

I did not know that there were as many men on the lake as came to see our find next day. They swarmed over that little vein like bees around a piece of honey. Every man picked away till he got a sample and all were greatly excited. They talked of another Cobalt and were loud in their congratulations.

Good old Fred went about with a smile that stayed. I really believe that he was as pleased as I was over my good luck. "Yes," I heard him say, "We find it, come here in the winter. Stay on the job, pick the best, then go out and record it."

A crowd of prospectors gathered in our camp that night. Nothing was talked of but our discovery. Everyone who had claims staked around the lake suddenly saw visions of great wealth before him. I determined not to get enthusiastic. I owned a one fourth interest in any property discovered and this might turn out to be a bonanza. Of course the vein was small but it was very rich, and there must be more. I could not help having a sort of opulent feeling. Anyway we could have a larger house and my wife could keep a servant and have more money to spend on dress, and have, perhaps, her heart's desire, an automobile, just a small one. We might find a large vein as rich as the small one. We'll dig in and try. I might get fifteen or twenty thousand, ten at least. It makes me dizzy.

I had written the syndicate telling the good news and asking them to send a man in at once. I sent the letter with a couple of prospectors who were going to record.

Day after day we worked hard stripping and trenching. We found another vein, narrow but as rich as the first and traced it for some distance.

Langton, one of the syndicate, arrived one day about noon very much fly bitten. After we had lunch we took him over to the claim, put in another shot and blew out a lot of silver.

"You certainly have the goods," he said eagerly examining piece after piece. "Do you realize that there is a bunch of money in this for us all?"

"I've had a few pipe dreams about it," I replied, "but the vein is narrow."

"What do you want, a mint?" he asked. "As soon as we got your letter the boys asked me to come up and see just what you had, but we had no idea that it was as rich as this. They will be pleased I can tell you."

"Now listen," he continued, "you know well that this looks fine. These claims may be worth a lot of money or we may spend a lot on them and lose it all. I am going to make you a sporting offer. We will give you five thousand dollars cold cash and cancel the contract."

I did not expect anything like this. I knew the game and knew the chances even on a showing as good as ours, and I had a dread of joint stock companies.

"Tell you what," I replied, "You have only seen one vein. We have another as rich. I will take six thousand five hundred and get out." We had not mentioned the other vein which we were keeping as a surprise.

"Another vein! Great Scot! Let's see it," he exclaimed.

We went over and examined it. Then he held out his hand.

"Done," he said, "Shake on it."

ACCIDENTS AT METALLURGICAL WORKS

The first report of the United States Bureau of Mines on accidents at metallurgical works has just been issued by the bureau and includes the calendar years 1913 and 1914. The figures, compiled by Albert H. Fay, engineer, show that 119 men were killed during the two years; 2,285 seriously injured; and 11,046 slightly injured at smelters and mills, representing fatality and injury rates of 1.55, 29.67, and 143.44, respectively, per 1,000 men employed. The report includes the returns of 79 smelting plants in 1913 and 94 in 1914, including copper, lead and

zinc, and quicksilver smelters, as well as refineries. The iron blast furnace figures are not included. The number of ore-dressing plants in 1913 was 311, and in 1914, 484. These represent concentrating plants of copper, lead and zinc ores, stamp mills, cyanide plants, and iron-ore washers.

The total number of men employed in the metallurgical plants, both smelters and ore-dressing plants, was 35,549 in 1913, and 41,461 in 1914.

In the ore-dressing plants machinery was responsible for 25.6 per cent of all fatalities, 28.9 per cent of the serious injuries, and 16.5 per cent of the slight injuries. Similar figures for smelting plants are much smaller, for the reason that there is more machinery in use in ore-dressing plants than in smelters, and the men are usually in closer contact with the machinery, as, for example, at jigs, tables, stamps, rolls, and crushers. There are many revolving shafts, a large number of which have projecting keys, moving belts, wheels, and cams within the reach of the operator. The machinery at smelting plants is usually confined to the power house, where the blowers, engines, and dynamos are placed, and to overhead cranes, most all of which are entirely out of the reach of the regular employees.

The percentage of accidents due to "falls of persons" and "flying and falling objects" is 15.4 per cent for each in ore-dressing plants, whereas at the smelters the fatalities due to falls of persons represent 20 per cent of the total, and those due to flying or falling objects represent 5 per cent.

Haulage systems claim 25 per cent of the fatalities at smelting plants, and about half this percentage at ore-dressing plants. The difference is largely due to the type of material handled and to the larger number of cars in operation around smelter yards than are at ore-dressing plants. In many ore-dressing plants the ore is brought to the bins in railroad cars or aerial trams, and often there is no other haulage system in connection with the plants, the tailings usually being disposed of by launders or flumes, whereas at smelting plants the molten slag is handled in slag cars and the bullion has to be handled on trucks.

At smelting plants burns from hot metal, slag, etc., claim the largest percentage of serious and slight injuries and 11.3 per cent of the fatalities.

IRON AND STEEL

Iron Age says: October goes down as the month in which United States iron yield reached 3,000,000 tons and daily output crossed the 100,000-ton mark. When war order tonnages of six figures are bandied about so commonly, it is hard to believe that the year opened with a daily pig iron production of only 51,000 tons, or half what it is now.

More furnaces are preparing to go in blast, but some of the steel companies' furnaces that have been hard driven for months must soon go out for repairs.

An extraordinary situation exists regarding prices of finished steel. Orders have been sent in with request that they be entered and buyer notified of price. In most lines it is a question of finding a mill that can make delivery desired. Mills are holding back demand for next year. Only the largest buyers seem able to get protection on manufacturing costs for 1916, and some manufacturing consumers may find output curtailed by lack of steel.

Cabled statements that the allies will cut down purchases of American steel because of high prices need not be taken seriously. Such buying has been, and is still, insistent. American steel makers have really been slow to believe what is now plain, that the dominant factor in the domestic situation is sheer tonnage of steel to be fired out of guns. In Great Britain government requirements for shell steel are beginning to occupy exclusive attention, new inquiry there amounting to 2,000,000 tons.