

Mineral Wealth of Southern Oregon Vast

1914 Metal Output

In announcing the following figures it is well to say that like all similar statistics it can serve only as an indication of the actual production of the mines. There is always a certain amount of the precious metals which is sequestered, hoarded or used as ornaments which may never come into the world's markets. There is also to be taken into consideration the ore which is produced and not marketed during the current year but which may later be benefited or sold thus swelling the returns for some future year. Material of this kind which may be of a lower grade is constantly going into the dumps of producing mines. Some producers undoubtedly withhold information as to their output either through secretiveness or for sound business reasons. It may be cited here that there is a large acreage in Jackson county the title to which is in litigation. Any considerable production of gold from such lands would probably be concealed. It is well to bear in mind that the figures upon which an estimate for a New Years edition are based are of necessity gotten up very quickly and even before the end of the year thus preventing the accuracy of official returns. There is also a percentage of bullion that is not marketed in or from the county of production.

After a careful consideration of the data at hand we make the estimate of the production of gold at \$70,000.00, silver \$1,000.00. The last official figures at hand issued by the Oregon Bureau of Mines are for the year 1912, gold \$62,885, and silver \$891.00.

In 1912 there were credited to Jackson county eight quartz mines the total production of which was \$31,682 thus showing one-half of the total to be from this source, the balance being from placer. The year 1914 shows 12 known deep mines with a production, still without fuller returns it would be impracticable to estimate the change if any in the percentages produced respectively by deep mines as compared with placer.

Of the various districts in the county, that of Gold Hill has produced about 50 per cent of the total for Jackson county. It contains the Braden mine, the premier mine of Jackson county and so far as is known of southern Oregon. Aside from the Braden the Gold Hill district produced more of the precious metals than any other single district in the county. A prominent operator there state that when the power costs are reduced there will be a heavy tonnage of low grade ore milled which has hitherto been unproductive. Substantially all of the county's production is in the shape of bullion. High grade ore is shipped from the Buzzard mine. No attempt has been made to list the producers of placer gold. The following is a list of deep mines that have produced during the current year. This list is probably incomplete:

Hill Nye, Braden, Buzzard, Grubstake, Hidden Treasure, Lucky Hart, Nellie Wright, Nuera, Palmer Creek, Norris, Star.

So far as known there has been no production of other metals in the county. Owing to the importance of the Braden strike the probability that the Sterling placer will be a producer in the coming year together with such favorable factors as the reduction in power cost and the excellent system of roads that are being constructed it is deemed highly probable that this county will show an increase in production for the year 1915.

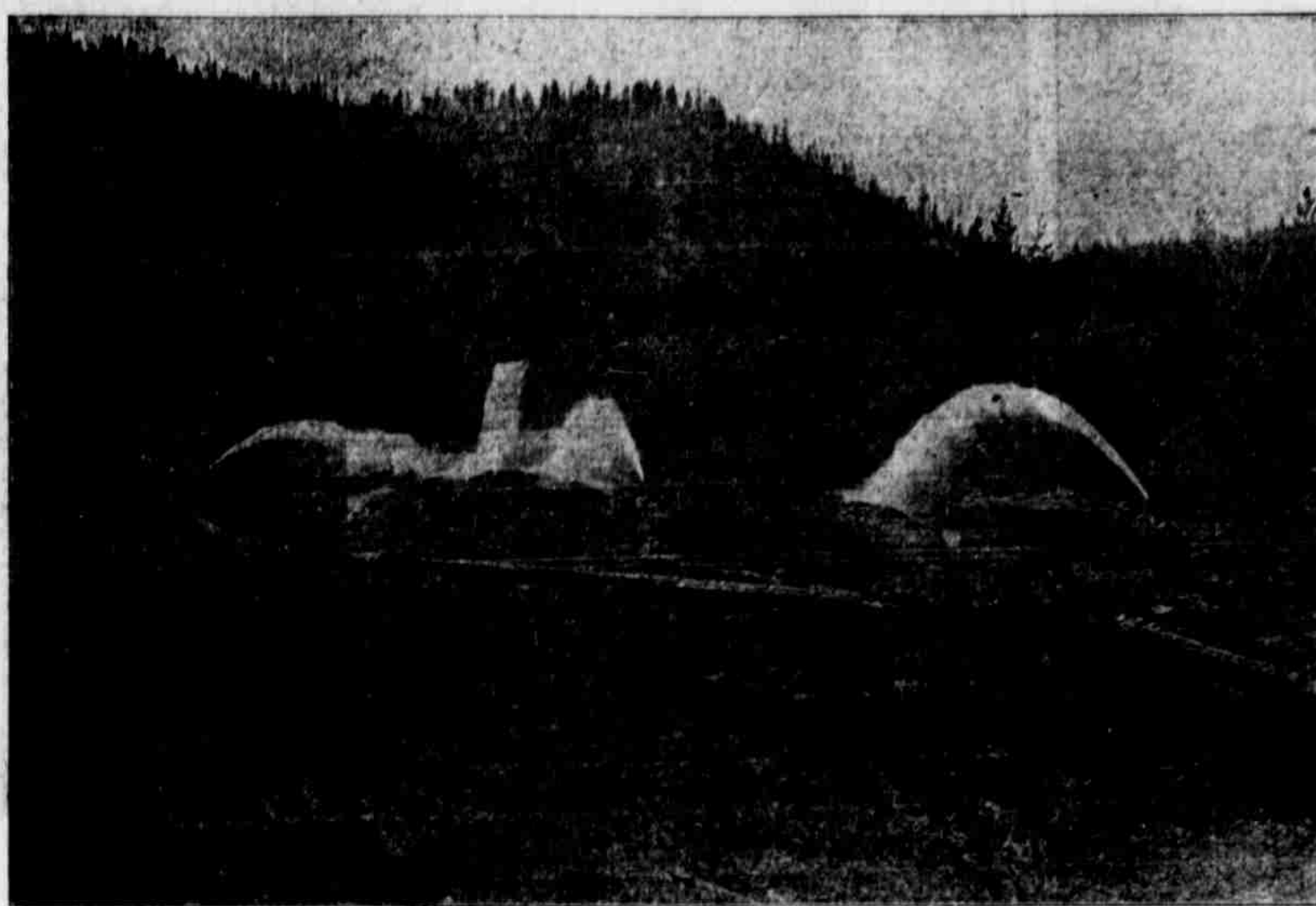
As an indication of the size of the gold producing belt in this county we may say that it includes one-half of the county and that the Buzzard mine is located 50 miles north of the Grubstake. There are over 1000 square miles in the county over which these productive mines are scattered.

Klamath Valley

How few among our readers know anything of the real Klamath valley. Most of us have crossed this valley on the way to San Francisco and frequently without knowing it. At the point where the railroad crosses the river has an elevation in excess of 2000 feet above sea level and for a considerable part of the year it is not apt to be especially prepossessing at this point yet this stream follows its rapid course for more than 100 miles before losing itself in the Pacific. Throughout this distance there is no sign of railroad and for half the distance trails form the only avenues of communication.

Klamath river, one of the principal rivers of the Pacific coast, has its source in a chain of lakes in southern

SCENE AT STERLING PLACER MINE, A PROLIFIC YIELDER IN THE PAST NOW BEING OPERATED BY S. S. BULLIS.



central Oregon and flows sinuously through Siskiyou, Humboldt and Del Norte counties, California, to the Pacific ocean. This river and its tributaries traverse a great region of undeveloped mineral, agricultural, and commercial resources; greater than any like area, without railroad facilities, within the United States. Its climate, in the foot-hills, is typically Californian, salubrious throughout the year, while its towering mountains, snow-capped for many months, are a guarantee of ever flowing water for power, mining and irrigation purposes. Its water shed of many hundred square miles is forested with a heavy growth of matured timber, estimated by the United States forester at more than twenty billion feet of commercial lumber. Its auriferous gravels, of great extent, have been continuously and profitably worked since the discovery of gold in California. Its foot-hills and bottom lands prolifically grow fruits, nuts and vegetables, unexcelled in flavor, while the valleys of its tributaries, containing more than 4000 acres are adapted to cereals and hay, stock raising and dairy purposes. Its crops never fail. Its atmospheric purity, its hot and cold medicinal waters are an insurance against the ills that "flesh is heir to"; its topographical wonders, defying portraiture by brush or pen, hold the mind enthralled in contemplation of the mystery of its creation.

Open this unexploited region by the construction of the wagon road now contemplated and it becomes the homeseekers paradise; the poor man's opportunity. This great artery of drainage, carrying the torrential flow of its mountain laterals will eventually, by the act of man, irrigate its adjacent tillable soil and furnish power for great commercial industries.

The erosion power of this great flow has exposed large areas of mineral being formations, practically undeveloped. Railroad construction through the Klamath basin would make these mineral areas accessible and their mine products marketable. Predominating in this territory are outcrops of enormous copper bodies, easily traceable by their iron and kossan cappings. This copper bearing area covers not less than 40 miles east and west and 30 miles north and south in the north central portion of Siskiyou county. Within this mineral region two districts are locally prominent and will be briefly described—viz—Happy Camp and the Blue Ledge district. Exploration of the latter district has established its present area to be fourteen miles in length and six miles in width, situated in the main Siskiyou mountain range about 40 miles southwest of Medford, Oregon, a thriving city on the line of the Southern Pacific railroad and 50 miles north of Yreka, the county seat of Siskiyou county, California. The north half of this district lies on the north slope of the Siskiyou mountains within the state of Oregon, and the drainage is into Applegate river, a tributary of Rogue river. The south half of the district is in California, and the drainage is in Klamath river. The predominant formation in which ore occurs is schist. Gosgan outcrops from 10 feet to 300 feet in width indicate 10 or more parallel veins striking north and south and traceable from a point three miles north of the Oregon-California line where the schist abuts granite, across the Siskiyou mountains (at an elevation of 6000 feet)



Quartz Mill at the Greenback, One of the Few Mines Which Have Been Dug to Any Depth Below the Grass Roots.

and into the foothills of Klamath river (elevation 1600 feet) a distance of eight miles, while a number of properties have surface showings equally as good.

West of the Pacific highway there is no wagon road across the Siskiyou mountains. The road from Crescent City to Requa passes along the face of the range as it plunges into the Pacific. This river is credited with a production of more than one hundred million dollars in placer gold. It is exempt from the debris regulations of the state of California. This river basin within a distance of 100 by road from Medford produces more gold annually than Jackson county. It contains one large developed copper mine as well as very valuable timber.

Realizing the value of a suitable connection between the Klamath valley and the Rogue river valley a pass through the Siskiyou mountains was selected having an elevation of about 4600 feet above sea level. Lying within sight of the Blue Ledge mine it offered the shortest possible connection between the Jackson county road system in the upper Applegate with the roads in the Klamath valley, requiring about 22 miles to be constructed.

Officers of the National forest in Oregon and California agreed to operate in the construction of a trail through the pass along the route of a wagon road. Twenty miles of this trail has been completed and is now in use leaving less than two miles unfinished. In order to go now by the shortest route to Hamburg Bar and Happy Camp one would proceed from Medford by auto to the California state line at Seattle Placer requiring two hours of uninterrupted driving. At that point saddle animals would take the trail up Middle Fork a distance of three miles to the spot where the trail leaves on its ascent up Cook and Green creek. This latter stream is crossed after following its banks for five miles and from this crossing the summit is reached in about three miles. From the summit in the pass the trail leads down Selad creek a distance of about seven miles where it connects with a wagon road, and five miles further with the Klamath river stage road. Not less than six hours should be allotted to this horseback trip, lunch being taken at a spring near the pass. This trip will reward any one who will undertake it as it passes through some of the most wildly interesting and virgin recesses of the

untrodden Siskiyou. Not far from the pass are the meadows with the lake on the top of a mountain formerly frequented by the elk. A rhododendron field of hundreds of acres greets the eye of a June visitor. The pass itself has a rare beauty being depressed more than 1000 feet below the general level of the ridge on either side while the observer can look alike upon the blue hills of southern Oregon and the mountain ranges of northern California.

It is the intention now to go about widening this trail which has a maximum grade of 8.7 per cent and finishing same as a highway for general traffic. It is believed that substantial assistance to this plan will be accorded by the present congress following the recommendations of the secretary of agriculture.

Reward of Effort

Well directed and persistent effort is invariably rewarded with success in all lines of industry, mining included.

While lode mining in southern Oregon has as a whole been rather in-

active the past year, with some exceptions, of which the Braden mine at Gold Hill stands as evidence, that well directed management and exploitation can be liberally rewarded with success in this region. About one year ago the Braden management decided on cross cutting into the foot-wall, which proved up a third parallel vein 65 feet west of the old Braden vein. The new strike has no evidence of coming to the surface as far as present development shows, but has a good average width and ore values, and reserve tonnage has materially gained on the ten stamp mill, which has been making a splendid record.

What has been done at the Braden mine is possible at many other places in this mineral belt. It is a positive fact that large bodies of high grade ore are often found in depth that does not come to the surface in full size and values. For instance, the DeLamar mine, Idaho, was worked from the surface down to a depth of about 200 feet for milling gold quartz that ran from \$5 to \$15 per ton. The quartz was displaced to a large extent by a blue talc containing what the miners called blackjack (zinc). The property was abandoned and finally bought for a small sum by Captain DeLamar. His experts found by assaying the so-called blackjack to be stephanite (brittle or black silver), some of it running 68 per cent silver, and averaged about \$2000.00 per ton. Another instance, the Leftoi mine

and averaged close to \$100 per ton. Is it any wonder this little plot of ground 600 by 1500 feet went to a valuation of \$79,500,000 on the London market? No doubt many mining men can site similar attractions of ore in depth that did not occur on the surface.

Here is the Buzzard mine in the Elk creek district now producing \$400 gold and silver ore that I am informed had less than \$20 croppings.

If the reader will look back and review the last few industrial and financial depressions, it will be noticed that they have been followed by a decided mining activity. It shows virgin treasure is necessary for industrial expansion.

E. W. LILJEGRAN.
Medford, Ore., Dec. 27, 1914.

Mining Resources

The mineral resources of Jackson county include gold, silver, copper, iron, lead, zinc, quicksilver, tungsten, tin, manganese, asbestos, coal, granite, marble, limestone and clay. Gold has been almost continuously mined in Jackson county since its first discovery in 1851. The earliest large town in Jackson county—Jacksonville—was a mining town, and the mining era did much toward attracting settlers to the Rogue River valley and affording to them a market for farm and range products. The gold fields of southern Oregon have a total area of 5000 square miles.

Mining Operations

It is variously estimated that the placer gold fields of southern Oregon have yielded \$100,000,000 since their discovery. Placer mining is today returning good dividends on a number of properties in the vicinity of Jacksonville and Gold Hill, and there are large areas of gold-bearing gravel in Jackson county awaiting capital to develop. Just across the county line, in Josephine county, is being operated, near Galice, what is called one of the model hydraulic mines on the Pacific coast. A large modern dredger employing from twelve to fourteen men is in operation a few miles up the Rogue river from Gold Hill. Placer mining is also being conducted intermittently along the Little Applegate river, Sterling creek, Foothills creek and Graves creek. Quartz mining is also active at several points, there being a quartz mill at Jacksonville, and others in operation near Gold Hill, and others on the Umpqua divide. Just across the Jackson county line to the south, in California, is located the famous Blue Ledge copper mine. This mine is prospectively among the richest copper mines of the west. But little deep mining has been done in Jackson county, and the district has not been systematically prospected. There are a large number of seemingly most promising mineral deposits awaiting capital for development.

Coal Possibilities

The large coal deposits are also among the mineral resources of Jackson county that have not been thoroughly tested. Reports of the geological survey indicate that there passes through the Rogue River valley a long narrow coal bed that reaches from Evans creek south through the Siskiyou mountain divide into California. The coal belt passes a few miles east of Medford and Ashland, and a number of small developments have been made. These coal veins, as far as prospecting has gone, range from eight to twelve feet in thickness, broken by layers of shale. This coal has been used locally both in Medford and Ashland. Though showing a fairly high percentage of ash and broken by shale, the veins have uniformly grown better in being followed deeper, toward the northwest. This has given much encouragement, and with such a large area of coal deposits it seems probable that good paying veins should be found with systematic development. The last report of the geological survey conservatively sums up their coal investigation of the Jackson county district as follows: "For the present the coal beds from Ager (California) to Evans creek are only of local interest as a source of fuel, but detailed examination in the future may show these coal beds to be more extensive than are now supposed. If so, they may become, with the improvement of gas producers, important sources of power." Some good peat deposits are also known.

Granite and Marble

Building stone seems to offer important development possibilities for the future. These include granite, marble and a variety of sandstones. All of these stones have been used more or less in some important buildings in Ashland and Medford and other population centers. Also some of these materials have been shipped to other cities.

BLUE LEDGE MINE HEADQUARTERS—ONE OF THE GREATEST COPPER MINES ON THE COAST—OVER A MILLION DOLLARS DEVELOPMENT WORK DONE

