

DALLES-CASCADES RAILROAD.

The distance between The Dalles and the Lower Cascades is, by railroad measurement, 46 miles. The construction of a road bed along the bank of the Columbia, between the two points named, is work of greater magnitude than the tourist, though a civil engineer, would imagine. The road bed has to be made over, in, and through solid basalt rock for nine-tenths of the distance. Much of this rock rises almost perpendicularly from the river many feet in the air. A track has to be cut through the side of this rock, involving much drilling and the explosion of much powder. In several places huge sections of the rock have been thrown into the water. At other places deep cuts have been made in the solid rock. At two places, tunnels, each over four hundred feet in length, have been bored through cliffs of solid rock, which rise abruptly for hundreds of feet above the water. At one place, known as Shell Rock, the road had to be constructed over a mass of sliding fragments of basaltic rock, which moved from near the summit of the mountains whenever the bottom rock was disturbed, as a pile of wheat will slide down from the top when a shovel full is removed from the bottom. To crown all, about four feet from the surface the fragments of rock are encased in ice, not ice that is clear as crystal, but ice that has been discolored by the rocks it embraces. Chief Engineer Thielsen is of the opinion that, way back in that period when the white man [knew not of the existence of the Columbia river, there was a winter of such great severity as to freeze the water which trickled through this vast pile of broken rock from the small streams that flow down the mountain sides in rainy weather, and that the sun has never since had power to thaw it to a greater depth than a few feet from the surface. To cross this mass of sliding, ice-bedded rock, temporary dams were made of timber at various points above the track, to retain the rock as excavations were made, and solid walls of masonry were constructed to keep the slippery mass in place. This work, after much skillful labor, was successfully performed, and a solid road bed made below the wall. There are numerous places requiring long embankments to be made, and many heavy fills, while there are a large num-

ber of pieces of trestle work required, one bridge being eighty-five feet high and seven hundred feet long. Then the road bed is a very crooked one, being, as one engineer described it, a succession of curves, many being quite sharp. Taken as a whole, the road bed between The Dalles and Portland is a very heavy one to construct. It is estimated that the section between The Dalles and the Cascades will cost an average of \$42,000 per mile, or a total of \$2,000,000. The work of construction is being prosecuted with great energy, there now being engaged in the labor about 4,000 Chinamen and 400 white men. The work is of such a character that few, if any, scrapers can be used, and only about 200 horses are employed, mostly in cart work. Several steam drills are employed in the rock work, and large quantities of powder are daily used in blasting. The engineers confidently expect to have the grading between The Dalles and the Cascades finished before the first of October, when the grading force will be set to work between the Cascades and Portland. Nearly seventeen miles of track have been laid, beginning at the Lower Cascades and extending above Shell Rock. Trestle building and track laying are both being pushed as fast as timber and rails can be obtained, and it is confidently predicted that the track will be laid and regular trains running to the Cascades before the first day of next November. Several ship loads of iron are daily expected to arrive at Portland. At a point some 15 miles below the Cascades, known as Table Rock, the work of boring a tunnel 630 feet long is being prosecuted, the workmen already being half way through. Chief Engineer Thielsen expects to have the cars running between Walla Walla and Portland before New Year's day.

An idea of the magnitude of some of the work can be obtained by imagining a section of rock about 800 feet long, 30 feet wide, and from 90 to 150 feet high, being blown into the river by the simultaneous discharge of seven blasts, containing an aggregate of 30,000 pounds of Judson, a species of giant powder. The passengers on the boats between The Dalles and the Cascades find much to interest them in viewing the operations of the graders,

whose numerous camps call to mind "the tented field." Daily the passengers on the up boats are saluted by the firing of numerous small blasts, resembling a light cannonade, throwing clouds of dust and smoke into the air and sending showers of rock far out into the river. When the road is finished between The Dalles and Portland, a ride over it will afford a treat to lovers of mountain scenery, which cannot be excelled in any other part of the earth. Those of our readers who have made the passage between the points by steamers, and gazed in awe and admiration upon the towering mountains, upon whose heights tall pines are dwindled into shrubs in dizziness of distance, between which flows the mighty Columbia, will miss, in riding the cars through the same region, one-half of the picture, because only the mountains on the Washington side of the river will be seen from the car window. But those who come after us will find enough to admire in half the magnificent scenery to compensate them for the expense of the trip. The O. R. & N. Co. will, we understand, put observatory cars on this portion of the road for the benefit of tourists.

A FRUIT COUNTRY.

A ride through the northern and older settled part of the country at this time will be apt to convince the most skeptical that for fruit growing this region is unsurpassed both as regards quality and productiveness. Apples, peaches, pears and plums grown here will compare as regards quality and size with any of the most favored localities either west or south, in fact the fruit attains a size here that would be called enormous when compared with fruit of the same varieties grown in any of the eastern states. Trees are breaking down with their enormous load of fruit, so productive is the soil and climate for the growing of fruit. Although but a few years has elapsed since that branch of agriculture was undertaken and the trees are all young, numerous orchards will yield, at a low estimate, five tons of apples to the acre. Quite a number of trees will be ruined this year, caused by the limbs breaking from the enormous loads of fruit they have to carry.—*Pendleton Tribune.*