WEALTH of the GOLD MINES

NO POPULAR error is more unfounded than the common impression that mining, as a business, is a losing venture.

Like all errors, it proceeds from a lack of knowledge, and vanishes when we permit ourselves to face the facts. It is true that there have been failures in mining. Banks fail, crops fail, and the records of the commercial agencies show that more than nine-tenths of all men who engage in business fail sooner or later.

On the other hand, no other avenue of industry holds out the prospects of such rich returns. The facts are undeniable.

The United States census of 1890 collected very complete information relative to the number of persons and the amount of capital engaged in the principal National industries, and the value of their output. An analysis of the returns is interesting and instructive. Briefly summarized, they are as follows:

Persons engaged in agriculture, 8,285,618. The total value of the farm products shows that the amount produced per capita was $287.

Persons engaged in forest industries (sawmills, logging, etc.), 521,806. The net value of the product per capita was $425.

Persons engaged in the manufacturing industries, 4,476,884. The net value of the product per capita was $764.

Persons engaged in the mining, milling and smelting of gold, silver, copper, lead and zinc, 74,428. (This does not include coal and iron.) The net value of the output per capita was $1910.

Two hundred and twelve mining and smelting companies have paid total dividends to July 6, 1901, of $367,010,480.

No exact record exists of the actual amount invested in these companies, but approximate figures show that the original investment has been returned to the stockholders 30 times over. Assuming the average age of such investments as 15 years, twice the investment has been paid back every year. Not only this, but this stock can be sold today at many times the original cost, and the dividends are still continuing.

How Other Industries Pay.

Compare the foregoing with what are generally considered as wiser investments of capital, viz:

Railroads.—The figures in Poor's Manual for 1901 show that the railroad companies of the United States paid in dividends and interest on bonds in the year preceding a little more than 2½ per cent of the cash actually invested in their properties.

Banks.—The official reports of the Controller of the Currency show the average annual earnings of the National banks of the United States, from 1890 to 1899 inclusive, were slightly more than 6 1-3 per cent on their capital and surplus.

Insurance.—The census inquiry of 1890 shows that the average annual dividends of the fire insurance companies of the United States, from 1880 to 1890 inclusive, were 10 7-10 per cent on their capital stock.

Manufacturing.—The apparent profit of manufacturers in the year shown by the same census was 20 per cent on their invested capital.

Lumber.—The apparent profits of the logging and lumbermen in the same year were slightly more than 14 per cent on the money invested in the business.

In the last two items, however, allowances are not made for the services and attention of the owners of the business, nor for the value of patents in the case of patented articles; nor is any deduction made for the cost of selling the product and the mercantile risk of loss. A proper allowance for these items would reduce the average profits considerably.

Mining.—The 212 mining companies mentioned have probably averaged 200 per cent per year.

The average earnings of banks, manufacturing and merchandising institutions are from 10 to 15 per cent on their invested capital.

The average earnings of mines are from 50 to 200 per cent on their entire capitalization, which is generally from five to ten times their actual invested capital. In other words, when organizing companies other than mining, the stocks are generally sold at or near par, while mining stocks are sold at a large discount.

In the year 1901 $35,000,000 was lost in the banking business alone. (See U. S. Governmental Reports.) The money lost in banking in one year is more than has been lost in mining in the past 20 years.

These are the plain, cold facts.

Mining a Safe Investment.

There is no avoiding the conclusion, viz: Mining is a safe and most profitable form of investment.

Geology, mineralogy, metallurgy and engineering, as now applied to mining, in combination with skill and practical experience, are exact sciences. There are as many facts in mining as there are in any other business, and they are, or can be, arrived at with just as great a degree of certainty.

All mines begin as prospects, and so prospecting is the first stage of mining. Chance enters very largely into the locating of prospects, but when once the mineral deposit has been located, there is no further room in the mining industry for hap-hazard chance or luck. The value and extent of the mineral body are still to be proven—whether it will pay to work—but these are questions that are comparatively easy of solution to men of experience and technical knowledge.

Every thrifty man desires to increase his income. When he has money to spare, he seeks the investment that will give him the best return.

In this day of gigantic combinations, what is the man with $100 or $1000 to do with it? Loans, bonds, the savings bank, all, offer a discouragingly small revenue upon a modest capital. It is hard to obtain a competence at 5 or 6 per cent annual interest. It requires many thousands of capital.

What legitimate enterprise or investment offers the probability of greatest profits within a reasonable time?

Only on Business Basis.

Undoubtedly mining. But only when conducted on a thoroughly business basis, as any other commercial enterprise—a union of technical knowledge and experience; a favorable field of opportunity, and, above all, honest and capable management. With this combination, you will share proportionately in the same opportunities and profits as the millionaire. And losses are impossible.

An investment of $1000 in any one of the 253 dividend-paying mines now operating in this country, during the early stages of its development (and all within the past 15 years), now renders from $3000 upward in dividends each year.

Nearly 200 instances can be cited where an investment of $100, less than ten years ago, in mining properties is now paying annually $1000 or more each year.

In many of these instances an investment of $100 within the past ten years has made the fortunate investor independent.

"Calumet and Hecla" has paid $1500 on each $1 invested.

In 12 years "Le Roi" stock has advanced from 10 cents to $150 per share.

"Home" mining shares advanced from 10 cents to $175 per share in two years.

The general public always hears of and forever remembers the failures, but it seldom hears of and easily forgets the successes. The aggregate losses, in all probability, will not exceed a few thousand dollars. Before you stop to estimate carefully, you will probably think that you can figure up millions, but you will be disappointed.

Lack of capital is responsible for more failures than all other causes combined.

THOMAS K. MUIR.

Portland, December 12.

SUMPTER IN THE LEAD.

Produces Bulk of Gold and Silver Credited to Oregon.

SUMPTER District's production of the precious metals for the year 1903 will undoubtedly exceed that of the preceding year materially, although this is not the salient feature of progress recorded. It was in new milling equipment, new smelting plants and thorough and exhaustive development work of new properties not yet or just entering the producing list that the district saw the greatest work.

Oregon's gold and silver production for 1902 was slightly more than $2,000,000. Of this, gold claimed above $1,800,000, and Baker and Grant Counties were credited by the Mint with about three-quarters of this total. This year more mills have been running, and it is believed that the average grade of ore handled has been higher. Among those plants contributing gold bullion this year, from which nothing was received last season, are the Bonanza, which had from 20 to 30 stamps busy much of the year. Golconda's 20 stamps have been doing steady work. The Phoenix has latterly been producing to some extent; also the Don Juan, Morning, I. X. L., Octo, E. & E., Taber Fraction, Imperial, Black Eagle and the Emma. The Columbia and North Pole have done steady work, while the Red Boy did likewise until recently. The Cornucopia has been idle during much of the year.

One smelter, costing about $225,000, with a 150-ton furnace capacity and 700-ton sampling capacity, has been completed at Sumpter by the Oregon Smelting & Refining Company, and is now receiving ore for reduction. A plant with a single furnace of about 100 tons capacity and a sampler is being erected at Homestead by the Ladd Metals Company. A calcining and leaching plant is being erected at Eureka, on the Imnaha, a new copper district brought out in the year.

In milling, there have been 22 new plants or material additions to old mills, giving an added capacity to the entire district of above 160 stamps. These plants are roll mills, stamps and the various devices for crushing ore and saving values by concentration, amalgamation and cyanidation. They represent nearly every known type and some of the most modern methods of ore reduction by mechanical and chemical devices, as at the North Pole, where crushing is by 30 stamps, concentration by two systems of bumping and belt tables, percolation of the sands and cyanidation of tailings by agitation. There has been marked improvement in the milling practice of the district for the year, this neglected study now receiving the attention of some first-class metallurgists. The science of mining has in the same period been applied more successfully, and breaking of ore, hoisting and delivering to the mill has been accomplished at quite low figures. At the Black Eagle 20-stamp plant, where the ore is porphyritic and mined above the tunnel level on the quarry system, mining and milling were for the remarkable figure of 69 cents per ton. This is not the Coast record, but is easily the best work done in the Northwest, it representing scientific application of modern improvements to a very favorable proposition in mining.

There has been a greater tendency to seek depth during the year, the Bonanza main shaft, the deepest in Oregon, now being near the 1200-foot level. Managers have been preparing to get into the ground, where they are realizing that the future of their properties rests, and several small sinking plants have been installed. Among these are the 1200-foot plant at the Golconda, the 1200-foot plant at the Midway and the smaller hoists put on the Prairie Diggings, May Queen, Gold Pan, Emma, Indiana and Ross Gulch. Deep work is the slogan of the district, and it has peculiarly close relationship to the predictions of Dr. Alfred R. C. Selwyn and Professor Waldemar Lindgren: that mining in the district would be to such depth as mechanical appliances would enable men to go.

There has been a marked tendency to utilize water power on every hand, and perhaps two score locations of such rights have been made during the year, some of which are being developed. On Eagle Creek a plant with an initial capacity of 3000 horse-power is being erected. On Rock Creek a plant is nearly complete capable of generating 300 to 500 horse-power. Another plant is being finished at Sumpter that will generate 500 to 1000 horse-power. Preliminary work was done at Olive Lake on a system that is calculated to generate 2000 horse-power. Several mills have utilized all available water by direct application without generating electricity, and those using electrical energy have extended and enlarged their plants. All operators grasp the value of this natural energy and are taking water rights everywhere.

Dredging seems to be passing from the very initial to a fairly successful stage. The big dredger at Weatherby has been idle most of the year, as it has been found that heavy boulders retard work there materially. A great plant, costing above $100,000 and having buckets holding seven cubic yards, was completed on the John Day and is finishing a very successful run. Arrangements are practically complete for building a smaller dredger near Granite. On Snake River, where the time-honored struggle to save the fine flour gold of the numerous bars still continues, no material variations have been noted. The burlap system, with Hungarian and Cariboo riffles, is the general method, and about a half dozen dredgers have been busy most of the season with fair success.

In a general way, the Eastern Oregon District is closing its greatest year, especially with reference to the many thousand feet of development done and the young properties entering the list for production. It never before saw so much good, sound, scientific work as in the year 1903.

W. B. D. DODSON.

Sumpter, December 14.

WEALTH OF JACKSON.

Great Hydraulic and Quartz Mines Succeed to Pioneer Diggings.

JACKSON COUNTY has been producing gold for more than 50 years, and during that time has yielded $30,000,000 or more of wealth to the world. The riches of this county were of course first revealed in the placer diggings, where fortunes were made by the pioneer miner in primitive ways. Much gold is still mined in Jackson County by sluicing it out by hand, and many farmers and ranchers have pieces of ground, where they take advantage of short intervals during the rainy season, when they have water to do a little placer mining. Great hydraulic plants have been installed, however, and are successfully operated.

The sources of the rich placer deposits have also received much attention and some splendid quartz properties are being opened up as a result. Some of the gold ores contain a heavy proportion of silver, too. Cinnabar prospects are common in the county, but have been little developed. Some coal deposits have been uncovered, but are not yet of sufficient extent for commercial purposes. There are also large and valuable beds of kaolin a short distance east of Ashland, which are bound to be a source of wealth.

The gold yield of Jackson County for the year 1903 is estimated at $230,000.

The two largest placer mines in Jackson County are the Sterling and the Sturgis, west of Jacksonville. Both have been worked since the '50's, and both have yielded many fortunes.

The Sterling was discovered about 50 years ago, but it was many years before it was operated on its present extensive scale with hydraulics and every modern equipment. The Sterling and mines on the creek adjacent to it have, it is estimated, yielded a total of $4,000,000. The present yield of the Sterling is not published, but there is little doubt that it passed the $100,000 mark each year. It is owned and operated by H. E. Ankeny and V. Cook.

The Sturgis placer property on Forest Creek comprises some 1200 acres and has pay dirt enough ahead to run for 50 years. It has already been worked off and on for 50 years, and in late years on an extensive scale. Recently the owner, A. W. Sturgis, has added much equipment to his hydraulic plant.

The most noteworthy accomplishment of the year in Jackson County, in one way, is the completion of the immense dam of the Condor Water & Power Company on Rogue River, at Tolo, and near Gold Hill. It is proposed to develop extensive placer properties with the waters thus conserved. In addition to supplying water to its mines the Condor Company expects to develop 10,000 horsepower to be used for generating electricity and for power purposes generally in the valley.

In the Ashland district there are several well-developed gold quartz properties. One of the principal ones, however, the Ashland, owned by the Montreal & Oregon Gold Mines, Ltd., a foreign corporation, which paid $125,000 for it, has not been in operation the past year. It has yielded handsomely in the past. The Shorty Hope is being steadily developed and splendid ore is being taken out right along. The fine ten-stamp mill operated by water power is not pounding at present, but doubtless soon will be. There is a labyrinth of tunneling on this property, and is considered one of the best quartz propositions in Southern Oregon. Its stock is owned largely by the Sanfords of New York.

The Elliott Creek copper properties, at the state line, southwest of Ashland, and lying partly in Oregon and partly in California, have attracted much attention. There is little doubt that the discoveries there will lead to extensive development in the near future. Propositions requiring the expenditure of a million or two for smelters, railroads, etc., before production commences, are not undertaken by capitalists without the fullest investigations, and these are now being made.

F. D. WAGNER.

Ashland, Dec. 10.

IN THE BOHEMIA DISTRICT.

Advent of Railroad Stimulates Development of Rich Mines.

AT no time since old "Bohemia" Johnson, who first discovered gold in the Bohemia mining district, exhibited specimens of his find in 1863 to the eyes of the hardy pioneers of this section of the state, has the development work of the entire district been so uniform, systematic and extensive, and with such satisfactory results in uncovering heavy ore bodies as in the year just ended.

Thousands upon thousands of dollars have been expended in the year 1903 in the purchase of more property by the larger companies, in driving huge tunnels at greater depth than ever before, in placing machine plants, in the erection of electric power plants, in the installing of massive machinery and in the erection of many buildings characteristic of great mining properties.

The work of the past year demonstrates to those familiar with mining and what it takes to develop a district into prominence that Bohemia has now taken an important place in the first rank in the Pacific Northwest.

This year is particularly marked by the building of the Oregon & Southeastern Railway into the district from Cottage Grove. Less than a year and a half ago the first dirt on the grade was turned and today it has some 16 miles of as good roadbed as can be found in Oregon, over which two trains each day are hauling machinery and supplies to the camp. At the end of the line freight teams are at hand and the freight is loaded on wagons and taken to its destination in six-horse loads.

By this time next year the railroad will have reached the Warehouse, 25 miles from Cottage Grove, in the edge of the district proper, which will forever end the great expense of freight hauling. The electric line of the Oregon Securities is another important improvement this year. The power-house, dam and water flume, located just above the warehouse, have been built this season and the machinery is on the ground and being placed in position as rapidly as possible. The Champion Creek road, which was finished last July, marks an important feature in the development of the district. This road was built by the Oregon Securities Company at a cost of some $8000, but is of vital importance to many properties in and adjacent to Champion Canyon, among which may be mentioned the Crystal Consolidated, Le Roy Mining Company, North Fairview, Grizzly, Nemo, Champion Basin Mining Company, Sunrise Mining Company and many others.

The present terminus of the railroad is at the red bridge, where the roads fork, one following Row River, the other Sharps Creek up Hard Scrabble to Bohemia Postoffice. On the Hard Scrabble Road are many promising properties, including the Golden Rule, the Vesuvius, the Glenwood and the Musick, which is a part of the Oregon Securities holdings. The Vesuvius this year absorbed the Stocks & Harlow property, which is already equipped with a stamp mill. In addition, important development work has been in progress on the Vesuvius all Summer and is being continued this Winter. Splendid buildings have been erected and a sawmill has been installed. Deep tunnels have been run on many of the properties in this section of the camp, with highly satisfactory results.

One of the important improvements under way this season is to be found at the Crystal. Here a 20-ton mill is now being installed, large buildings have been erected, assay office established and a road one and one-half miles long has been built connecting the works of the Crystal with the main Champion Basin Road.

Referring to the Oregon Securities again, it is well to review the work under way at the present time. The 20-stamp mill has just been completed, and now a large force is at work on the big tunnel which will be driven on one of the company's rich veins to connect with the works at the Musick mine, nearly a mile distant. The object of this tunnel is to enable the company to tram the ore from the Musick into the new mill, which is at the head of the Champion Basin, where it will be reduced along with the ores from the Helena, Champion, Broadway and the various other veins owned by the company. The year has been a very important one, and every dollar that has been expended has brought satisfactory results.

C. J. HOWARD.

Cottage Grove, Dec. 10.

ON BLUE RIVER.

Development Going Ahead and Great Power Plant Established.

MINING interests of the Blue River mining district have certainly enjoyed a year of prosperity, when the substantial development of the district is considered.

The Blue River district is in a state of development, and in this respect more has been done than in any past year, although there has been less prospecting and fewer men have been at work on claims than last year. The fact has been demonstrated that the ore pays for working, if worked properly, that there is a great abundance of such ore, and that the conditions are favorable for working.

For some years past the Lucky Boy has been the only developed mine in the district. This has been satisfactory, and now the work of opening up two or three other mines is in steady progress. In this line the Uncle Sam, owned by Yerington and Brewbacker, is making rapid progress. They have been steadily at work for the past two years or more, and have a ten-stamp mill which was put up during the past year.

On the Sunset, which has long been known to possess high-grade ore, considerable work has been done, and it is showing up exceedingly well.

The Treasure is said by miners to be the best-developed mine in the district. This mine is now owned by a company of Eastern capitalists, and is managed by Charles Harding Park, a mining man of much experience. The owners have had a large force of men at work the past season, and have run about 700 feet of tunnel. It is expected that a mill will be put to work in the Spring and that it will then become a steady producer.

There are a number of properties on which smaller amounts have been expended in development.

The Lucky Boy, the pioneer of the district, is the leader. It has been running its 15 stamps almost continuously, and the monthly output of precious metal has been very satisfactory to its owners, although the amount is known only to them. This company is also developing. The past season it has established a water power plant on the McKenzie River about five miles distant from the mine, which operates a vast electric plant of the most modern type. From this plant electric current will be transmitted to the mines and there employed to produce light, operate drills and run the mills. It will also produce current available for sale to work other mines. The cost of this improvement is about $100,000, and it is recognized as being a great step toward building up the camp.

Blue River is not doing any advertising; it realizes that it is not one of the mining camps where men get rich in a month. It knows, however, that its ore is abundant and good, and the owners of the various properties are working with a view of getting permanent revenue therefrom. Next year will show more development than the past, whil at the same time the work of the past will be in shape to yield revenue.

GEORGE O. YORAN.

Eugene, Dec. 11.

CORNUCOPIA DISTRICT.

New York Company Resumes Development on Immense Scale.

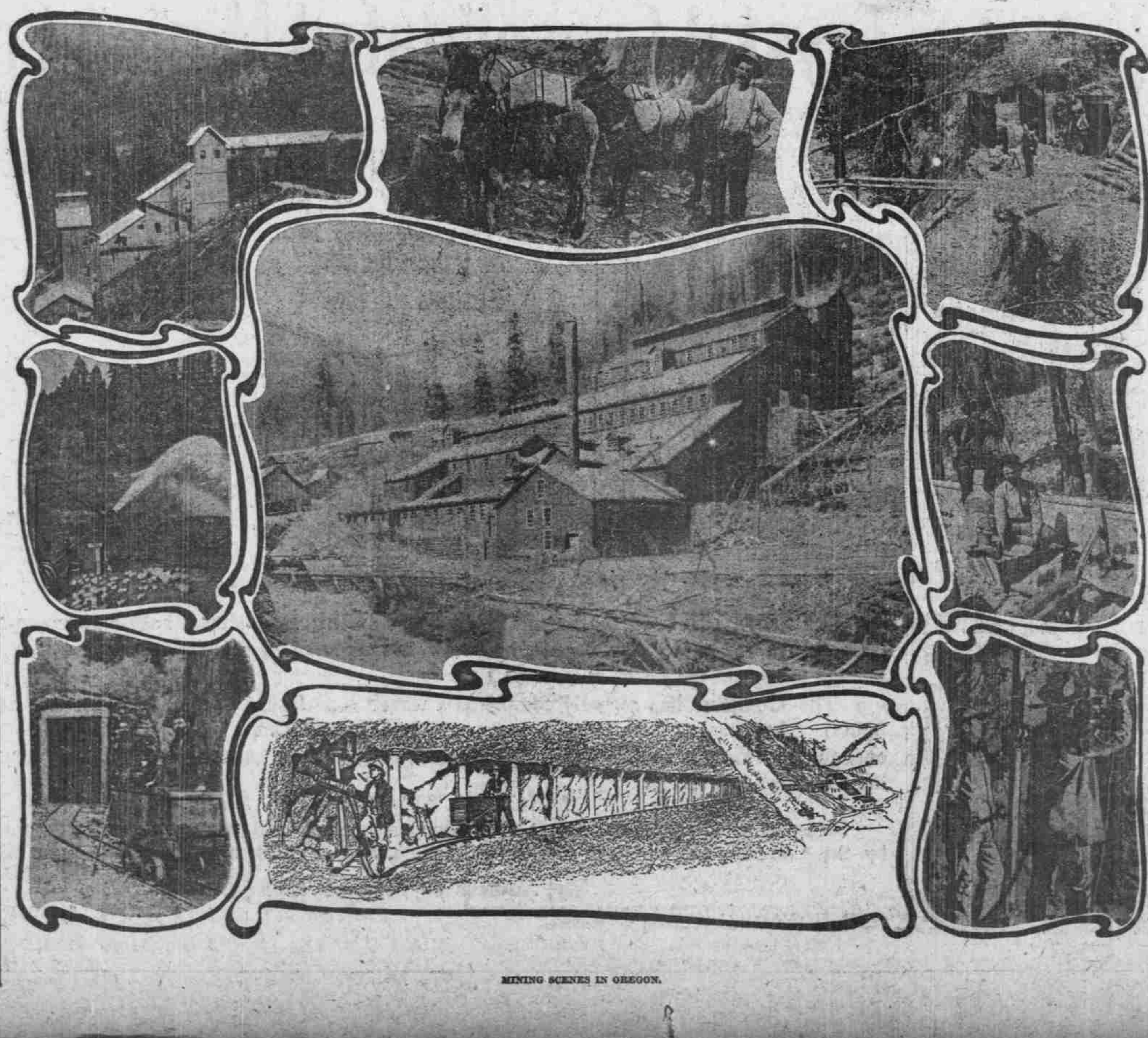
ONE of the most important mining districts in Eastern Oregon is the Cornucopia, named after Cornucopia Mountain, a high and rugged peak of the Blue Mountain range, in the northeastern part of Baker County, about 65 miles from Baker City.

Gold was first discovered in this region about the year 1880, but owing to the fact that it is far removed from railroad transportation and the further fact that expensive mills and heavy machinery were necessary to treat the quartz ores, very little development was done for several years.

The opening up of several other rich quartz mines in other portions of the county attracted attention to the Cornucopia discoveries again in 1895, and considerable development was done on the Union and Companion, two of the first claims discovered. Very little work was done on these claims before they gave promise of developing into rich mines and the original owners sold them for $60,000 cash. These claims were so rich in free gold, that, despite the fact that the cost of constructing a mill was almost prohibitory, a 20-stamp mill was erected, also a combination plant for the treatment of some of the rich smelting ore that could not be run through the mill. The chlorination plant did not prove to be a success but the mill was successful from the first. The Red Jacket, Last Chance and several other claims were opened up and the richest ores put through the mill.

The total yield of the district to date from bullion and concentrates has been $1,006,000.

John E. Searles, of New York, became interested in this district several years ago and soon became the sole owner of all of the principal mines. He was proceeding to develop the property when he became financially embarrassed and his estate was thrown into the hands of a receiver in bankruptcy, and all development work practically ceased. Within the past year the mines in this district belonging to the Searles estate have been sold for a sum said to be about $800,000 and a new company with a capitalization of $5,000,000 has begun development anew on a larger scale than ever before contemplated. The plan is to bore a tunnel into Cornucopia Mountain a distance of over 10,000 feet, which will tap one or



MINING SCENES IN OREGON.