sight of Seaton Mountain, “and I've the key to the treasure!”

Having been in America a good deal, I was somewhat sceptical with regard to the value of this mass of dark grey stone that was the most prominent feature of the landscape for miles; and also to the “open sesame” he spoke of as well; but that we were in a golden region was very plain to anyone, even if I had not known before that Central City, the point for which we were making, was the principal town of the “Little Kingdom of Gilpin,” and for years had been an established gold camp.

As the train slowly wound its way up the grade which seemed far too steep for safety, along the banks of the very muddy creek that a boy could jump with ease, at every turn we saw signs of the precious metal.

While the stream itself, at the time of our visit, was not more than a few feet wide, the width of its course in flood-times was very clearly defined, and the bed of the now almost dry creek was now the scene of great activity—hundreds of men of every nationality being busily engaged in washing for gold. It was a “no man's land,” the only notice of ejectionment from which was a flood, and when that had subsided the results were that fresh gold had been brought down from

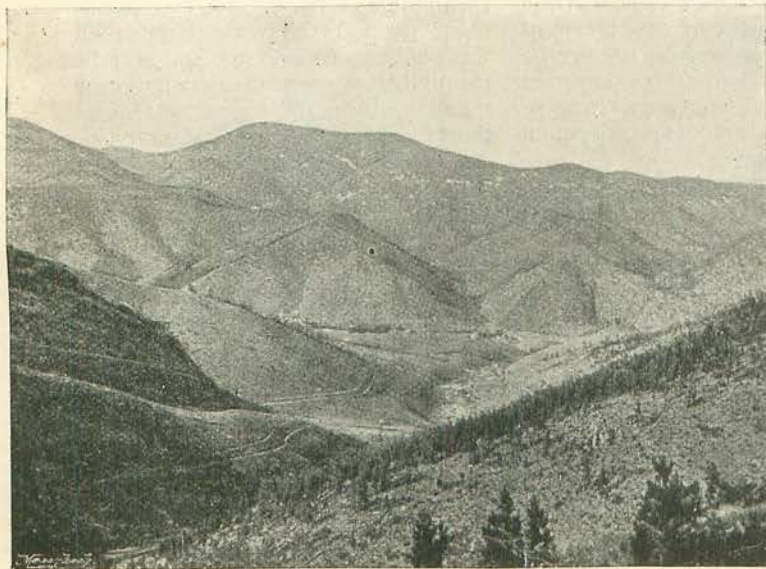
the mountain sides above by the torrents, and been deposited in the bed of the creek to await discovery at the hands of the diligent crowd of men who, with no capital but their thews and sinews, and with the rudest of implements, were working so busily as we passed by.

Along the banks of the stream higher up were the crushers, where the gold-bearing quartz brought from the mines is ground to powder and the gold extracted. A considerable amount is lost, however, even in the best processes; this is carried down in minute particles by the stream, is deposited in its bed, and eventually becomes the spoil of the herd of toilers down below.

At every turn we came in sight of fresh crushing plants and fresh mines perched on the hill-side in apparently inaccessible places. “Clear Creek,” as it is called, had become even more than before the opposite to its name, and had also dwindled down to almost an apology for a stream, and its banks had narrowed considerably, showing we were close to Central City, which stands at the head of the gulch.

Central City is rich in gold, but however alluring that metal may be, the city is by no means attractive itself. However, it has a history, which is a good deal more than many American cities can boast of. In 1859 a prospector of the name of John H. Gregory discovered the Gregory lode, and a mining authority gave me the following information, which shows this part of Colorado—whatever other gold-fields in America may be doing—is more than holding her own:—

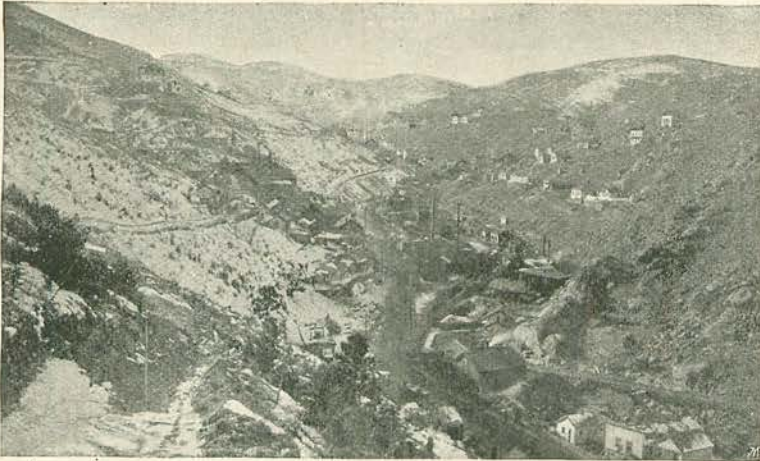
“From the first pan of dirt \$4 in gold were obtained; the following day, Mr. Gregory and his partner washed over \$40 from forty pans of dirt. This was the beginning of the great Pike's Peak craze, which has endured under different forms in various districts of



From a

SEATON MOUNTAIN—THE MOUNTAIN OF GOLD.

[Photograph.



From a

CENTRAL CITY.

[Photograph.]

record was made. The total product to that date is thus given: Coin value of product, \$28,077,000; currency value, \$35,000,000. Computed at its coin value, this product is thus classified: Gold, \$26,917,000; silver, \$690,000; copper and lead, \$470,000; total to January 1st, 1879, \$28,077,000. During the year 1872 the mines of Gilpin County yielded in

the State to the present day. Many thousand people rushed to Central City, Black Hawk, and Nevadaville, a continuous city under three corporations, and along whose gulches have been discovered, and are still being discovered, the greatest mines in the West. Among these are the Bates, Bobtail, Hunter, Gunnel, Clay County, Fisk, and Mammoth. In 1867 the Boston and Colorado Smelting Works were established in Black Hawk by Professor N. P. Hill, and successfully treated ore that could not be treated in a stamp-mill. Central City and its environs remained a typical early mining camp until 1878, the year of the advent of the Colorado Central Railroad, which was extended to Central City from Black Hawk by means of switch-backs, requiring four miles of road to go one mile in distance. Since that date the "Little Kingdom of Gilpin" has been transformed into a modern mining metropolis with tramway systems, electric and hoisting appointments, and all other conveniences of a well-equipped mining centre. The Gilpin Tramway Company commenced hauling ore in 1888 on a two-foot gauge railroad from the principal mines to Black Hawk; it then had one locomotive. They now have three locomotives and over 125 cars, and nearly twenty miles of track, the line running up Clear Creek, Chase Gulch, over Winnebago, Gunnel and Quartz Hills, to Russell and Willis Gulches. In estimating the value of the product of Gilpin County mines up to January 1st, 1879, two systems have been used by statisticians, illustrating the difference between the value in coin and the depreciated currency in circulation during most of the time in which the

value to the amount of \$2,431,291, exceeding the output of any previous year. The output for 1889 was \$3,334,300; that of 1890 was \$2,624,925. The total output since January 1st, 1879, aggregates over \$30,000,000, so that the coin value of the yield of Gilpin County mines from the year 1859 to 1891 very nearly reaches the enormous sum of \$60,000,000, and this has largely increased during the past three years."

To show the great value of these Colorado mines, I quote from what appeared in the financial columns of a leading London paper:—

"Messrs. Eives and Allen have sent us the Annual Report of Mr. John J. Valentine, the president of Wells, Fargo, and Co., bank and express agency, on the precious metals product of the United States and Mexico in the year 1894. From this it appears that the total production of gold in states and territories west of the Missouri River, including British Columbia, was, roundly, £9,180,000, and of silver £5,740,000. This latter value is arrived at by taking silver at 31½d. per ounce, which is rather high. The largest output of gold was in Colorado, which gave £2,435,000. Next came California with £2,140,000, and then Montana with £1,030,000. Colorado was also the largest producer of silver. Including copper and lead, the total output of the United States, British Columbia, and the West Coast of Mexico, due to mining for the precious metals, is valued at £21,023,000 for the year 1894. Looking back over past years, the production of gold is found to have been much increased, and that of silver to be much reduced, compared with the

average of any series of years since 1874. The highest production of silver in the States was in the year 1889, when the total was valued at almost £13,000,000; but, of course, prices were much higher then and in previous years than now. Last year's output of gold was the highest since 1870, beyond which date Mr. Valentine's tables do not go. The year which came nearest to it was 1877, when the total was returned at £8,976,000. These figures are only put forth as approximately correct, but they are the best obtainable."

So much for statistics; these were necessary but dry, so we took the two-horse buggy that had been "hitched up" and made a start for Idaho Springs, passing over the top of Seaton Mountain.

It was a glorious day, and at the height we were at, over 8,000ft., the air was perfection.

Slowly we wound our way up the side of the hill, passing dozens of miners hard at work, bringing out the gold-bearing rock, until Central City seemed a tiny village in the gorge below us. We were over 10,000ft. above sea-level, and had a gorgeous distant panorama around us, though the actual scenery of Seaton Mountain is tame, and not improved by the hundreds of rough buildings that dot the landscape on all sides.

Still, we had come to see the golden mountain, and here we were at its summit. Slowly Mr. Newhouse explained the situation and his project, and a map could not have explained as fully in a week as a glance did here. There were the mines, the occupants doing their best to wrest the golden treasure from the mountain under difficulties that are hardly credible, for without seeing the country one could hardly appreciate these difficulties. To begin with, the roads to the various mines are simply tracks worn by the waggon-wheels into some semblance of a road; down these come the waggons with four horses bearing the blocks of quartz. Once on the main road their task is

more simple, but the return journey is very different. The main difficulty the miners have to contend with is water, and the deeper they go the worse this trouble seems to be. In fact, they say that in one instance, for every ton of ore taken out, forty tons of water had to be pumped. To pump you must have steam, and steam requires coal, every pound of which has to be hauled up to the mine-mouth. When I say a waggon can bring down six tons of ore and not take up half a ton of coal, the difficulties of making the two ends meet will partly be appreciated. Besides the pumping, hauling gear has to be kept in order, horse-flesh replaced, every bit of fodder being hauled up these inclines; wages are high, and unless the ore is high grade it does not pay to work the mine. Low-grade ores are valueless now, but when the Newhouse

tunnel taps the seams, the low-grade seams will be worked as much as the high-grade.

To begin with, the seams, which are numberless, and commence about a mile from Idaho Springs and continue to Central City, are vertical: this is the key to Mr. Newhouse's scheme, and makes it of such value. It has been proved that the lower the seams go the better the ore becomes, but the cost of working is so increased that it does not pay. The question was: how deep did the veins go? Geology can tell us a lot, but it cannot, for certain, tell us what there is 5,000ft. below, in the midst of a mass

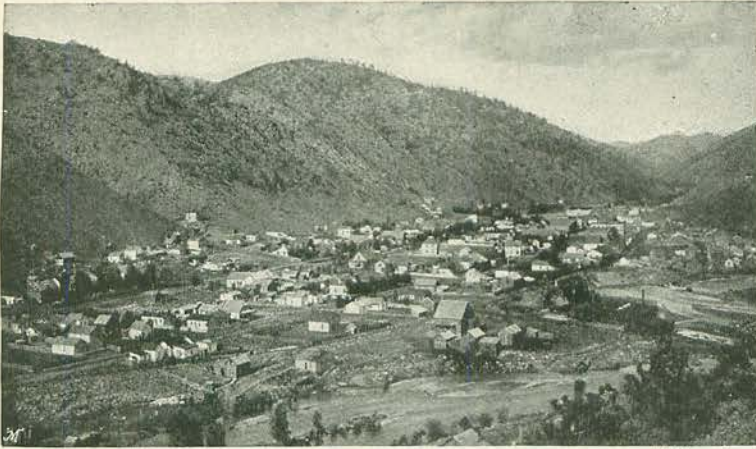
of granite; but that the seams went down deep had been proved by one of the mines going down over 2,000ft. before the water became too strong.

Mr. Samuel Newhouse knew this part of the country well; he had been over every foot of it when the boom of about twenty years back had brought such crowds to this part of the world. The expenses of mining and the difficulties were a puzzle that he set himself to overcome.

Taking elevations, he found that the



MR. SAMUEL NEWHOUSE.
From a Photo. by Nast, Denver.



From a]

IDAHO SPRINGS.

[Photograph.

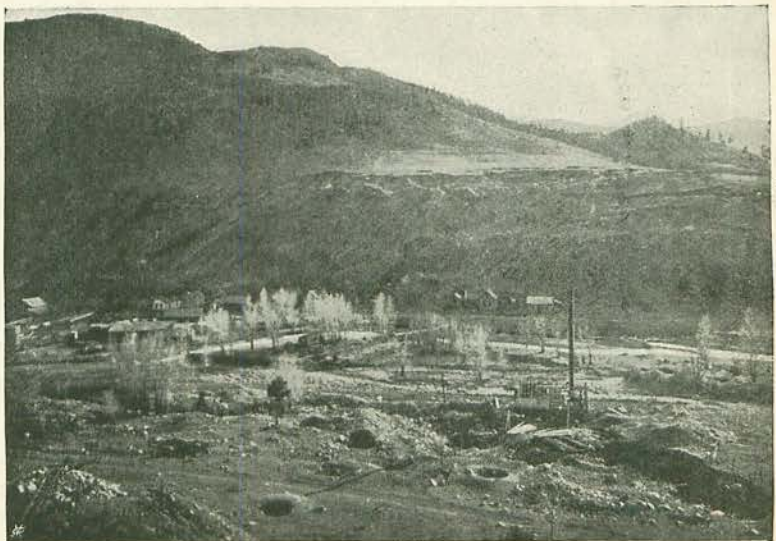
difference between Idaho Springs and Central City was about 3,000ft., and he also saw that the veins, which run very regularly, were at right angles to a line drawn between these two places. The idea of a tunnel then occurred to him, and he mooted the project to some friends, who, while appreciating the idea, laughed at it, as the expenses would be so enormous as to preclude any chance of building it. Not to be deterred, however, Mr. Newhouse quietly bought a piece of land a little distance below Idaho Springs, and started without any flourish of trumpets what is now the talk of every gold-miner in the United States.

Sitting as we were on the top of Seaton Mountain, to get to Idaho Springs to see the tunnel required an adjournment to the "top buggy," as the instrument of torture that was awaiting us is called.

I forget the name of the horses, though the driver kept apostrophizing them by name all the way down the hill "to get up and paddle!" The road was narrow, it was steep, it was also rocky. The buggy had a top and, being a two seated affair, Mr. Newhouse sat beside the driver while I occupied the back

seat. The builder of that buggy believed no man was more than 5ft. 6in., or else he meant to build it bigger and ran short of material. I have seldom enjoyed a ride more — my head against the roof, my knees wedged against the seat in front, my backbone rubbing the seat behind: we tore down that hill at a rate that in a good road would have

been terrific, but on this hundredth cousin to a macadam road was diabolical. A recent flood had brought out a new vintage of rocks, and carried off the little earth that ever had made that causeway believe itself a road. "Pet," I think that was the name of one of the horses, was almost down once or twice, but the pace saved him. Newhouse lost his spectacles, the driver his voice, the horses their wind, and I a good deal of skin, before, after a wild tear of at least three miles, we swung into Idaho Springs. Truly, if the material of that buggy was scanty it was good, or a handful of remnants on the sides of Seaton Mountain would have been all that was left of us. Peace be to that driver, and may he one day take a party of my



From a]

VIEW FROM THE MOUTH OF THE TUNNEL.

[Photograph.

dearest enemies down that descent after a flood.

However our angles had suffered, our appetites were not the worse, and Tom Henahen's, the manager's, excellent luncheon was inward oil and wine to our bruised anatomies; then, after smoking the pipe of peace, a short walk brought us to the tunnel.

The entrance shows but little of the great scheme, and might be anything of a very ordinary nature, and it is only when the ore begins to come out that it will make a big showing.

The tunnel will, when finished, be four miles long, and its furthest extremity will be almost directly under Central City, but about 2,000ft. below it. It is about 14ft. wide and about 10ft. high. In the centre, between the two lines of railroad, is a waterway cut in the solid rock, about 3ft. wide and 2ft. deep, which carries off all the superfluous water that has in mines to be pumped



From a

THE DRILL.

[Photograph.]

out, for the rise in the grade of the tunnel is enough to carry out the water, and also facilitates by gravity the exit of the cars laden with ore, while it is not great enough to render much force necessary to push the empty cars into the mine. Thus at only the expense of cutting the water-course the whole question of water is disposed of. When a vein of ore is reached in the tunnel, cross-cuts will be made and the vein followed until a sufficient distance

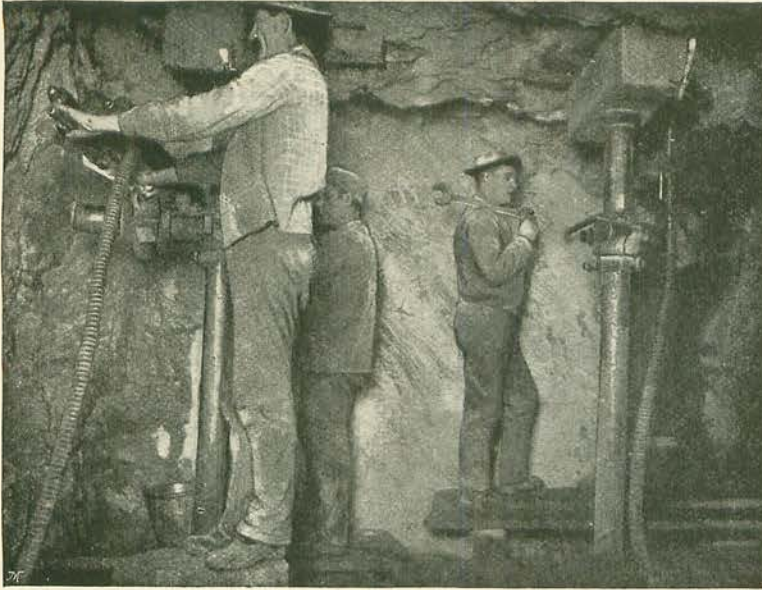
for proper development is attained. No roofing is required, the rock on either side being of the hardest granite; and, indeed, its hardness, while of benefit in this respect, is such that the boring is of necessity a slow process. It will readily be seen that so cheap a method of mining will, when once the tunnel is made, enable the low-grade ores to be as readily mined as those of better quality, and as each vein is cut, it will be driven on, the ore



From a

THE MOUTH OF THE TUNNEL.

[Photograph.]



From a

AT WORK WITH THE DRILL 1,300FT. FROM THE MOUTH.

[Photograph.]

drills for eight hours apiece, and are making a progress of over 10ft. a day, the work being continuous day and night, with only a few pauses to blast and clear away the débris, which is carried out in cars to the "dump" at the entrance to the tunnel.

Two hydraulic plants are ready, so, in case anything should happen to the one, the other is at hand, and the progress being made is very rapid for the nature of the work. The rich

being brought out through the tunnel, and thus the whole mining business of this large district will be centred under one administration. The company owns a large number of the veins, which it will work for its own benefit, those belonging to others being operated on a royalty basis.

The company will on the land at the mouth of the tunnel have huge smelters and stamp-mills, and be able to treat every pound of ore that comes out. If the tunnel proves too narrow, Mr. Newhouse says he can enlarge it. There will be ample room inside in the transverse cuttings for sidings for cars, and the tunnel in its present size is capable of handling thousands of tons of ore a day. At the present moment, the tunnel is about three-quarters of a mile into the mountain, and three shifts of five men each are at work with two Leyner

ore-bed will be reached in about a year's time, and the harvest commenced. The tunnel will take about four years to complete, and experts declare that when finished the vast sum of three hundred millions of dollars worth of gold, or sixty million sterling, will be accessible, so Mr. Newhouse's remark about having the key to the treasure was the truth after all, and that the mountain is one of gold, statistics, geology, and experiment very clearly demonstrate.



From a

IN THE HEART OF THE MOUNTAIN OF GOLD.

[Photograph.]