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HOW SILVER IS MINED.

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HAVE COME to Park City to tell you how silver is gotten out of the earth. This is one of the world's great treasure vaults of the white metal. It is the site of the Ontario mine,

which is the biggest silver mine in the United States, and which is said to be the biggest working mine in the world today. The Ontario has already produced more than \$30,000,000 worth of silver, and it has paid its owners more than \$13,000,000 in dividends. For the past two years it has been putting in very expensive improvements, and owing to this and to the demonetization of silver, the dividends have dropped, but I am told that it will pay more than ten per cent this year, and its silver deposits are still of incalculable value. Connected with the Ontario is the great Daly mine whose dividends have amounted to between two and three million dollars, and near it is the Daly-West mine, now just about ready for working, and other things which have large deposits of silver.

You reach Park City by a branch of the Union Pacific. It is situated in the Wasatch mountains, just about a mile and a half above the sea, and within thirty-two miles of Salt Lake City. The town has about 7,000 inhabitants. It lies along both sides of a gulch, and its main street is filled with dust in the summer and mud in the winter. All around it are silver mines, and the town lives upon silver. In its palmiest days its pay roll has amounted to millions a year, and the Ontario mine alone pays out now more than \$100,000 annually in wages. The Ontario property is situated just back of the city. When the mine was discovered its surroundings were those of bleak, bare and desolate hills. Now immense frame buildings, with steam pipes and smoke stacks are seen scattered over the mountains, and big four horse wagons travel from daylight until dark up and down the valley with loads of silver ore. In going up to the mine you pass here and there enormous bins or square buildings, into which the ore, dragged from the bowels of the earth, is emptied, preparatory to loading it on the wagon. These buildings have many mouths or

holes at the bottom, so arranged that, by the lifting of a board, they can be opened and the ore will fall down into the wagons on the road below. You pass boarding houses devoted to the feeding of the army of men in the mines, and go on until you reach the big barn-like shaft houses. They seem to be rudely built, and you would never imagine that they represent a product of \$30,000,000. They contain, however, little more than the hoisting machinery. The real workshops of any mine are underground.

But let me give you in simple words some idea of this enormous silver mine. When discovered, it was, you know, merely a mountain of rock, through one part of which ran a little streak which the prospectors thought carried ore values. They broke some of the rock in pieces. It looked not much different from any piece of broken granite which you might pick up on the roadside, but to their experienced eyes it contained silver. They laid out their claim and dug a shaft or well. They found the prospects grow richer as they went downward, and at last the hole was sold to Senator Hearst, Lloyd Tevis, J. B. Haggin and other millionaires, who put in expensive machinery to get the ore out. This was almost twenty years ago, and it has in that time produced the enormous amount of silver above stated. These men took the well or hole made by the prospectors and they have sunk it more than 1,500 feet down through that mountain of rock. They have made of it what is known as the shaft, which is little more than a hole walled with boards five feet wide and fourteen feet long, running for more than a quarter of a mile straight down into the earth. This shaft was sunk just beside the vein of silver rock, and at intervals of one hundred feet on the way downward they have run off tunnels into the vein and have taken out the ore. Each of these tunnels is from four to six feet wide and from six to nine feet high. It is walled and roofed with timbers. Logs as big around as your waist are braced by the walls against the roof to keep the dirt and rock from coming down upon you as you go through them. From these tunnels the miners have worked upward along the vein, digging out great caves and rooms in the mountain, all of which have to be walled and roofed with logs and so braced that there may be no danger of their caving in. A good idea of a silver mine might be gotten from a big New York apartment house. Take the Ontario for instance. The mine has fifteen stories, each one hundred feet in height, and the shaft contains an elevator which an immense steam engine raises and lowers, carrying the ore and the men from story

to story. At each story the tunnels run off through the vein and connect with the rooms or stopes, as they are called by the miners. The tunnels are the passage ways or halls of the flats and the stopes are rooms dug upward and outward in taking out the ore. Each tunnel has a little railroad running through it and there are fifty miles of such tunnels in the Ontario and the Daly. The cars of the railroad are of iron. They are always loaded by gravity. In order that the miners may not have the trouble of lifting the ore, from the tunnel of each of these stories to the tunnel below it is cut a great pipe or chut at such an angle the ore being shoveled into it will roll down and fall into the car placed at its mouth at the other end, 100 feet below.

But the manager is ready for our visit to the mine. We stand at the entrance of the shaft and watch the elevator coming up. It is raised by means of a cable made of wire ropes each as thick as your thumb, which runs over a pulley forty feet above the floor, and thence straight down into the shaft. The cable looks strong, and we ask the engineer how much the rope will hold without breaking. We are told that it can easily support eighty tons. I look at the manager and the two miners who are to go with us. None of them weigh more than 200 pounds, and as my weight is about 100 I feel comparatively safe. Now the elevator is at the top. Two cars, each holding 1,500 pounds of rock, are wheeled off and we are motioned to take their places. As we do so the manager gives a signal to the engineer, and we start down into the bowels of the earth. We descend as fast as though we were in the elevator of a Chicago hotel, and we drop at once into the darkness. We are warned to keep close within the cage, as a hand or a head might be taken off by a projecting timber. We hold on for dear life to the iron rail over our heads and I try to shrink myself inward as far as possible as we go down, down, down. Now we pass one of the levels, and we catch a glimpse of a candle in the opening. Now our ears are dimmed by the shooting of a blast, and the sound so shakes the air that our candles are blown out. We light them again when we fall to the next level, and the faces of the miners about us look weird and ghost-like in their flickering glare. It makes one shudder, and you feel at times as though you were on the edge of the grave. At least I felt so when the elevator was stopped at the sixth level, and there, 600 feet below the earth, a miner stepped on with a box of dynamite candles. It was no bigger than a soap box. It could not have been more than two feet square, but it contained enough dynamite