

CANYON MOUNTAIN REGION

CANYON DISTRICT

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The extended quotation which follows is taken from Waldemar Lindgren's excellent report upon "The Gold Belt of the Blue Mountains of Oregon," pp. 712-720, and is the result of his visit to this district in 1900.

General Features.—The celebrated placer mines of Canyon are situated in the upper drainage basin of the South Fork of John Day river. The valley here widens to a broad depression, about 18 miles from east to west, and from 4 to 8 miles from north to south. In contrast to the narrow and heavily timbered valleys of the North and Middle forks, this is a bare expanse of gravelly pasture land with strips of alluvial soils along the river from a quarter mile to 1 mile wide. The elevation at John Day is 3,000 feet; at Prairie, 3,500. The climate is fairly mild and dry, the water supply ample; in consequence the valley was settled soon after the discovery of the placers, and has for thirty-five years supported a prosperous community of cattlemen and farmers. North of the river the hills rise gradually and culminate in a timbered ridge forming the divide between the Middle and South forks of John Day river. The eastern end of the valley is surrounded by dark forested mountains rising to about 6,500 to 7,000 feet. At the very head of the valley there is, however, an unexpectedly low pass (elevation about 4,500 feet), through which a wagon road leads over to the Malheur river basin. South of the valley the picturesque Strawberry range rises abruptly, with serrated peaks, culminating in Strawberry Butte, with an elevation of about 8,600 feet. Toward Canyon the sharp ridges are a little lower, but still attain 8,000 feet. The range presents a steep but not very regular slope, with numerous salients and deeply incised canyons. Hot springs are found on Reynolds creek in the uppermost part of the valley.

Geology.—The older pre-Miocene diabases, slates, and serpentines from the north side of the valley have been described under the heading "Quartzburg district." The eastern end of Strawberry range, including the butte of the same name, is built up of Tertiary lavas. But at the foot of this mountain the underlying rocks appear, and their contact gradually rises westward, until in a short distance they form the summit of the mountains, culminating in a group of peaks and ridges which a few miles south of Canyon attain 8,000 feet above the sea. South of Prairie, below Strawberry butte, serpentine appears in great development. It reaches 900 feet above the foothills, and also continues westward across Indian creek. At Gillespie's sawmill it contains small bunches of chromite. The range was not ascended any farther than to the claim known as the Oregon Wonder, at an elevation of 6,300 feet; but the color and configuration of the high ridges

back of Canyon indicate that they are composed of a granitic rock. Prospectors state that diorites and porphyries are the prevailing rock, and in the gulches, coming down from the peaks, are abundant cobbles of a very coarse diorite with hornblende crystals up to 2 inches in length.

"Above Canyon serpentine crops below the gravels almost within the limits of the settlement. Immediately above and on the west side fissile clay slate begins, with east-west strike and steep southerly dip. This continues for a few hundred feet, with a smaller mass of serpentine intercalated with slates. The relations between the two rocks are not clear, though the serpentine, an altered igneous rock, is probably intrusive in the slates. Above this follows another belt of serpentine about 1,000 feet wide and adjoined on the south, without well-exposed contact, by diabase and diabase-porphry. At this point the canyon becomes deep and narrow; on the east rises the pronounced salient, Canyon peak, which is also made up of diabasic rocks.

"In general there is a marked similarity in geological structure between the Greenhorn mountains, Dixie butte, and the Strawberry range. All of them are built up of diorites, diabases, and serpentines, inclosing smaller masses of sedimentary rocks, usually clay slate.

CANYON AREA REGION

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"Extensive areas of basaltic and andesitic rocks surround John Day valley. Most of them, it is believed, are of early Neocene age. The road from Austin to Prairie, after crossing the divide, descends over long ridges of pyroxene-andesite, both massive and brecciated. Lower down the gradually flattening ridges are made up of massive basalts, and these continue for 3 miles, down to the level of the valley. The same fine-grained, often vesicular basalts form the low hills bounding the alluvium on the north for several miles east of Prairie. Augite-andesite directly overlies the argillite on Dixie Creek a couple of miles above the junction with the main river, and it is, indeed, probable that the andesites are the older of the two rocks. All the way down to the town of John Day basalt bluffs follow the north side of the river, gradually increasing in height; near John Day they are about 500 feet high. In places white tuffs alternate with the basalt. The surface ascends gradually from the bluff to a moderately high divide, the slope probably indicating the surface of the lava flows. At a few places near John Day the black, glassy olivine-basalt appears on the north side of the river, but the exposures are usually small and covered by gravels.

"Along Canyon creek above John Day the basalt is overlain by a considerable thickness of light-colored rhyolitic tuff, extensively used as a building stone at Canyon. Above this tuff again rest more recent gravels.

"The uppermost part of the valley was not visited, but it is believed to be entirely covered by basalt and andesite, these extensive areas forming a continuation of the area surrounding Austin and extending over the headwaters of Burnt river. Without much doubt

The position of this flood plain indicates that the river then took a course from 2 to 3 miles south of its present channel. The exposures at Canyon (see below under "Placer mines"), indicate that the bottom of these old river deposits lies considerably below the present bed of

posed dark lava flows, and was no doubt once the locus of a most intensive eruptive activity. The rock forming its slope is a basalt cut by a rhyolite dike of immense size.

The broad extent of the valley from Prairie across to the foot of Strawberry butte is a gently sloping surface covered with coarse basaltic gravel. Broad gulches cut in this slope reveal thick strata of these coarse gravels interstratified with some sandy material. At some point near the river coaly material has been found, no doubt embedded in these strata. West of Prairie the basalt north of the river is for some distance covered by these gravels.

"Along the road down to John Day, volcanic bluffs, as stated, follow the north side of the river. The south side of the alluvium is bordered by lower bluffs, from 100 to 300 feet high, less abrupt and with smoother outlines. They consist of coarse gravel with occasional softer strata, and in several places are seen to rest on basalt. All these gravels form a part of the old, late Neocene flood plain which shortly after the close of the eruptions covered the John Day valley to a height several hundred feet above the present river level.

The position of this flood plain indicates that the river then took a course from 2 to 3 miles south of its present channel. The exposures at Canyon (see below under "Placer mines"), indicate that the bottom of these old river deposits lies considerably below the present bed of the river.

"The most recent deposits are the alluvial sands and gravels along the present river course. These are over 1 mile wide at the junction of John Day river and Strawberry creek. Two miles below Prairie are narrows, where a little canyon has been cut through a bed of basalt. Below this the alluvial deposits are from 1,000 to 2,000 feet wide.

CANYON MT. MINE

CANYON MT.
REGION
CANYON
DISTRICT

The Canyon Mountain Mining Company built a 10-stamp mill on the property described above as the "Mountain View," but have operated the mill but a short time since its completion about a year ago.

Work was continued since 1900 on the "Great Northern" in search of more high-grade ore, but it has been closed down for a few years.

Mill now at Miller Mt. Mine

575 ft drift (in one place)

120 ft.

50' wings (64 ft ea way)

Canyon Mountain Mining Co - see Mountain New Mine

Gold

9/46

NAME OLD NAMES PRINCIPAL ORE MINOR MINERALS

145 31 about 1/2 miles SE of Canyon City
T R S

PUBLISHED REFERENCES

Parks + Swarthley 16:50-51
Ogami Bull 14B: page 20

Grant COUNTY
Canyon AREA
about 4500 ELEVATION
ROAD OR HIGHWAY
DISTANCE TO SHIPPING POINT

MISCELLANEOUS RECORDS

PRESENT LEGAL OWNER (S)

Address

OPERATOR

Name of claims Area Pat. Unpat.

Name of claims Area Pat. Unpat.

EQUIPMENT ON PROPERTY

"Other Name: Mountain View Mine.

"Office: Canyon City, Oregon. Jackson Chambers, Pres.; F.S. Slater, Sec.-Treasurer, both of Canyon City. Capital stock \$1,000,000; par value \$1.00; \$810,005 subscribed; \$876,392 issued and paid up. (1916 report)

"This company's property is located $1\frac{1}{2}$ miles southeast from Canyon City, at an elevation of about 4500 feet, some 1200 feet above the town. The country rock is greenstone and the deposit is in many ways similar to that of the Great Northern mines, elsewhere described. There is a persistent ledge a few feet in width with small stringers roughly parallel approaching the main ledge at an angle of 45° , in which there is frequently found specimens so rich that this company concluded that all the rock could be quarried and milled so as to produce from \$3 to \$5 per ton in free milling gold. In the fall of 1914 their 10-stamp mill, built during the summer, was operated for a short time, but apparently results were disappointing. The development consists of one tunnel about 500 feet long, which is 300 feet away from the main ledge above referred to. The property has been almost idle since 1914."

Reference: Parks and Swartley 16:50-51 (quoted)

According to Clint Haight, Clyde V. Nunes, of Canyon City, is the owner.

H.K.L. 11/13/40.
