

girl there you have to give her an hour off in the middle of the day to attend to her stock speculations. With stock selling at one cent a share, such a girl could buy 100 shares for a dollar, or if she had received her monthly wages, she could, perhaps, buy a thousand shares of these one-cent stocks for \$10. The mines are capitalized in this way, largely as a result of the hard times. A great deal of the mining done now is by a combination of small investors, and in case a one-cent mine turns out well the investors realize largely. Of course, most of such investments are gambling, and a large proportion of those who invest in them take the stock as a "flyer," many not even knowing anything about the mine which they are buying. One of the shrewdest mining capitalists in Colorado said to me the other day:

"Many of the tenderfeet who come out here seem to want to be humbugged. They don't investigate the properties in which they buy stock, and they don't seem to want legitimate mines. Their sole care seems to be whether the stock is cheap or not, paying little regard as to whether it is good. Some of them want to buy gold lands by the acre, and, in fact, a large part of the speculation in Colorado mines this year has been fostered by real estate agents. You see, Denver has been very dull during the hard times, and the real estate men were almost starving when the Cripple Creek gold fever broke out. At this time they left Denver and went to Cripple Creek, and bought land by the acre near the mining camps and capitalized it. At the same time real estate fakirs from different parts of the country came in. They went through the ceremony of digging holes—called them mines and stocked them. They took their stock books home with them and filled them out ad libitum. They sold their stock at a few cents a share, and in many cases the buyers are still waiting to hear further from them. The truth is, the man who believes in a guarantee of \$1 out of a one-cent investment is a fool. There is a chance for such an occurrence, it is true, and I know that there have been many instances of this kind in Cripple Creek. I know, for example, one man who bought Portland stock when it was 3½ cents a share. He invested \$400 in it, and when he sold the other day he cleared \$90,000. I know of other fellows who have put \$400 into other stocks and whose stocks are not now worth more than the paper on which they are printed. Buying cheap and unlisted stock is like gambling in Monte Carlo. The chances are almost altogether against you."

And still you can never tell where gold is until you find it. Some of those one-cent holes may turn out to be worth fortunes, and it may pay you to invest in some of them if you will take the preliminary steps which I have advised in the beginning of this letter to find out as to whether they are offered by reliable parties. The best part of the Cripple Creek region was once sold for \$7,500, and only about six years ago there were thousands of miners wandering over these gold fields which are now producing a million dollars a month and cursing the authors of the famous Mount Pisgah swindle. Mount Pisgah is only a few miles from Cripple Creek. You can see it from almost any one of the famous mines of the region. It was at

that time the center of a gold excitement brought about by two swindling prospectors. These prospectors dug a hole on Mount Pisgah and salted the mine, as it is termed, by bringing rich gold ore from other parts of the state and burying it in their shaft. They then took specimens of this ore and carried them to Leadville, stating that they had struck it rich on Mount Pisgah. There was a great excitement at once. Leadville capitalists went back with them and bought the mine of the swindlers for \$2,000. For some reason, however, the money was not paid on the spot, and in the meantime the story of the gold being found was heard in Denver and Colorado Springs. There was at once a rush for Mount Pisgah. Mr. George Ady, the general agent of the Union Pacific company of Denver, told me that he could not get enough cars to carry the passengers. Said he:

"We put on extra trains, and in less than a week there were thousands of men marching over what is now Cripple Creek to get to Mount Pisgah. Among them were good miners, and within a couple of days these men saw that the mine was a fraud. They saw that it had been salted. The news soon got out, and the thousands of men came back, leaving untouched the gold fields between them and the railroad. The fraud was discovered before the money was paid, and the salters had to keep out of the way for fear of being lynched."

There is little salting mines done today. There are too many honest experts, and it is seldom that a worthless property brings an immense fortune. Still, the man who wishes to buy mines wants to keep his eyes open, and the expert who would judge a mine correctly ought to go through it almost alone. If he does not and picks his samples from the places suggested he will be apt to strike only the richest parts of the vein, and he may get ore that is salted. An average mine may be salted with rich pieces of rock here and there, and the result of the assay will make it look far richer than it is. A good expert takes his samples from a number of places. He uses good-sized chunks as well as small bits, and he takes them from all parts of the hole. Salting is often done by means of scattering gold dust on the rock of the vein or on the loose dirt of a placer, and there have been cases in which chloride of gold have been used. Any expert, however, can tell that the existence of chloride of gold is a fraud, as such gold does not occur free in nature, and you never find it in a mine in this shape.

Sometimes samples are salted after they are taken from the mines, and the man who is judging a mine has to keep his eyes open from the time he gets the rock to the time he has made his assay.

You hear of all kinds of curious swindles here. A pipe full of ashes containing gold dust may be dropped into a sample of powdered rock ready for assaying, and the assayer may be in conjunction with the miner to sell the mine. Such an instance may be easily prevented, however, by a government assay. In placer mining gold dust may be dropped into the gravel almost under the eyes of the capitalist and he will not see it. Sometimes enormous amounts of dust are used. Arthur Lakes of the State School of Mines in his book which was published last year entitled "Prospecting for Gold and Silver" cites an in-

stance where some mining sharks spent \$50,000 for gold dust, and with it salted a placer mine. They put up a hydraulic plant, and prepared to work the mine by means of quicksilver. They brought the capitalists to the spot just at the time when they put the dirt containing the \$50,000 worth of gold dust into the mill, and the result was that they sold their mine for \$250,000 in cash. As soon as they got the money they left the country, and it was some weeks before the capitalists found that they had been fooled.

Frank G. Carpenter

## THE LARGEST VOLCANO.

It was in the month of June last, ninth day if I remember rightly, that I, accompanied by a little native boy ten years of age, set out for a pleasure trip to view one of Hawaii's wonders—Haleakala (the house of the sun), the largest extinct volcano in the world. The day was beautiful, the broad canopy of heaven was cloudless, Hawaii's sun beamed in the zenith of its splendor and a balmy breeze floated gently over the land that certainly must have invigorated all with whom it came in contact.

It was 1 o'clock p. m. when, after having provided ourselves with a day's rations of food, such as could easily be carried in the saddle bags, we mounted our steeds and departed from Pulehu, which consists of quite a number of houses scattered in anything but close proximity to each other among the prolific panini (cactus) a few miles up from the base of the mountain at an elevation of about 1,800 feet. (I will here state that it was at this place or near vicinity that our beloved Brother George Q. Cannon labored so diligently in the morning of the 50's to first establish the Church of Jesus Christ of Latter-day Saints in this land and sound the notes of salvation in the ears of the Hawaiian race.)

Our destination being the top of the mountain, we decided to make the ascent by the shortest route possible, consequently started straight up the slope for a mile or two through the corn and bean fields of the Portuguese planters, thence by a cut off way over the rolling hills beyond.

After proceeding for some distance over the what from below appeared to be tolerable smooth country, but which in reality was quite the contrary, we found ourselves in the midst of perplexing circumstances, as on account of the sharp, ragged lava beds, thick underbrush and many deep holes and gorges a halt with the animals was necessary; yet I continued some little distance on foot in search of an opening, but, alas! with no available result—to get out of the difficulty we were compelled, much to my displeasure, to turn back and go lower down the mountain side. By my miscalculations in the lay of the country much time was lost and in order to make up for the same I urged my mule all I could, realizing that to be out after night in that locality was anything but desirable.

On we journeyed, finally coming into the main trail that leads up from Makawao, the which we followed to the summit, reaching there with exhausted ani-