

AS A MINING STATE OREGON BIDS FAIR TO RANK HIGH IN NEAR FUTURE.

No State in Union Has a Greater Variety of Mineral Resources

By R. L. Nell, President Sumpter Development League.

At the close of the year 1907 the condition of the mining camps in Eastern Oregon, the district embracing Baker, Grant and Malheur counties, is much more satisfactory than at any time in the past three or four years. One of the facts verifying this conclusion is that the smelter in Sumpter has been able to run for a period of several months longer than any time since it was established. The ores which have made this possible came, very largely, from the districts contiguous to Sumpter.

Over on the east side of Baker County, through what are properly known as the Eagle Valley and Snake River districts, tributary to Baker City, the metropolis of Eastern Oregon, a number of copper properties have undergone partial development during the past Summer, which indicates that a very large number of vast deposits of low-grade ores exist in those sections. Further south, in the Mormon Basin country, one big property has reached a stage of permanent production. The property is known as the Rainbow, and is operated by a close corporation, composed of Portland people. From general accounts this mine is now producing at a rate of about \$25,000 a month. The success of this property has caused much development work in that vicinity.

Still further south, in the Malheur section, desultory development on quartz holdings has progressed, but most of the attention bestowed on mining by the people of that district has been devoted to the shale lands where oil and gas indications have caused surprising re-



SMELTING AND REFINING PLANT AT SUMPTER, BAKER CO OREGON

LANE COUNTY MINES GIVE RICH PROMISE

Blue River and Bohemia Districts Tributary to Eugene Have of Great Activity During 1907.

By H. C. Mahon.

THE mining industry in Lane and the early '90s, when prospecting for Linn Counties had its beginning in placer gold was carried on along several of the smaller streams tributary to the Willamette and McKenzie rivers. Colors were to be found, and still may be found, for that matter, in the sands of almost every stream throughout the foothills and mountain regions in both the Cascade and Coast ranges, but placer deposits of any consequence were never discovered. A small sluice-box equipment was put into operation, some 40 years ago in the now well-known Blue River mining camp, and for a number of years parties of men were engaged in washing gold from the beach sands along the Western border of Lane County. This enterprise yielded quite handsomely at times, considering the small outlay necessary, but has now been abandoned.

This early exploitation served a twofold purpose: It furnished a satisfactory opportunity for operation to that pioneer of the mining industry, the prospector and old-time placer miner, and also demonstrated to future operators that the mountain region of this entire county is

latter 25 miles southeast of Cottage Grove, on a fork of the Willamette River. A branch railroad is being built from Cottage Grove to the camp, some 18 or 20 miles of which is now in operation. Several hundred different claims have been staked and are being developed in each of these camps, nearly every one of which yields free gold on the surface. This feature has proved an especially favorable one, in that it makes return-

50-ton plant on the Great Northern in the same district, the very extensive equipment and power-plants of the Oregon Securities Company in the Bohemia district, and others. In all the larger properties in these two camps, many of which have never, as yet, installed value-saving machinery, deep development work has been carried on, with the result that magnificent bodies of rich ore have been exposed, and are being blocked out, the

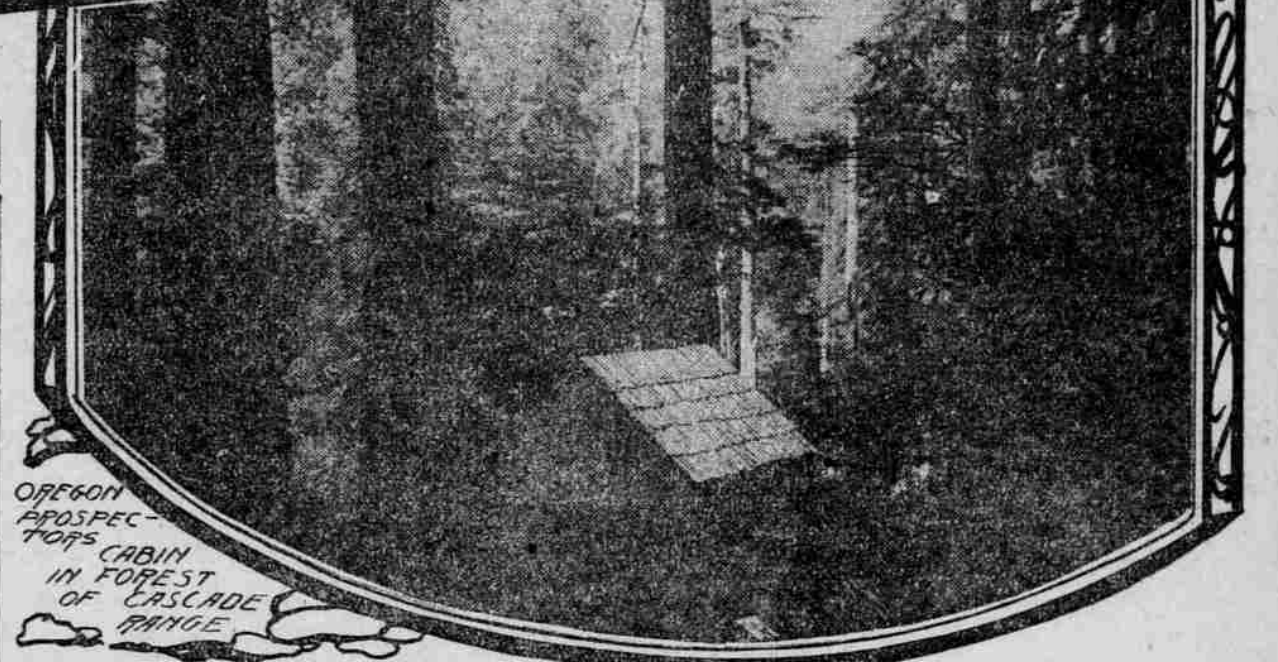
is owned by Portland people, and for many years steady work has been carried on, developing immense deposits of cinabar ore, experimenting with the process of extraction and building equipment. Mr. Dennis, the manager, has worked out a special process of his own for treating this ore, and has perfected what is considered the most successful method of cinabar treatment in the world. The company is now putting the finishing touches on a large-capacity plant of this kind, complete with all accessories, including modern electric-power plant, etc. Briefly, the mineral values of Lane County may be summed up as having been already "discovered-developed-and-demonstrated." We have minerals in wide variety, including many not named in this article. Among the more important, and we might say staple ones, practically every one is "in sight" in our mines in enormous quantities, there being now blocked out, ready for shipping, hundreds of thousands of tons of ore, which will pay, and pay well, with the extension of proper transportation facilities to the different localities.

NEW MINES OPENED IN SOUTHERN OREGON

Gold Placers First Worked 50 Years Ago Still Yield Well—Future Lies in Quartz.

By H. L. Andrews, Secretary Grants Place Commercial Club.

SINCE the early '50s mining has been carried on to a very considerable extent in Southern Oregon. Placer mining at its inception in Oregon was confined to the methods which were in



OREGON PROSPECTOR'S CABIN IN FOREST OF CASCADE RANGE

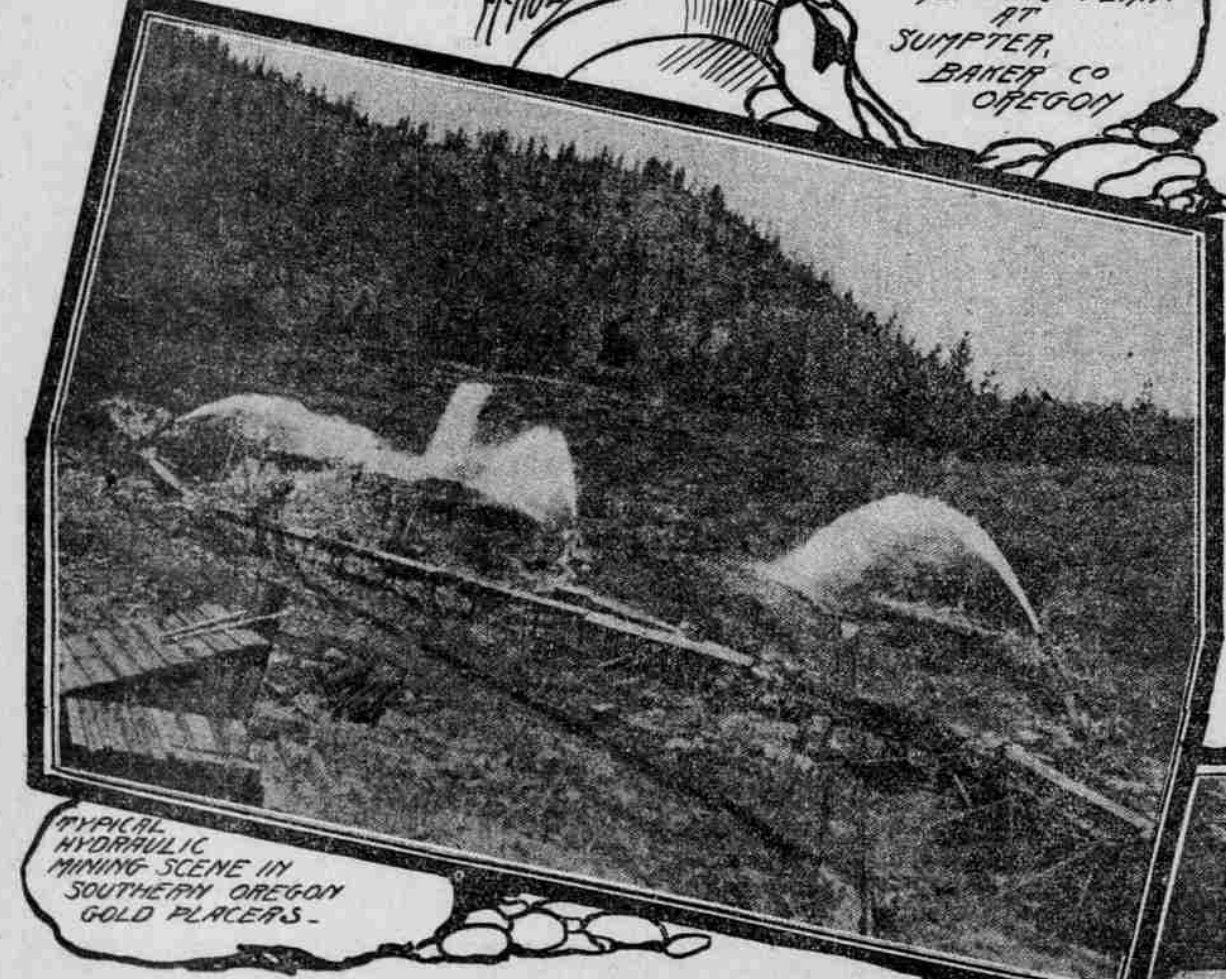
vogue in the early days, viz.: Washing in pans, then the "rocker," later the "Long Tom," and still later the sluice box. We now have the hydraulic "Chiant" with its powerful stream, boring into the foundation of deposits of gravel which lie in the beds of ancient river channels, thus causing them to cave off in huge masses, when they are torn apart and passed on through the flumes and sluices, leaving the precious yellow metal in the riffles to be gathered up, melted into "bricks" and shipped to the mint for coinage.

Many millions of dollars have been taken from the gravel beds of Southern Oregon. The principal district which have contributed to this enormous wealth are the Waldo district, in Josephine County, in which the Old Salter diggings were located, which produced as high as \$500 a day to the man, and the Sucker Creek and Althouse districts, in the same county, which include the famous "Briggs strike" of two years ago, and which have added millions of dollars to the wealth of the country. At the present time placer mining is successfully being carried on at Galice Creek, Grave Creek, Louse Creek, Williams Creek, Wolf Creek and on the Applegate, Rogue and Illinois Rivers.

The large placer mines in operation at the present time are the Logan & Simmons and Deep Graves Mining Company's properties, in the Waldo district; the Columbia, at Graves Creek; the Old Channel Mining Company, at Galice, and the Sterling mine, in Jackson County. Quartz mining is now taking the lead in Southern Oregon. Rich gold and copper mines are being opened up in nearly every section of the two counties mentioned. The copper mines are attracting the attention of capitalists all over the country. In Josephine County, the Waldo Smelting Company has been operating a 100-ton smelter for the past three years, employing 125 men and 20 six-mule teams in hauling in coke and bringing back matte.

The Alameda Mining Company, at Galice, Josephine County, is opening up what is destined to become one of the largest copper mines in the world. During the past year upward of 100 men have been employed in the mine in addition to several large crews who have been engaged in building a wagon road up to the mine. This road is now being extended down toward the mouth of Rogue River by the United States Forestry Service, thus opening up a country rich in minerals and timber. There are several rich gold and copper mines in addition to this district, including the Gold-an-Wedge, Oriole (which is at present in litigation) and the Picklet Creek copper mine, all in the same mineral belt, which includes the rich Chetco section, which is verily a prospector's paradise.

Jackson County was the scene of very extensive placer mining in the early days, Jacksonville, the county seat, being the only town in those days in Southern Oregon. The Blue Ledge copper mine is now the chief center of attraction at this point, being situated just across the state line in California. In the Gold Hill district are many promising quartz mines in addition to extensive placer mines, notably the Tin Pan, Braden and the Bill Nye, as well as the plant of the Champlain Dredging Company, which is being very profitably operated in the Foots Creek River. It



TYPICAL HYDRAULIC MINING SCENE IN SOUTHERN OREGON GOLD PLACERS

ports to be brought from there by men formerly prominent in the Sumpter district.

The mining region from which comes the greater portion of Oregon's output of gold is that which is popularly described as the Sumpter district. It takes its inception at Rock Creek, extending on a line south 40 miles to the old placer streams in Grant County out near Susanville, John Day and Prairie City. Embraced in that territory are four or five big producing mines and some 30 or 40 smaller ones, all of which in 1907 made shipments to the smelter at Sumpter. Notable among these are the North Pole, Columbia, Imperial, Pyx, Present Need and the Standard. The smaller properties in the aggregate have produced probably as much as the larger ones.

In round figures this territory probably produced \$750,000 in gold during 1907. The number of men employed in the mines in this district will approximate 1000.

One of the causes of confidence in the future, an attribute that is peculiar to this zone, has been the almost startling return of values in the old Red Boy, late in November, after months of work at a depth on the level that is known as the Blacksmith tunnel. Since that time work has progressed to such an extent as to demonstrate a remarkable value in the vein which is from seven to eight feet wide and will give backs of 500 to 800 feet. From comprehensive tests, it is indicated that the values run from 25 to 50 a ton. The facts concerning this property indicate that it will go to a state of permanent production which means much to the entire territory. The parties in control are also the ones chiefly interested in the Fremont Power Plant which was completed in October of this year and represents an investment of probably \$300,000.

The power generated by this great plant will be distributed over the entire Sumpter district. This means much economy in all future development work wherever it goes. It has been demonstrated by the use of a small portion of it in the present work at the Red Boy mine. The electric drills employed there went through rock at a cost of \$15 a foot, which otherwise costs from \$30 to \$50. The introduction of electricity will do away very largely with the extensive

equipment involved in steam plants, and also permit prospectors to tap the wires and get their properties into shape without the necessity of heavy expenditures for machinery. It will also settle a very important question in the matter of fuel. The Fremont power plant was evidently designed very largely to furnish the "juice" with which to drive the Red Boy's machinery. The transmission line has been extended into the Bourne district, however, and contracts have been made with several managements, notably the North Pole, which will result in the electrification of their entire plants. Next season, I am informed, the company will probably extend its transmission line into the Greenhorn, Cabellville and Quartzburg districts. Several managements in those territories have asked for the power, and with the return of confidence in their sections it will probably place them in the position to make contracts.

During the year 1907 more legitimate, honest, labor was expended on a number of properties that were on a flotation basis than was expended during the coin-gathering period. The result is shown in several sections, particularly at the Standard mine. In the Quartzburg district, from present indications this property will now be equipped with the machinery that will give it a very heavy output of concentrates for the smelter and keep its large mill busy for some years to come. And further evidence of the return of confidence in this section was made manifest a few weeks ago by the purchase of property in the Cabellville section, adjoining the Imperial, by Portland people who are planning at the present time for extensive development work early in the Spring. Several miles south in the Greenhorn section another sale of what is known as the Bi-Metallic has been made by the Cincinnati parties. The development work on this property has exposed a body of ore containing uniform values for which milling treatment was necessary to put it on a profitable basis. The owners are now intending to install a plant on this property early next Spring. It is now quite certain that the Sumpter

Valley Railroad will be extended from its present terminus some 20 or 30 miles to Susanville, during the coming Summer. It can be seen that this move on their part will have a very wholesome effect on the mining industry, as in the vicinity of Susanville are a number of partially developed and one of two proven properties which contain iron ores much desired at this time by the smelter and which have hitherto been unprofitable owing to the great expense involved in lone wagon hauls.

mineralized to a greater or less extent. Later exploration of a more thorough and scientific character have revealed in several localities extensive mineralized zones, carrying scores of large and well-defined ledges, rich in gold, silver, copper and lead. The principal camps so far developed are the Blue River and Bohemia, the former located 50 miles east of Eugene, on the watershed, between the McKenzie and Calapooya rivers, and reached by good wagon road from Eugene, and the



ONE OF MANY MINES IN BLUE RIVER DISTRICT NEAR EUGENE, OREGON