

THE GREAT BOHEMIA MINING DISTRICT SOUTHERN OREGON

The Oregon Southeastern Railroad, now Building from Cottage Grove, on the Southern Pacific, to these Properties, is Bound to Open Up Some of the Richest Mines of the West.

One hundred and forty-four miles south of Portland, in Lane County, Oregon, is located the City of Cottage Grove, a prosperous town of about 1500 population.

Beginning at 35 miles, and extending to a distance of 45 to 50 miles, in a southeasterly direction from Cottage Grove, is found the Bohemia mining region, a district prolific in the production of gold, so far as developed, and likewise valuable for the silver, lead and copper deposits of its mountains.

From Cottage Grove the Oregon & Southeastern Railroad is now in process of construction, active grading operations being prosecuted at the present time. The roadbed to the mines will be completed, it is expected, by November, and cars running to its terminus before the snows of another winter whiten the valleys adjacent to the camp.

Here is a mining district, therefore, within a few hours' ride of the metropolis of the North Pacific—a neighbor to Portland, a city of 100,000 souls—and so near the city of Cottage Grove that mine owners may have their homes within the shadows of its churches, yet pursue their vocations daily at their properties in the hills.

Attention is called to these features of that part of the state of Oregon because it is unusual that mining camps are favored with the highest type of civilization skirting their borders, and so located that men may enjoy the comforts and privacies of their homes by night, while superintending or laboring in their mines by day.

COTTAGE GROVE.

As stated, Cottage Grove, 144 miles south of Portland, on the Portland-San

Francisco division of the Southern Pacific, is a city of about 1500 people. It is governed by a Mayor and Common Council, as other places of its kind are governed, a marshal and a deputy maintaining the quiet and order of the town. Surrounding the city is a fertile agricultural area, on which is grown all kinds of cereals, vegetables, etc. As fine fruits are produced as may be grown anywhere on the North Pacific Coast. Indeed, it is a remarkably fertile region all the way back to the foothills, and there the line is drawn between the products of the farm and those of the mountains rich in gold.

The business of Cottage Grove consists of the mercantile establishments usual to well-settled communities of thriving people. Several large general stores, a substantial bank, exclusive groceries, two or three hotels and two prosperous newspapers are among its possessions, and the city is lighted by electricity. A branch of the Willamette river courses through the city, affording power for a small custom flouring mill. A graded school equipped with all paraphernalia necessary to the education of the young, possesses a full complement of experienced teachers, and the various religious denominations worship in the churches erected for themselves.

MINES OF BOHEMIA.

What has been said in the foregoing lines is intended merely to introduce the reader to the mineral district of that part of Oregon. It must be remembered first of all that this state contains four highly mineralized sections. The Baker City district, in the extreme eastern part, is perhaps the best known. It has been

so largely advertised by the local newspapers, the railroads and the active Chamber of Commerce of Baker City, that everybody, seemingly, in the Western country anyway, is familiar, not only with its topography, but the marvelous production of its mines as well.

Central Oregon, in which is located the fabulously rich Oregon King mine, is not known anywhere to any extent. Litigation has closed that mine down, and the district is dormant now.

St. Helena, at the base of Mount E. Helena, a camp that will probably develop the greatest copper mines west of Lake Superior, is held in bonds for lack of transportation facilities, and cannot now, for that reason, bear the harvest of mineral fruit sure to follow the construction of a railroad to connect the Northern Pacific with its copper rocks.

OUT OF THE WOODS.

And this has been the condition of Bohemia, except in not so great a degree, since time began.

Now, however, the cords of isolation which have for all these centuries bound the contents of these hills to the wilderness of unprofitable development are being speedily severed, and Bohemia is soon to step upon the forum of popular favor, and the stocks of its properties will be sought for by thousands who have never been introduced to the richness of its ores.

With all the difficulties of transportation that have heretofore existed there, its ores and concentrates having to be carted 35 to 45 miles over precipitous mountains and rudely constructed highways, Bohemia has well rewarded the

development of its mines, the properties of the Helena Mining & Mining Company alone having disbursed \$150,000 in dividends to its stockholders. The Helena—has produced \$250,000; Musick, \$150,000; Noonday, \$150,000; Champion, \$50,000; Knott, \$50,000; Vesuvius, \$20,000; Star, \$15,000; Stocks & Harlow, \$15,000, and Tom Johnson, \$10,000.

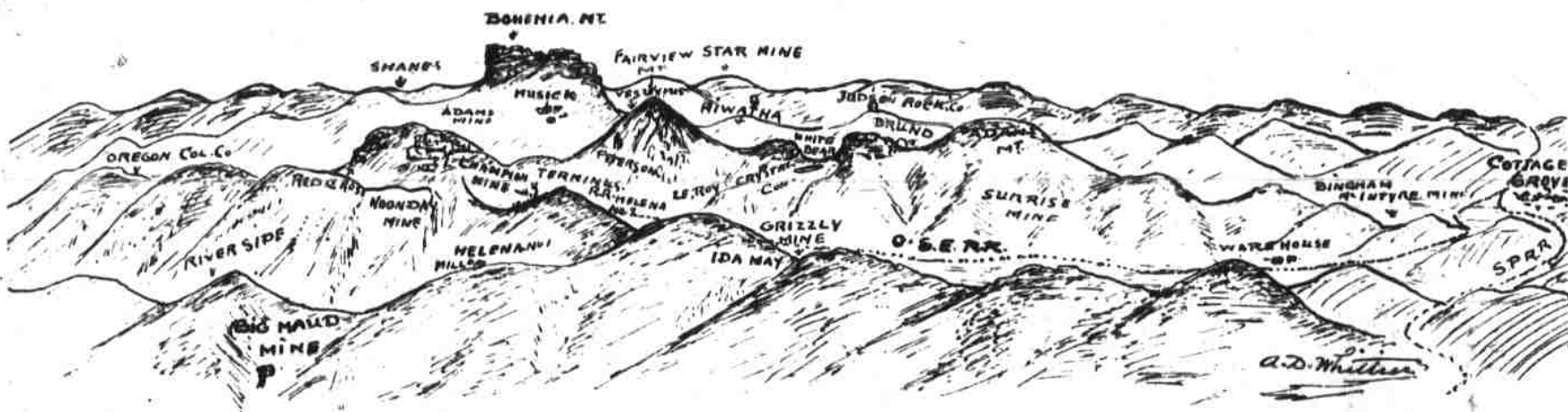
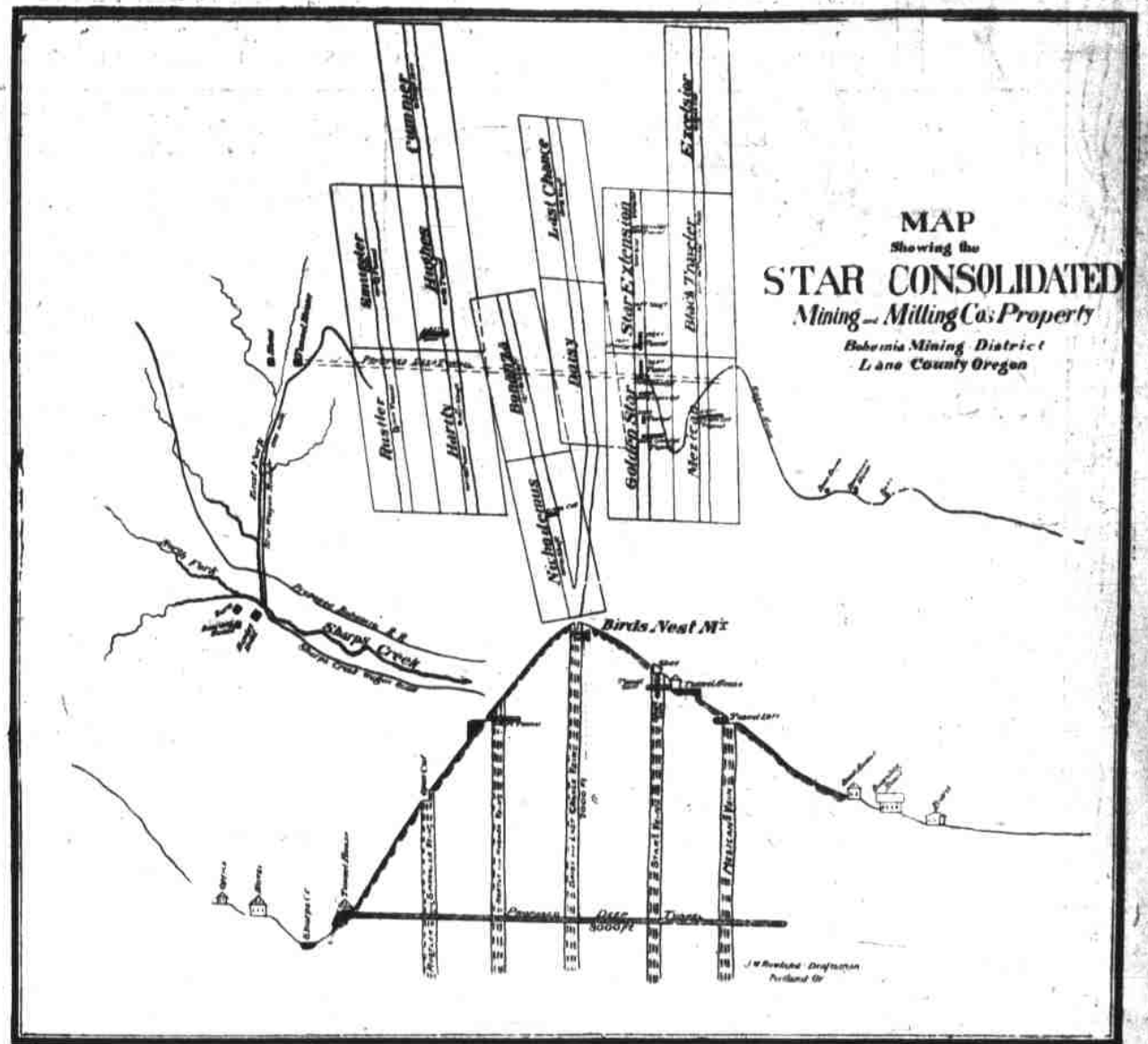
These figures show to some extent the amount of work already done on these properties, and may form a basis of calculation of what the profits may be when the ore wagons of the past have given way to the steam cars of the closely approaching future.

The Journal will not attempt to enter upon a minute description of the Calapooia mountains, Lane and Douglas counties, in which the Bohemia district lies.

PROFESSOR KIMBALL'S REPORT.

Professor James P. Kimball, M. E., at one time director of the United States Mint, a geologist and mineralogist of world-wide reputation, has given the region critical examination, and has made the following intensely interesting report of its formation:

"The mineral bearing formation is andesite of volcanic origin. In the form of lava flows, and intrusive dykes—more or less differentiated in crystallization, according to the mode of occurrence. No true porphyry dykes are seen, but numerous trap dykes toward the western base of the mountains. Conformably to well-defined jointing of the mass, it is traversed by a great number of parallel fissure veins filled out with fragmental material from the walls (breccia) and with secondary or vein quartz mineralized with



Tracing Showing Line of Oregon Southeastern Railroad, Now Building from Cottage Grove, on the Southern Pacific Railroad, to the Bohemia Mines.

the precious and base metals. The hanging wall at least is always well defined.

"The vein phenomena are extremely pronounced, and altogether favorable to permanent mineral developments.

"The topography is all that could be desired, especially for drift mining from the gulches, all of which are occupied by copious mountain streams, offering natural water power at numerous points.

"The climate is mild in winter. The rainfall is probably near the maximum.

"Mineral discoveries in the Bohemia district date from the year 1858. It was practically rediscovered in 1891. Since that year it has chiefly been known as a free-gold camp. As such its importance is really subsidiary to what it derives from its deeper gold and silver-bearing smelting ores of lead and copper in the form of sulphides.

"As compared with the Coeur d'Alene products, widely marketed in the form of

coarse concentrates, the Bohemia shipping products are similar in point of lead and silver, but essentially different in their large ratios of gold and copper.

"Their fluxing value, due to the lead ratio, is fully equal to the Coeur d'Alene products, in competition with which their further metallurgical values are greatly in their favor.

"The development of rich free-milling gold ores in the Bohemia mines is confined to a comparatively shallow zone of the same lodes carrying the metallic sulphides beneath. This zone is determined and limited by the depth penetrated by oxidizing, or weathering agencies. The depth varies with the topography or the inequalities of erosion. The underground workings of the older or free-milling operations open by drifts from 20 to 50 feet below the top of the divide.

"The later operations, including the more extensive of the older workings, are

designed to reach smelting products below the superficial oxidized zone. All of the workings are by means of drifts connected by quizes. From the axes of the several mountain valleys' backs above

adit-level are to be had from 100 to 200 feet, thus obviating corresponding sums of grade in transportation and construction in locating all mine plants at or near water level.

"While all of the mines have only been wrought at shallow depths for the production of amalgamating ores, they are bound to be opened at lower elevations from the sides and bottoms of the gulches mainly for the sake of their normal shipping or smelting ores, rich in precious metals, in comparison with which free-milling products are only of passing and minor importance."

A number of assays made for Professor

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