

Scenic Boulevard of the World on Crater's Rim

The United States government is spending, under direction of the war department three-fourths of a million dollars in improving and constructing a system of highways around Crater lake. One hundred and twenty-five thousand dollars has been already appropriated, half of which was spent the last season, and \$200,000 additional requested for use the coming year, with \$100,000 additional each succeeding year.

During the past season there has been a strong desire on the part of the war department to open up full communication between the park and the railroad, prompted by the necessity of transporting machinery and supplies at a minimum cost. With this end in view a temporary road was constructed from Kirk, the most northerly point on the Southern Pacific to the east line of the park near Sand creek canon, in which are thousands of very fine pinnacles. Permanent grading was commenced on the line of the park at this point and continued to Kerr Notch on the rim of Crater lake, a distance of six and one-half miles. This road is known as the pinnacles road and was completed, in as far as grading and draining are concerned, camp No. 1 being established a mile or so below the lake.

A second camp, known as camp No. 2, was established about a mile and a half from Crater lake lodge, on the rim of the lake, and a new grade was completed from this point to the rim, with easy curves and a maximum grade of 10 per cent, which will take the place of the sharp curves and 33 per cent maximum that have prevailed heretofore. Besides this, about two miles of road between camps 1 and 2 have been graded and drained, leaving six, on which considerable work has been done, including several miles of clearing. This road, eight miles in length, will be completed in 1914, thus opening a new entrance to the southeast over which machinery and supplies will probably be transported for the construction force. A mile or so of grading has already been accomplished between camp No. 2 and park headquarters, all of which will doubtless be completed in time for the main travel of 1914.

The road between park headquarters and the south line, generally referred to as Klamath entrance, has been permanently located and active work will be commenced on it as soon as climatic conditions will permit in the spring and it is planned to finish it during the season.

Now that the old grade close to the lake has been eliminated, the worst place remaining is what is known as the Corkscrew, on the road leading to Medford, which it is planned to do away with during the next season, besides which it is hoped there will be funds sufficient to complete the grade to the Medford entrance, with a maximum grade not to exceed eight per cent and probably considerably less.

Congress appropriated \$125,000 for road construction under the war department during the past season, of which only about one-half was used, so that the remainder is on hand for use in 1914, thus enabling the engineering division to get to work just as soon as climatic conditions will permit. Besides this it is hoped congress will appropriate at least \$200,000 additional, together with authority for the secretary of war to let any or all of the work by contract, in which event there is no reason why all the grading should not be completed by 1915, thus permitting visitors at that time to see the entire park from automobiles, or other means of conveyance.

During the past season Superintendent Steel built a convenient office directly on the road at park headquarters, where all the business of the park is attended to. He also cleaned up the dead and down timber and underbrush along the road from headquarters for about a mile toward the lake, including the trimming of small trees, which gives it the appearance of a genuine park, besides adding material protection against fire. As fast as money is available he will continue the work until the view from all roads will be one of beauty, and not as at present, an exhibition of neglect and an invitation to destructive fires. During 1914 a water reservoir will be constructed at headquarters and a gravity system established, with sufficient force to throw a stream over any of the buildings in case of fire. A sewer system will also be established so that sanitary conditions may be maintained. Several trails will be built that will open to easy access numerous interesting points heretofore practically unknown.

Jackson county's average road tax levy is three mills on a valuation of \$38,000,000, yielding over \$100,000 a year for road work.



World Famous Botanists on Visit to Crater Lake.

Bottom—Dr. Tansley of the University of Cambridge, Dr. Paulsen of the University of Copenhagen, Dr. Rubel of the University of Zurich, and Professor Fuller of the University of Chicago in a Rogue River valley orchard.



madrone. As they ascended the beautiful Rogue the flora became more confusing and more bewildering with its lofty pines, incense cedar and fir clothed beneath with chaparral, service berry, hawthorne, chinquapin, buckhorn, mountain lilac and other species. Beyond Prospect, where a most beautiful luncheon was served at the Prospect hotel, the party entered the Crater national forest, which is today considered the most magnificent stand of virgin timber in the world. Drs. Von Tubauf, Engler and Schroter, the famous botanical trio, state that the stand of sugar pine, Douglas fir and yellow pine is the most interesting that they have ever seen from a phytogeographical standpoint. Other interesting botanical features, as the party neared Crater lake, were the stands of lodgepole pine, hemlock, noble fir and white bark pine.

Two nights and a day spent at Crater lake, where the botanists had ample time to make collections of the many rare plants which they found on and about the rim and on Wizard Island. The grandeur of Crater lake with its reflected colors of blue, purple and emerald, produced an impression upon the visitors the like of which they had never before experienced. Upon their return to Medford an elaborate banquet was given to the male members of the party by the main members of the party by the ladies club at the club rooms. The ladies of the party were entertained at the Hotel Medford by the

College Women's club. The following morning members of the party were taken by automobile for a visit to the magnificent pear and apple orchards where every phase of fruit growing was shown and explained. They were most interested in seeing the fancy pears packed for export trade; but they were more forcibly struck by the healthy condition of the orchards. Dr. Von Tubauf, the great mycologist and plant pathologist, remarked that, from the standpoint of disease and fungi which produce disease in plants, he found little of interest, as the fruit growers had so carefully cared for their trees that he would have to go elsewhere to find specimens for his collection.

The personnel of the party was: Freiherr Dr. Carl von Tubauf, University of Munich; Dr. Adolph Engler, director Royal Botanic Gardens and professor of botany, university of Berlin; Dr. Carl Schroter, University of Zurich; Dr. and Frau Dr. Brockmann-Jerosch, University of Zurich; Dr. Eduard Rubel, University of Zurich; Dr. and Mrs. A. G. Tansley, University of Cambridge, England; Dr. T. J. Stomps, University of Amsterdam; Dr. Ove Paulsen, University of Copenhagen; Dr. and Mrs. Alfred Daehnowski, University of Ohio; Dr. and Mrs. F. E. Clements, University of Minnesota; Dr. George E. Nichols, Yale University; Dr. Henry C. Cowles, University of Chicago; Dr. George D. Fuller, University of Chicago; Prof. F. K. Butters, University of Minnesota, Professor P. P. O'Gara

was botanical leader of the excursion to Crater lake, and was ably assisted by Dr. E. P. Melnecke, forest pathologist United States department of agriculture, and Mr. H. D. Foster, United States forest service.

That the Rogue River Valley is a botanical and agricultural center of more than passing importance is attested to by the many complimentary statements made by these visitors since arriving at their homes. It is the intent of several members to bring parties of students from their respective universities to the Rogue River Valley for an entire summer season so as to give the small opportunity for careful study of our botanical wealth. We may expect hundreds of students here during the coming year.

International Scientists Visit Crater Lake

On September 3, 1913, there came to Medford a party of the most distinguished botanists of both the old world and the new. Among the noted visitors, eighteen in all, were men representing the greatest universities in Europe, men who have stood at the head of all lines of botanical research for many years, and whose scientific publications have become texts in our schools and colleges.

The members of the party were representatives of the International Phytogeographic society, and their tour throughout the United States was for the purpose of studying the distribution of plant life. The phytogeographer studies plant life in its relation to the many environmental factors, such as soils, climate, elevation, exposure, etc.; in other words, he takes the broadest view of botany in that he is not merely interested in the species he finds in any locality, but rather in the inter-relationship which exists between the various species of plant life.

Two years ago a tour of England was made by the same party, and it was so successful that it was decided to make a tour of the United States, taking two great cross sections, through the north and through the south of the United States. That Medford and the Rogue River valley is the most important center in the state of Oregon is evidenced by the fact that no other stops were made at any other point in Oregon. As a matter of fact, Medford, Rogue River Valley and Crater lake were all the party saw or desired to see between Tacoma and San Francisco.

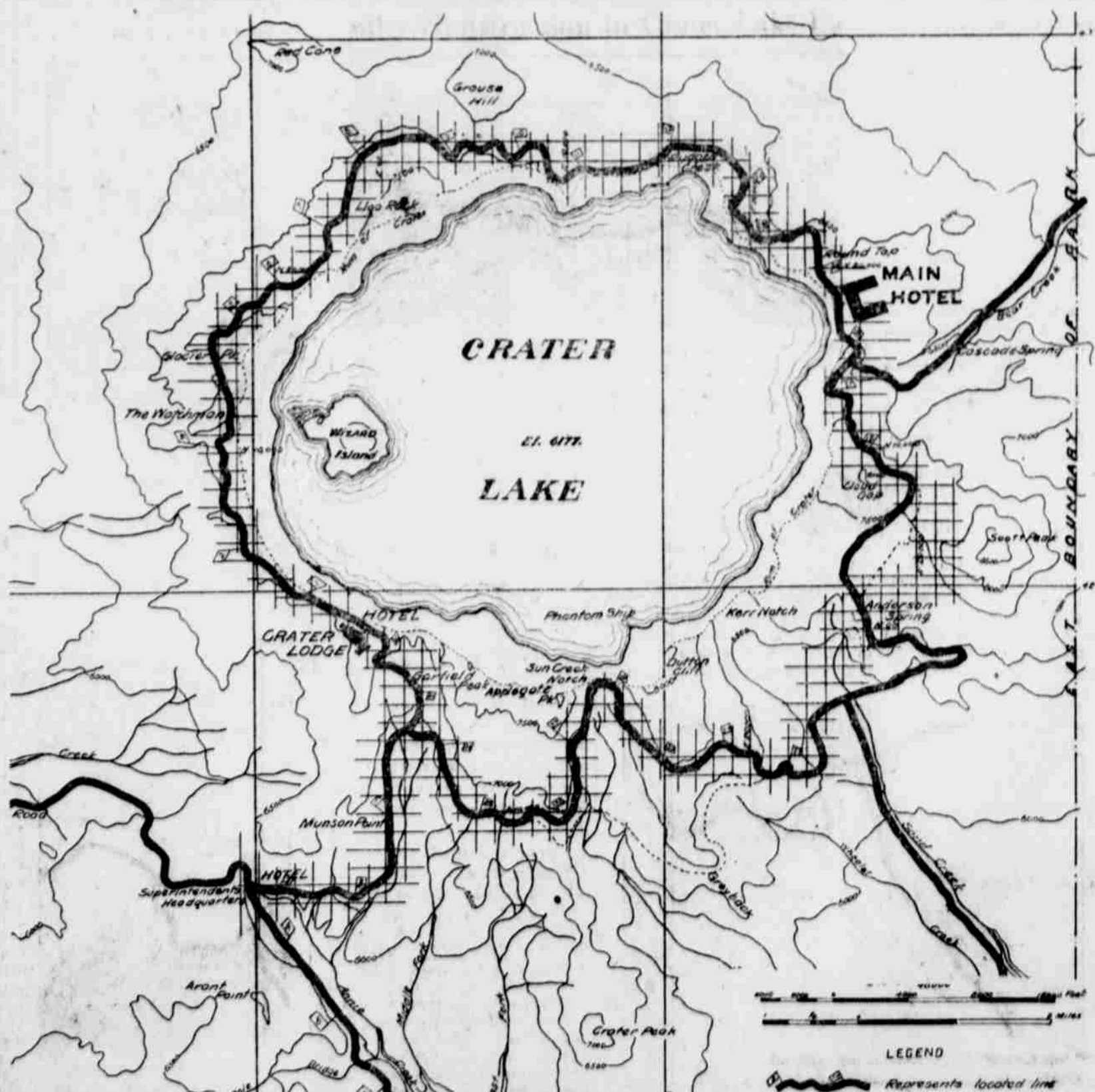
These famous botanists did not spend four days at Crater lake and Medford mainly because the Medford Commercial club had sent them a most hearty invitation, but because of the wonderful physiographic, botanical and agricultural features of this most noted part of Oregon. They were particularly anxious to see this part of southern Oregon because of the great reputation it had already been given by members of the geographical excursion upon the occasion of their visit in 1912, just a year previous. As many of the members said, "We already know Medford and the Rogue River Valley by the great reputation it has made in its horticultural products, namely, apples and pears. We have seen these fruits in our markets and have always wished to visit the beautiful country which produces such marvelous fruits."

The party arrived on the Shasta limited on the morning of September 3, the ride on this most exclusive train having been made possible by the energy and foresight of the Medford Commercial club's committee, which consisted of Professor P. J. O'Gara, chairman, C. E. Gates and S. S. Smith. After breakfasting they were immediately taken by automobile on their way to Crater lake, automobiles were furnished free of

Siskiyou Roads

Keasel & McDowell Logging company of Tacoma, Wash., were Nov. 20, awarded the contract for grading the Pacific Highway over the Siskiyou mountains by State Highway Engineer Bowly and the county court, the price being \$107,534.39. They were the lowest of the nine firms who bid. All bids were rejected on paving the Central Point-Medford road, as being too high. The road will be 13 miles long, 24 feet wide. Keasel & McDowell bid 29 cents on earth excavation, 38 cents on loose

System of Highways Under Construction in Crater Lake Park to Cost \$700,000



"It is doubtful if any view existing in the world today is as impressive and at the same time as beautiful as the view of Crater lake from the rim," said Major Jay J. Morrow of the army engineering corps, in transmitting a report to the war department recommending the expenditure of \$642,000 for the construction of roads and trails in the Crater Lake National park.

Congress at its last session passed an appropriation of \$50,000 for the beginning of this highway construction. An additional \$100,000 is recommended by the war department for this year and it is expected that \$100,000 yearly will be expended until the system of highways is complete.

About 62 miles of good roads and 100 miles of trails, in the opinion of Major Morrow, will enable the tourist to reach the most important spots in the park with facility, and, while the estimated cost is high, he believes the expenditure is fully justified, particularly as it is proposed to build the roads for automobile travel. Compared with the cost of building roads in the Yellowstone and Haligier national parks, where the topography is similar to that in the Crater Lake park, Major Morrow says the figures cited in his estimates are not excessive, but about on a par with the actual cost of building roads over like territory in the two older parks.

This boulevard will be unlike any other in the world. Not only does it look down upon America's deepest lake, lying like a blue amethyst in mystic beauty, and admittedly unrivaled among the world's natural wonders, but it affords a wonderful panorama of mountain scenery, of bleak hills and verdure-clad slopes, of snowy peaks—a bewildering multitude of mountain ranges stretching toward horizons in every direction as far as the eye can see. Mount Jefferson is plainly visible in the north, Mount Shasta in the south. To the east lie the lakes and green fields of the Klamath stretching like a fairyland into the sagebrush hills of the distance. To the west are the many ribbed slopes of the wooded Umpqua and the Siskiyou.

work, 78 cents on solid rock, 50 cents per square rod on clearing right-of-way, \$1.40 per square rod on grubbing, \$1.05 per foot on corrugated iron culvert 12 inch, \$1.60 on 18 inch, \$2 on 24 inch; \$7.20 on 12 inch concrete culvert, \$1.50 on 18 inch, and \$2 on 24 inch; 70 cents per foot on 12 inch vitrified tile, \$1.30 on 18 inch, \$2.53 on 24 inch. On rubble masonry, \$8 per cubic yard; class A, concrete, \$11, per cubic yard; class B, \$10; class C, \$10; reinforcing steel, \$6 per 100 pounds.

ROAD BUILDING IN PIONEER DAYS

(Continued from Page Three.)

impassable grades that I experienced on the trip, and when part way down from the summit I saw a man extending his glad hand, and my heart leaped for joy at such a greeting, but my exuberations were soon changed when he said \$2.50 toll please, and I paid him my last dollar, leaving me 50 cents in my pocket. I said then and there that if I lived long enough I would change all those conditions, and I have never forgotten, and after waiting fifty-three years I have had my chance, for last spring I went to the county seat of Jackson county and asked them to give to C. F. Rhodes and myself the assignment to lay out a Pacific highway across the Siskiyou, which was granted, and the order so made.

In about 1850 I had run the first line for the Oregon and California railroad from Rogue River across the mountains and over to the Klamath river near Hornbrook. In so doing I had cross-sectioned the Siskiyou mountains thoroughly and knew the ground as a man would know his own door yard. From the information thus acquired I drew an approximate map of the Pacific highway and with this equipped Mr. Rhodes as county engineer in the field and myself as consulting engineer, undertook to make the survey of the highway with a maximum grade of six per cent. Mr. Rhodes finished this preliminary survey about August 1 last, when Major Bowly, state highway engineer, took charge, running the final detailed locations. So the old adage, all things come to him who waits, came true and my fifty-three years' waiting is about to be rewarded during the new year. On November 28, with Mr. Sam Hill as chief, we celebrated the breaking of ground for the road, a cut of which will be found elsewhere in the New Year number of this paper.