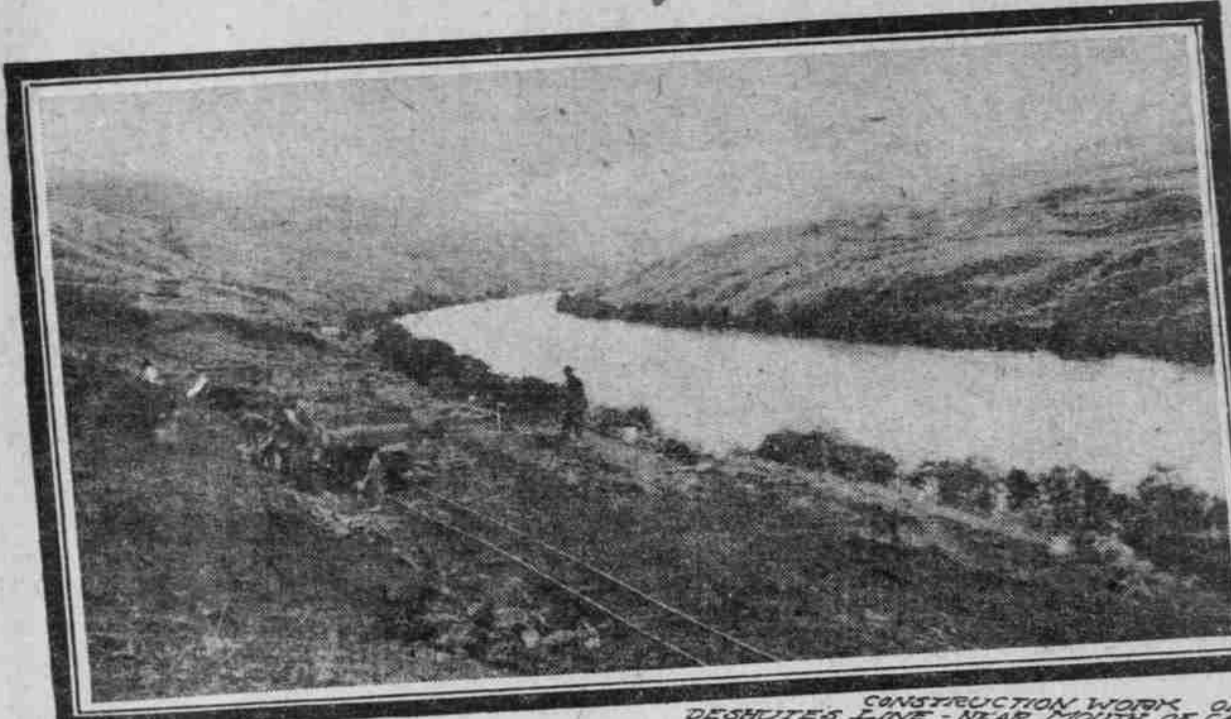


HARRIMAN ROAD HAS 2600 MEN AT WORK

Track Laying Is Under Way to Central Oregon, Where Unlimited Acreage Awaits Development

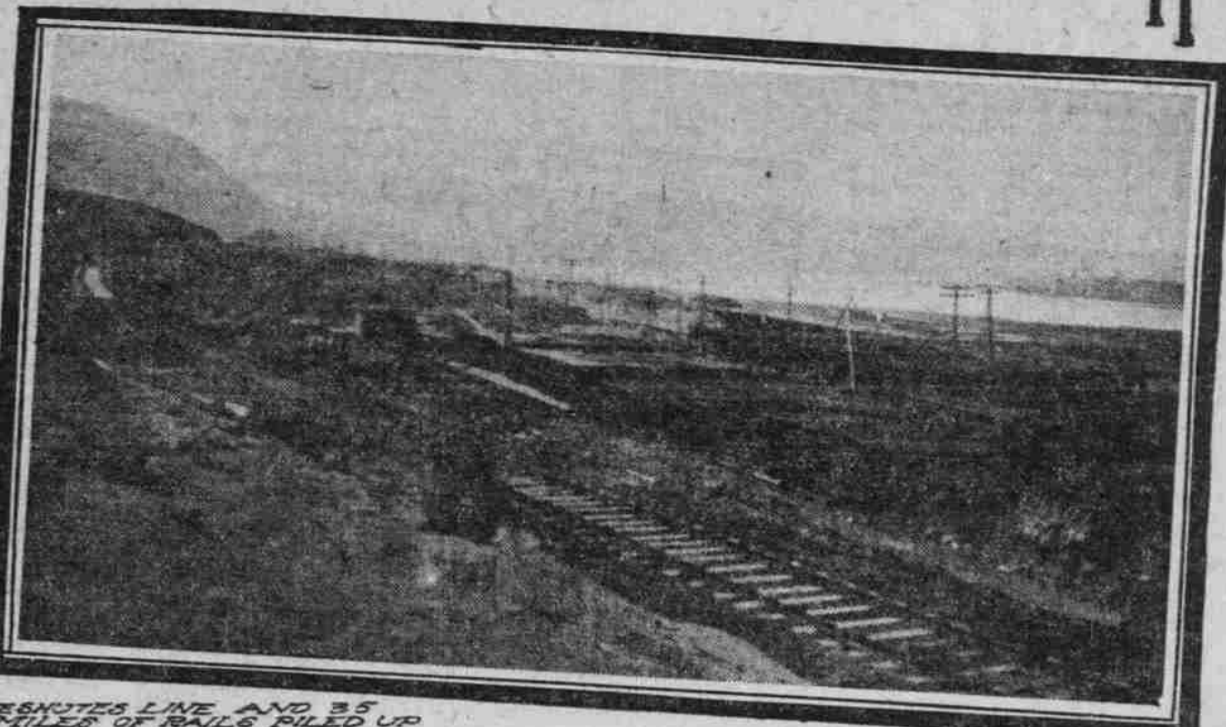
Deschutes Project Will Probably Connect With Extension of Oregon Short Line Across State



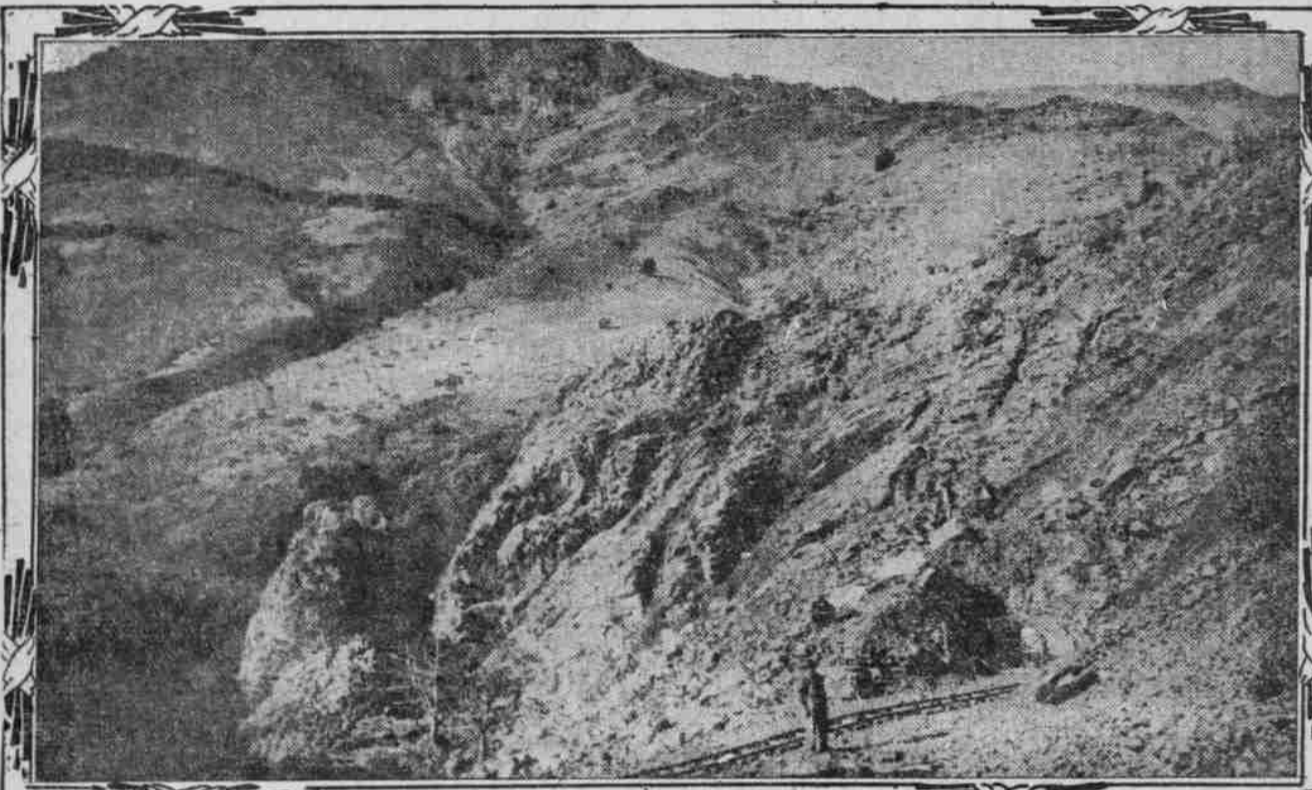
CONSTRUCTION WORK ON DESCHUTES LINE - NEAR MOUTH OF CANYON



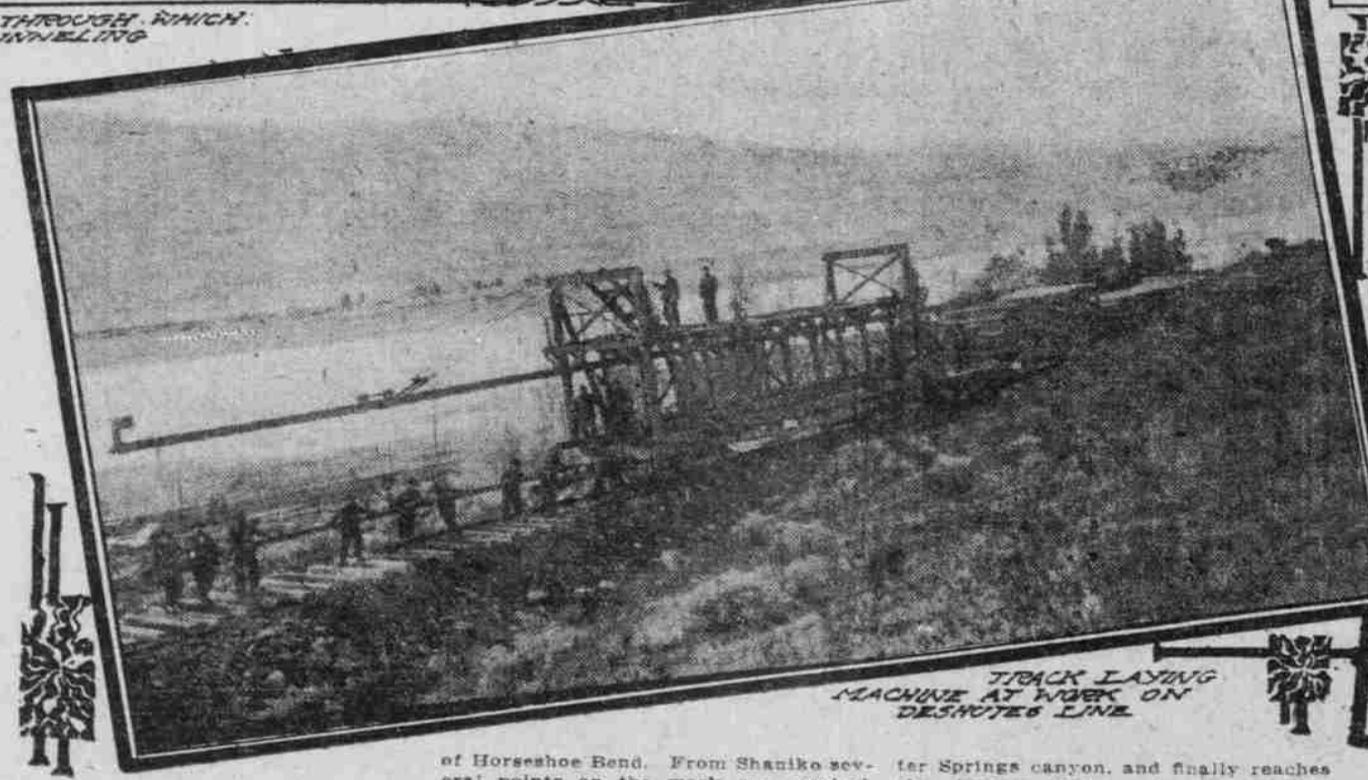
DESCHUTES LINE AND 25 DEGREES OF HILLS FILLED UP



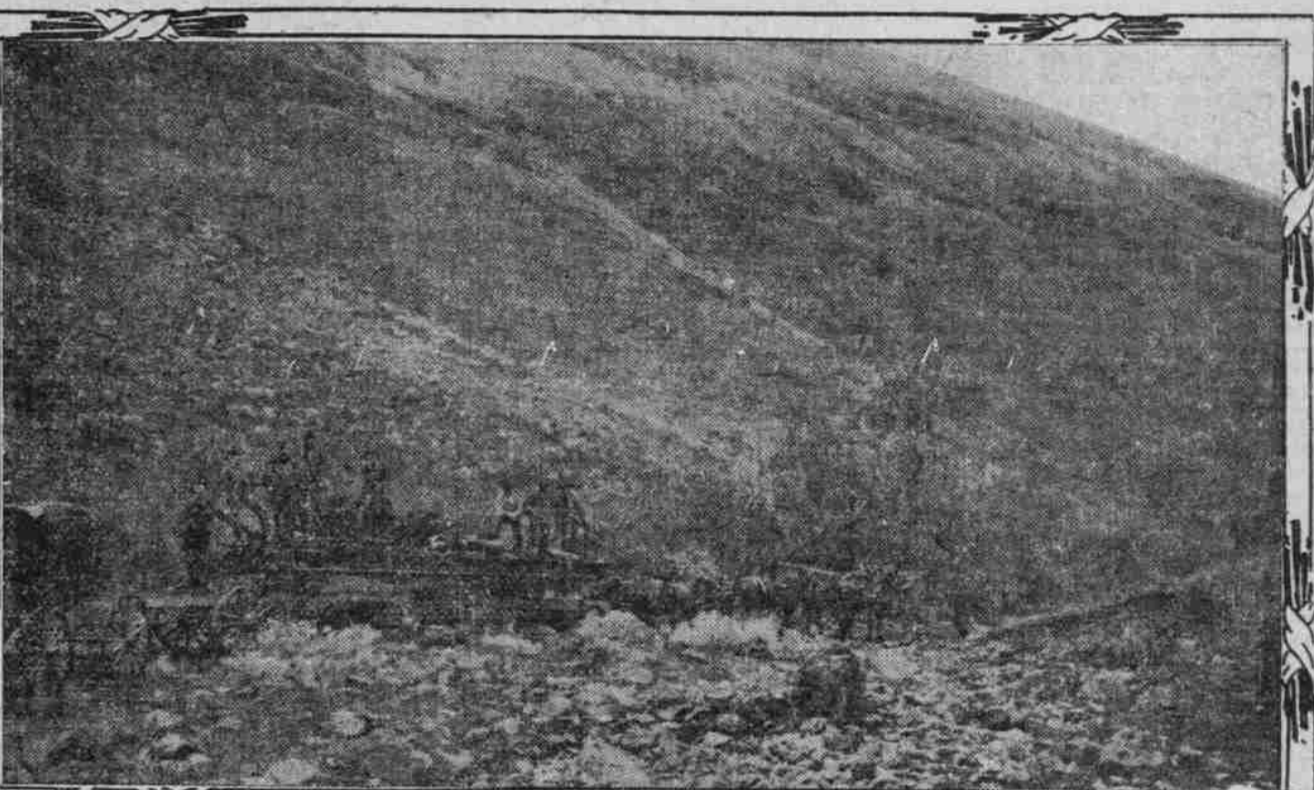
HAULING STREAM GRAVEL DOWN MACK'S CANYON TO HARRIMAN CAMP



APPROACH TO ROCK CLIFF THROUGH WHICH DESCHUTES LINE IS TUNNELING



TRACK LAYING MACHINE AT WORK ON DESCHUTES LINE



GORGE OF DESCHUTES LINE 100 FEET ABOVE RIVER

STRUNG along the Deschutes River Canyon from the mouth to Madras, with the exception of 12 miles on which there is a conflict of location with the Oregon Trunk Line, are the construction and engineering camps of the Deschutes Railroad Company, still known as the Harriman road, in spite of the death of the railway wizard.

The Harriman road preceded its rival in the field several weeks and, having chosen the side of the canyon as the more easy of access for railway construction, equipment and supplies, its construction work is somewhat in the lead of that of the Oregon Trunk Line in the lower reaches of the canyon.

Whether or not this lead will be overtaken by the Oregon Trunk Line is a matter of speculation among those who are watching the contest and apparently one of considerable concern to both railway companies.

There is undoubtedly room for two railways in the Deschutes Canyon, but also, undoubtedly, one railway could build through it more quickly and more cheaply, too, were it free to swing from side to side of the stream as the canyon demands. Two railroads along such a narrow stream, where construction is in any event slow and difficult, complicates the situation. Work has now progressed so far that neither road can hope to block the other, so the struggle of each railroad now apparently is to press its own work and seize the best locations, thereby hampering its rival, and be the first railroad to operate trains to Interior Oregon.

As incident to this effort the Harriman contractors have secured the country for workmen, until 2600 or more are drilling, grading, excavating and laying rails. They are assisted by a track-laying machine, three steam shovels and scores of teams. The officials of the road declare they will be running trains into Madras before the end of 1910.

The Deschutes railroad follows the east bank of the river, crossing over only once, a few miles below Sherar's Bridge, and then for but five miles in the effort to avoid costly tunnel and rock work on the east side of the canyon.

The road leaves the main line of the O. R. & N. about one and a half miles east of the main line bridge across the mouth of the Deschutes River. The new road swings back westward for this one and one-half miles, paralleling the main line, but gradually rising up the sides of the bluffs and rounding into the Deschutes Canyon still on an up-grade in a climb of 150 feet to get over the Moody power-dam site, three miles up. Rails are now laid from the junction several miles into the Deschutes Canyon, and a track-laying machine is employed whenever a stretch of completed grade is added. Material-yards have been established at Deschutes Station, where 35 miles of steel rails, thousands of ties, bridge timbers, angle bars, corrugated iron culverts and other materials necessary to railway construction are piled over several acres of ground. These are the main material-yards for the construction work, although other material depots have been established at Grass Valley and Shaniko.

The three steam shovels now used in

the construction work were taken by rail to points on the Columbia Southern, the O. R. & N. branch which parallels the Deschutes on the highlands for 70 miles, and from there hauled in sections over steep wagon roads into the canyon. From three different towns along the Columbia Southern, the camps of the Deschutes Railroad Company may be reached. One is Moro, where the old wood trail down Rattlesnake grade to Free bridge has been improved so that heavy loads of supplies and materials may be taken in. From Grass Valley another road has been built down Mack's canyon, reaching the work by a haul of seven miles from the town. Down Mack's canyon two of the steam shovels were carried in sections on wagons drawn by ten-horse teams.

Six or eight miles above Mack's canyon the wagon road built to the Horseshoe Bend by the Harriman contractors last summer and blockaded for a time by the Oregon Trunk line contractors, is still in use. This road was built on a 25 per cent grade for a distance of two miles to reach the bottom of the canyon, the right of way being on Government land, and it cost nearly \$10,000. It was no more than completed when the Trunk line contractors bought a ranch near the head of the road and blocked the private road leading across the ranch, and which formed the only means of access to the new canyon road. The Hill contractors utilized the road themselves, but shut their rivals out.

On one occasion large bodies of workmen brought up from the two camps in the canyon were apparently about to come to blows over the locked gate across the road, when instructions came to lift the blockade. Three leaders were arrested, charged with inciting riot, but all troubles have apparently been adjusted, and large quantities of tunnel timbers are now going down the grade to the Harriman camp for use in the tunnel through the tongue

of Horseshoe Bend. From Shaniko several points on the work are reached, and the forces are now well distributed over the line.

In the 107 miles to Madras the Deschutes Railroad Company will construct six tunnels, the longest of which will be 1100 feet, and the shortest about 300 feet. The tunnel at Horseshoe Bend, 1000 feet long, is in several hundred feet. Another, 68 miles from the mouth of the river, is practically completed. Work is in progress on all the others.

The Harriman road turns out of the

HARRIMAN LINE UP DESCHUTES

Under construction contract—120 miles, Deschutes to Redmond. Probable terminus—Odell, connecting there with Natron cutoff of Southern Pacific to Klamath Falls; will probably extend eastward through Christmas Lake country to connection with Oregon Short Line at Vale.

Estimated cost—Deschutes to Redmond—\$5,000,000. Number of men at work—About 2600.

Maximum working grade—Eight-tenths of one per cent. Maximum curvatures—One of 12 degrees; others 10 degrees or less.

Character of construction—Rock and gravel ballast; 75-pound steel; standard O. R. & N. construction.

Estimated time for completion to Madras—August, 1910.

Deschutes canyon about 85 miles from the mouth, by way of Trout Creek. Before reaching the mouth of Trout Creek the grade gradually rises. Trout Creek is crossed by a steel viaduct 550 feet long and 100 feet above the stream about a mile from its mouth, and the road then turns up Sage Springs canyon and then up Por-

ter Springs canyon, and finally reaches the Agency Plains, about ten miles north of Madras. Although the road passes within a half mile of the very center of Madras, it is at a height of 240 feet above the town. Willow Creek canyon, up which the Oregon Trunk line is building, will be bridged by a steel viaduct 100 feet long, the Harriman road passing 250 feet over its rival.

Redmond, 25 miles south of Madras, is the terminus of the Harriman road so far as it is now located, and graders are now busy for several miles south of Madras, working toward Redmond.

The Harriman and Hill roads reach the same level again on a shoulder of Juniper Butte, a few miles south of Madras, and from there to Redmond it is said their surveys coil around each other like snakes. The Harriman road has so far made no effort to contest the rights of the Oregon Trunk line at Crooked River crossing. The Oregon Trunk line selected the narrowest point in the chasm several weeks ago, and rushed men to the spot to begin work that would hold the bridge site. The Harriman forces are not yet that far south, but will bridge Crooked River about 100 feet west of the Oregon Trunk line.

Concerning the canyon of the Deschutes, magazine articles written by alarmists have appeared, in which the fear was expressed that water-power sites had been sacrificed to railway construction. A trip through the canyon shows these fears to be groundless. Both railroads clear the Moody and Government dam sites by ten feet, and have been compelled to sacrifice easier grades to do it. Only at rare intervals along the work is either road near the water's level, but as a rule is 50 to 100 feet above it. If there is any material difference, the Harriman road, generally, is higher up the canyon than its rival.

About \$5,000,000 is being expended by the Harriman system in constructing a railroad into Central Oregon. It is not believed that it will stop at Red-

mond, after expending this sum and reaching only the outskirts of the interior empire. Judge Lovett, now the head of the system, when in Portland in November, promised that interior Oregon would receive its full share of the generally accepted belief of railroad development from the Deschutes line.

That the road will be constructed to Odell, a point on the Natron-Klamath

cut-off of the Southern Pacific, and that an east and west line will be constructed from Odell over surveys and rights of way heretofore secured, through the Fort Rock and Christmas Lake countries, striking either through or south of Burns and gaining the Malheur River canyon near Malheur Lake, and thence 150 miles down Malheur canyon to Vale, which is now the terminus of an Oregon Short Line branch

from Ontario. This road is likely to be built as an Oregon Short Line extension, at least in part.

The construction of these lines will give the timber of Central Oregon outlets, north, south and east, and will serve extensive areas of irrigated farming, grain-growing and stock-producing countries.

ORCHARDS MAY DOT LAND NOW BARREN

Experiments Indicate Central Oregon Will Become Celebrated for Its Apples and Other Fruit.

THE new visitor to California invariably writes home the wonderful tale of orange trees on which may be seen the blossoms, green fruit and ripe fruit, all at the same time. The Deschutes Canyon can duplicate the wonder almost any October day with its apple trees, which invariably prevail in that locality. Situated at an altitude from 1000 to 2000 feet below the surrounding country, the temperature is uniformly 10 to 15 degrees warmer. In addition to apples, peaches, cherries, pears and the small fruits are grown successfully.

There are but a few of these flats now given over to the growing of fruit. Because of the newness of the country and the long absence of railway transportation not many commercial orchards have been set out in Central Oregon. One orchard tract, known as Cove Orchard, however, is famed throughout Central Oregon. It is situated in Crooked River Canyon near the confluence of the Crooked and Deschutes Rivers. This orchard, 1000 feet below

the surrounding country, markets its products principally in Madras, 12 miles away, and in Prineville, 35 miles distant.

The orchard was not planted with regard to scientific methods. The trees were too close together and no one knew exactly what varieties there were. William Beall, the owner, set to work, however, thinned out the weaker trees, classified the fruit, put the orchard on a paying basis and in four years has cleared off his indebtedness for the purchase price. There are three 40-acre tracts at The Cove, but only 12 acres are set out to orchard. There are grown apples, pears, peaches, cherries, plums, prunes and other fruits. On other tracts strawberries, raspberries, tomatoes, melons and other products are successful.

A few miles farther north in the Deschutes Canyon and near the mouth of Trout Creek is the Ed Campbell Ranch and orchard and of this place it is told that in October the apple trees may be seen bearing blossoms, green fruit and ripened fruit on the same day. Apples, peaches, prunes and cherries are also grown at Tetherow Bridge, eight miles northwest of Redmond.

Commercial orchards are now being set out on the high table lands. Edward White has a thrifty young growth of hardy apple trees doing well on a

25-acre, non-irrigated tract near Madras, but the trees have not yet reached the bearing stage. Near Prineville many farmers have home orchards that are demonstrating the adaptability of the country to fruitgrowing.

In the irrigated districts surrounding Redmond practically every settler is settling out a home orchard, while a few are devoting their attention to commercial orchards. On a tract of 45 acres W. A. Stevens has a promising young orchard six miles north of Redmond and Kirk Whitely, who has had experience in the Yakima Country, has another thrifty orchard near town.

Joseph Buckholz, near Redmond, has an orchard of 505 trees planted in 1908, and which includes apples, cherries, pears, prunes and plums.

Apple varieties most commonly used are the Duchess of Oldenburg, Yellow Transparent, Arkansas Black, Winter Banana, Winesap, Spitzenberg, Snow, South Carolina Red and Wealthy. Cherry varieties used are Monticello, King, Special, Early Richmond, Royal Anne and Bing.

In small fruits in the irrigated district raspberries generally produce the first year. L. D. Weist, whose property adjoins Bend, has produced 7200 pounds to the acre of Gregg raspberries and 2000 pounds to the acre of Cumberland. Strawberries bear for six months in the year.