STATE OF OREGON
DEPARTMENT OF GEOLOGY & MINERAL INDUSTRIES

PORTLAND, OREGON

THE ORE.-BIN

VOL. 2 NO. 9 PORTLAND, OREGON September 1940

OREGON MINES' OUTPUT SOARS.

Oregon's mining industry is increasing very rapidly, probably faster than any other basic industry in the State. Judging by official figures just released by the U.S.Bureau of Mines, the value of Oregon's production of metallic minerals and ores increased 16.6% in value from 1938 to 1939. For the current year 1940 this same metallic mineral production of the State will be increased by 50% over the 1939 figures, according to an estimate by the State Department of Geology and Mineral Industries. Adding in the value of non-metallic production for 1940, including limestone for cement, stone, gravel, diatomite, etc., of around $6,000,000, the State's total mineral production will be well in excess of $10,000,000 for the current year - perhaps nearer $12,000,000.

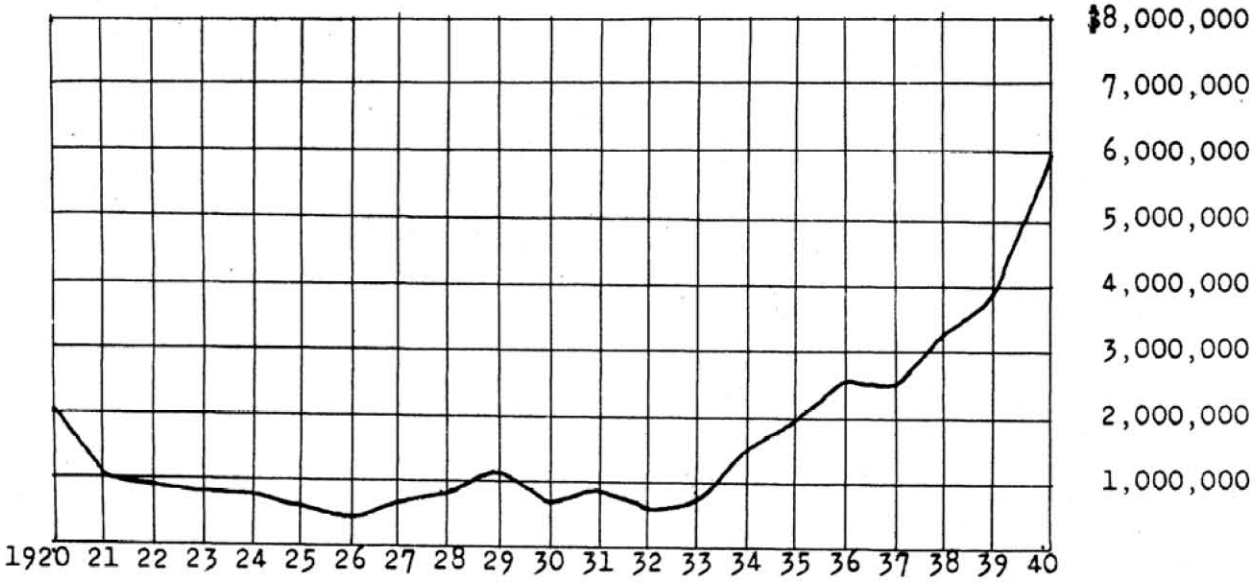
The actual value of gold, quicksilver, lead, zinc and copper produced in Oregon in 1939 was $3,828,243.00; for the previous year, 1938, the corresponding valuation was $3,282,970.

The rapid advance in 1940 has been due mainly to the greatly increased production of quicksilver (having a value of about $1,650,000), and to the increased number of gold dredges operating in the State. Oregon now has the largest producing quicksilver mine - the Bonanza Mine near Sutherlin - in the United States.

Counting gold producers only in the year 1939, there were 116 underground quartz producers and a total of 201 placer producers, consisting of 15 dredges, 13 non-floating washing plants, 76 hydraulic gold producers, 13 underground drift placers and numerous miscellaneous placers. Baker County was the largest gold producer and Grant County second.

****

Value of Oregon Metallic Mineral Production
from 1920 to 1940.



Actual value of metallic production is $2,392,133 for 1937.
" 3,282,970 for 1938.
" 3,828,243 for 1939.
Closely estimated " 6,000,000 for 1940.

Note: Non-metallic production of Oregon runs about $6,000,000 additional, making a total mineral product of the State of around $12,000,000 for 1940.

(NOTE: - 'Bout every few months the Director of this Shebang comes in and submits some of his so-called "copy" for possible inclusion in our otherwise staid and gentlemanly publication. This time, it's excerpts from his diary written during his recent trips in South America where he was carrying out consulting mine examination work. Maybe it don't hurt to jazz up our sheet a little now and then. We don't know, - - anyway, don't say we didn't warn you.

--------The Ore.-Bin

SOMEWHERE IN THE PERUVIAN ANDES

"July 28, 1940. Diary of Earl K. Nixon

Did you ever sit nonchalantly down at a table and, in subconsciously arranging a yarding space for your feet, poke an innocent toe into a soft,yielding object that you knew instantly could be nothing else than the shapely shank of a nearby Venus? And, just as instantly, you retracted your offending landing gear and blurted idiotically, "My Heaven, I thought it was the table leg." Then, still woozy, but compelled by something, you looked down - just as Venus looked - and saw that the table had one of those single, 12-inch, quarter-sawed oak affairs in the middle? You say, "It couldn't happen here!" (-that is, way back up in the Andes). The Hell it couldn't.

I sat down to a "dinner" this evening in a tin-roofed, adobe hut - the only dwelling in a "town" that begins with "Q" at the end of a narrow-guage railroad high in the Andes - and poked my aching legs under the table, (aching, because I had just been in the saddle six hours on the roughest kind of Andean trails), -- and stuck my toe into one of those "soft, yielding objects". Momentarily, I felt ashamed, embarrassed, abashed, etcetera, etcetera, but not for long as there was no one else at the table. I gave "Venus" a heck of a kick by way of exploration (a matter in which I am supposed to be adept), and did I get results? Amidst squeals and yeows, two sows (authentic American for female swine, size 44) and a tom cat came charging out from under the table and darn near wrecked the place.

I might mention that the place had a dirt floor - late Pleistocene alluvial - and that flies had been using the originally whitewashed adobe walls for bleachers since the time of the Incas. The little boy who brought in my dinner was about 10 years old, judging by the amount of "stain" he had accumulated. My dinner consisted of a can of sardines and a bottle of mineral water out of my knapsack, two "huevos pasados por agua cinco minutas" (5-minute eggs), and a small bowl of rice. I have always found boiled rice to be satisfactory in such out-of-the-way places. Being white and thus less susceptible to the possibilities of protective coloration, one can more easily segregate any "meat" or gangue that might render the chow less delectable.

I'd gone up there to look at a series of veins - never mind what kind - and to get a preliminary slant at the geology and general mining economics. . .

July 21, 1940.

Left Lima yesterday morning with D., B., and del G., and drove about 200 kilometers, half of it along the macadamized Pan-American highway, to the town of J--- where we had lunch. I ate black coffee, boiled rice and two eggs fried

in butter or grease, possibly left over from Pizarro's last meal, judging by the aroma. Then 60 kilometers along a winding canyon road, deeper into the Andes, to the town of C---. The latter, a village of 300 or 400, is really clean, and, set in a niche between high mountains, looks as much like a Swiss hamlet as anything I have seen.

This morning, on horseback, we traversed a winding, but wide, canyon trail, 20 kilometers to the "city" of O---, where we deposited most of our duffel in the patio of a thatch-covered, adobe residence - then on to the principal coal areas, another 15 kilometers.

At and beyond O--- at an elevation of 11,500 feet, we began seeing llamas, instead of burros, used for beasts of burden. Burros are real hay-burners and must have their water frequently, though they seem to carry heavier loads and are a little tougher than the llamas. The latter, seemingly a cross between a camel and a deer, carry fair-sized loads over the highest Andean trails and, it is said, can carry on a couple of days if absolutely necessary without water and with a minimum of food.

One mine I visited was unique in my experience, although not unlike other coal operations in the district. It was located at an elevation of about 14,500 feet. Entrance was through a cross-cut tunnel about $2\frac{1}{2}$ by $4\frac{1}{2}$ feet in cross section. (The miners - Cholo Indian types - are small fellows on the average). From the point where the entry cross-cut reached the vein a narrow slope or winze, cut in the coal, leads downward on an angle of 30°-40° to the first sub-level. The gangways - as we would call them in our coal regions - are very narrow drifts only large enough to get through by stooping and are driven in the coal, more or less on the contour of the vein. With head ducked, my shoulders brushed both sides of the passageways in places.

Although the coal - anthracite - was so shelly that one could break up any chunks in his hands, nevertheless there was a minimum of timbering in the mine. I noted in places that they had put in short sets and stulls of gnarled and crooked eucalyptus wood, the average size of the timbers being that of a man's arm. I crawled about, sometimes stooping over, sometimes on "all fours", down ladders and through "gangways", sometimes merely using hitches in the inclined passages to keep my boots from slipping. The mine was dry, although at greater depths, judging by the dampness at the bottom, they will have to pump or carry out a few gallons of water per day.

The mine was especially unique in several respects: not a stick of powder they told me had ever been used since the mine was begun; I saw neither pick nor shovel nor any kind of hoist, pulley or mechanical or metal apparatus of any kind with the exception of four or five 3/4-inch, pointed iron rods about five feet long. These were used to bar down the soft, shelly anthracite coal.

The coal in turn is scooped by hand into bag-like, home-made leather contraptions the miners use to carry the coal - the hard way - out of the mine. Of course they do not use chutes for loading coal out of the breasts under these circumstances.

I cut a channel sample of the coal at one point where the vein was of average texture and about two meters thick. The sample, weighing nearly 200 pounds, was hand "shoveled" into six clean, five-gallon gasoline cans and carried out through the maze of raises and "gangways" on natives' backs. The sample reached the surface long before I did, as I had to sit down and pant because of the elevation after climbing each incline between sub-levels. At the portal of the mine, the six big tins were soldered up - in about four hours - by a peon using an antique piece of copper heated in an open coal fire. Then the cans were placed on the backs of llamas and started on their long trip to the outside to the United States for metallurgical and coking tests.

About 400 tons per month are produced at this mine. The coal is bagged at the portal and placed in 100 pound sacks, one to an animal, on the backs of llamas and thus transported 35 kilometers (21 miles) over a 15,000 pass to point of consumption at a property owned by an American corporation. The coal is delivered for about $3.30 gold per ton, which covers, transportation, mining and a small profit to the producer. (We may neglect overhead, depreciation, amortization and obsolescence on such operations).

Miners are seldom injured in these mines but if they are they are taken care of properly because of good governmental regulations.

I suspect that these miners are just as happy, possibly more so, as the miners in the United States, but it isn't the American way, and we wouldn't care to trade.

Oh, yes, about the cockroach! Last night, I stayed at a little hotel in a certain town before catching the plane back to Lima. Just before dozing off, I heard something stomping down the hall! It hesitated just before entering my open door - I reached down beside my cot and clutched an oxford - having no other weapon. "It" stomped on in, and what do you think - a cockroach! I heaved the shoe, but did I crush it? Hell, no. It stood up on its hind legs, caught the missile in mid-air, tossed it over toward third base, emitted a sound suspiciously like a Bronx cheer, then stomped off down the hall again. (This last yarn was a little tall, I realize, but many things like the mountains, for example, come big in this country, and you can make allowances when I give you permission).

****

KLAMATH FAULT EXPOSED.

Borrow pit excavation by the Highway Department just east of The Dalles-California Highway between Fort Klamath and Chiloquin Junction has exposed a west-dipping fault plane nearly 50 feet high and over 100 feet long.

In removing the fine talus material from the foot of the north-south trending escarpment, the smooth and polished fault surface of basalt was exposed. This fault dips about 80° W. and has been exposed for a considerable distance. The fault escarpments along the east side of Klamath Lake have been described, and a small portion of the fault surface itself appears on the south side of Algoma Point, but this is the first time that the main north-south fault plane has been actually seen.

****

MINING AND GEOLOGICAL SOCIETIES MEET.

A field trip of the Oregon Section of the American Institute of Mining and Metallurgical Engineers, in which members of the Geological Society of the Oregon Country participated as guests, was taken over the Labor Day week-end. Visits were made to the Bonanza Mine, southern Oregon's largest lode gold mine, numerous dredges, and Crater Lake. Dinner meetings were held at Roseburg and Grants Pass.

The group numbered about 40 persons and was supplemented at the dinners by attendance of members of the staffs of the local mine.

After lunch, served at the Bonanza Mine by Mrs. H. C. Wilmot, the party was guided through the mine workings and furnace plant. The program at Roseburg was headed by a talk by Albert Burch on the History and Ore Deposits of the Benton Mine, followed by a discussion of Nonmetallic Deposits by Fay Bristol.

Sunday morning members and guests drove to the Benton Mine and were shown over the mill, after which they were guests of Mr. Mason Bingham at lunch. During the afternoon the party was shown through the mine. The dinner at Grants Pass that evening was followed by a program arranged by the Oregon Mining Association, and consisted of talks on the History of the Oregon Mining Association by F. W. Watson, the Effect of the Excess Profits Tax on Mining by S. H. Williston, Transportation Problems in Nonmetallic Mining by Fay Bristol, and the Muddy Water Problem in Southern Oregon by Senator Wipperman of Grants Pass.

On Monday part of the group was conducted on a tour of dredge operations in southern Oregon by Ray C. Treasher and Albert Lewis; the rest went to Crater Lake and thence to Portland via the Willamette Highway.

****

This Department acts as a clearing house for those who wish to buy or sell or lease or operate mineral properties within the state of Oregon.

****

29-1. Lode gold property near Grants Pass, consisting of six patented claims. Owner states there is considerable $15 to $20 ore developed by open cuts and a 250-foot tunnel. Owner will consider any attractive offer.

E. T. Carnegie, Route 2, Box 493,
Grants Pass, Oregon.

29-2 Gold property of three unpatented claims on Ogle Mountain, Clackamas county. Owner states there are 400,000 tons of $9.00 ore in a decomposed porphyry developed by open cuts and short tunnel. Financial aid will be considered.

W. C. Daly, 16 SW. 3rd Ave., Portland, Oregon

Cosmo Metal Alloys Corporation, 275 Front St., New York City, purchases tungsten ores and concentrates. Correspondence with possible producers in regard to quotations is solicited by the corporation.

****

The ORE.-BIN
State of Oregon
DEPARTMENT OF GEOLOGY & MINERAL INDUSTRIES
702 Woodlark Bldg., Portland 5, Oregon
POSTMASTER: Return Postage Guaranteed

Sec. 562, P. L. & R.