

DEPARTMENT OF THE INTERIOR

FRANKLIN K. LANE, Secretary

THE
CRATER LAKE
NATIONAL PARK

Season of 1916

GENERAL INFORMATION

How to Get There—A Lake of Great Depth and Wonderful Color
Occupying an Extinct Crater—Joaquin Miller's Description—Its
Mysterious Beauty—Surrounding Cliffs are Two Thousand Feet
High—Its Chiseled Volcanic Walls—Its Fine Fishing



WASHINGTON
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THE NATIONAL PARKS AT A GLANCE

Chronologically in the order of their creation

[Number, 14; Total Area, 7,290 Square Miles]

NATIONAL PARKS in order of creation	LOCATION	AREA in square miles	DISTINCTIVE CHARACTERISTICS
Hot Springs..... 1832	Middle Arkansas	1½	46 hot springs possessing curative properties—Many hotels and boarding houses—20 bathhouses under public control.
Yellowstone..... 1872	North- western Wyoming	3,348	More geysers than in all rest of world together—Boiling springs—Mud volcanoes—Petrified forests—Grand Canyon of the Yellowstone, remarkable for gorgeous coloring—Large lakes—Many large streams and waterfalls—Vast wilderness inhabited by deer, elk, bison, moose, antelope, bear, mountain sheep, beaver, etc., constituting greatest wild bird and animal preserve in world—Altitude 6,000 to 11,000 feet—Exceptional trout fishing.
Yosemite..... 1890	Middle eastern California	1,125	Valley of world-famed beauty—Lofty cliffs—Romantic vistas—Many waterfalls of extraordinary height—3 groves of big trees—High Sierra—Large areas of snowy peaks—Waterwheel falls—Good trout fishing.
Sequoia..... 1890	Middle eastern California	237	The Big Tree national park—12,000 sequoia trees over 10 feet in diameter, some 25 to 36 feet in diameter—Towering mountain ranges—Startling precipices—Fine trout fishing.
General Grant.... 1890	Middle eastern California	4	Created to preserve the celebrated General Grant Tree, 35 feet in diameter—6 miles from Sequoia National Park and under same management.
Mount Rainier.... 1899	West central Washington	324	Largest accessible single peak glacier system—28 glaciers, some of large size—Forty-eight square miles of glacier, fifty to five-hundred feet thick—Wonderful sub-alpine wild flower fields.
Crater Lake..... 1902	South- western Oregon	249	Lake of extraordinary blue in crater of extinct volcano, no inlet, no outlet—Sides 1,000 feet high—Interesting lava formations—Fine trout fishing.
Mesa Verde..... 1906	South western Colorado	77	Most notable and best preserved prehistoric cliff dwellings in United States, if not in the world.
Platt..... 1906	Southern Oklahoma	1½	Many sulphur and other springs possessing medicinal value, under Government regulation.
Glacier..... 1910	North- western Montana	1,534	Rugged mountain region of unsurpassed Alpine character—250 glacier-fed lakes of romantic beauty—60 small glaciers—Peaks of unusual shape—Precipices thousands of feet deep—Almost sensational scenery of marked individuality—Fine trout fishing.
Rocky Mountain. 1915	North middle Colorado	358	Heart of the Rockies—Snowy range, peaks 11,000 to 14,250 feet altitude—Remarkable records of glacial period.

National Parks of less popular interest are:

Sullys Hill, 1904, North Dakota Wooded hilly tract on Devils Lake.
Wind Cave, 1903, South Dakota..... Large natural cavern.
Casa Grande Ruin, 1892, Arizona..... Prehistoric Indian ruin.

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GENERAL INFORMATION REGARDING CRATER LAKE NATIONAL PARK.

GENERAL DESCRIPTION.

CRATER LAKE is a body of water of unbelievable blue occupying the crater of an extinct volcano in the very heart of the Cascade Range in southern Oregon. In this neighborhood the Cascades merge into a broad, irregular platform surmounted by volcanic cones. The cones vary greatly in size and are distributed without regularity. Each has been an active volcano. The fragments blown out by violent eruption have fallen upon the volcanic orifice from which they issued and built up cinder cones.

From their bases have spread streams of lava (coulees), raising the general level of the country between the cones. From some vents by many eruptions, both explosive and effusive, large cones, like McLoughlin, Shasta, and Hood, have been built up. Were we to examine their internal structure, exposed in the walls of the canyons carved in their slopes, we should find them composed of overlapping layers of lava and volcanic conglomerate. But to this general form of volcanic architecture there was an exception. One of the very largest of these ancient volcanoes was Mount Mazama, which lifted its majestic cone nearly to the height of Mount Rainier, 200 miles to its south. It was about the height of Mount Shasta.

But this was ages ago. No human eyes ever saw Mount Mazama. Long before man came, the entire upper part of it in some titanic cataclysm fell in upon itself as if swallowed by a subterranean cavern, leaving its craterlike lava sides cut sharply downwardly into the central abyss.

What a spectacle that must have been!

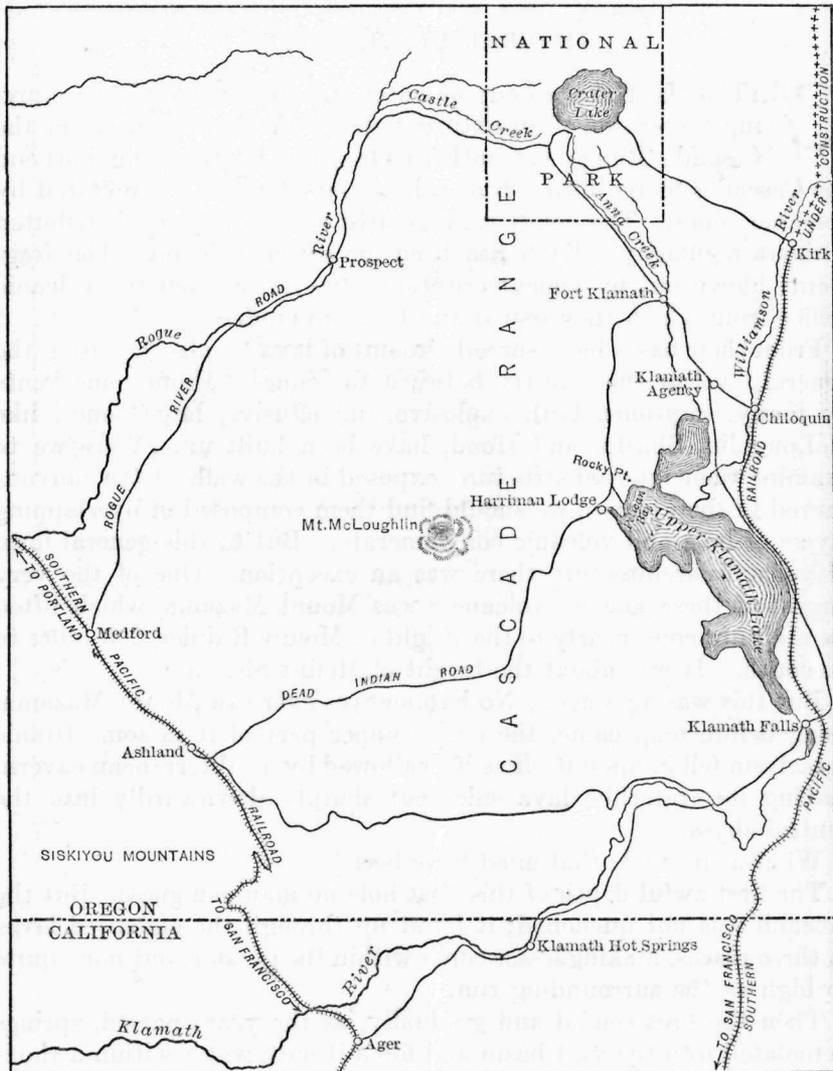
The first awful depth of this vast hole no man can guess. But the volcano was not quenched; it burst up through the collapsed lavas in three places, making lesser cones within the greater, but none quite so high as the surrounding rim.

Then the fires ceased and gradually, as the years passed, springs percolated into the vast basin and filled it with water within a thousand feet of its rim.

This is Crater Lake.

To-day one small cone emerges a few hundred feet from the surface. The lake is 2,000 feet deep in places. It has no inlet of any sort nor is there any stream running out of it; but the water is supposed to escape by underground channels and to reappear in the Klamath River, a few miles away.

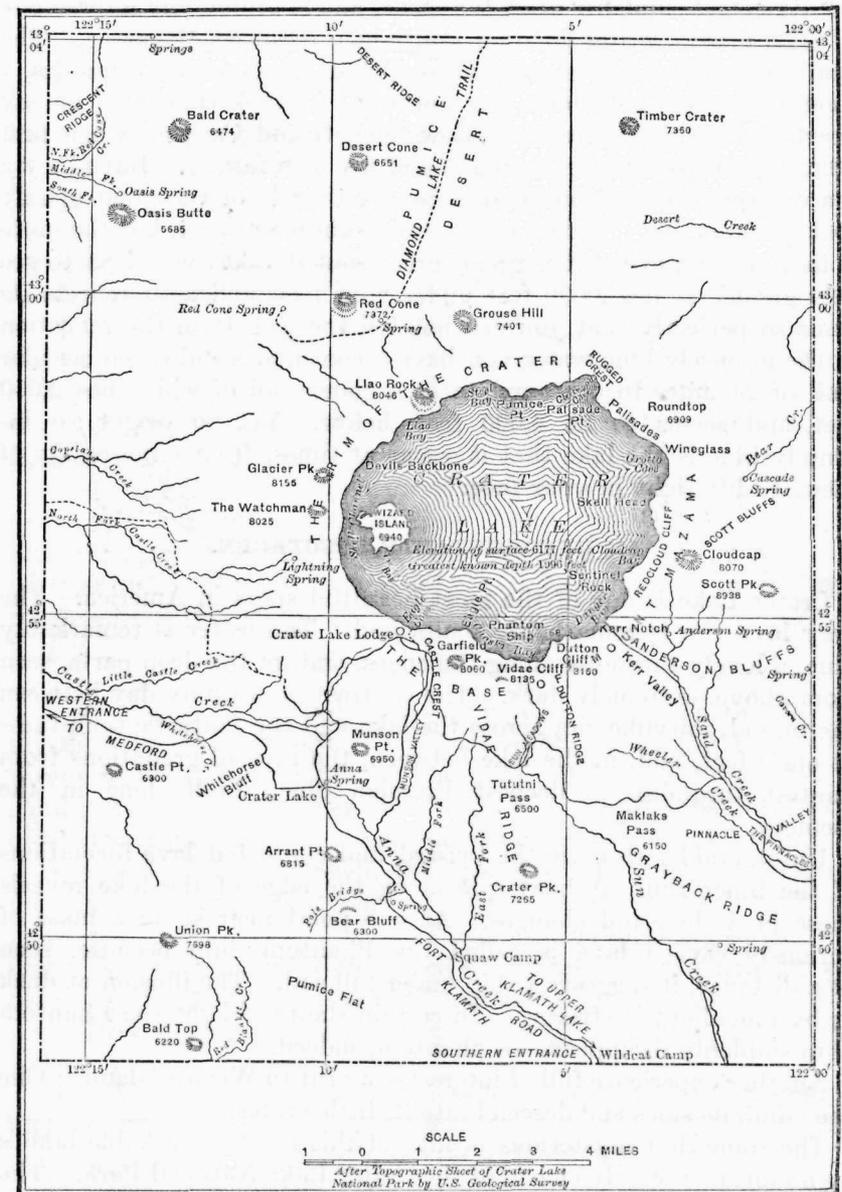
Geologists find Crater Lake of special interest because of the way nature made it. Many volcanoes have had their tops blown off. Mount Rainier was one of these. But no other in the United States has fallen in, like Mount Mazama.



MAP SHOWING ROADS TO CRATER LAKE.

The evidence of this process is quite conclusive. The lava found on the slopes that remain was not blown there from an exploding summit but ran, hot and fluid, from a crater many thousands of feet higher. The pitch of these outer slopes enables the scientist to tell with reasonable probability how high the volcano originally was.

There are crater lakes in other lands; in Italy, for instance, in Germany, India, and Hawaii. The one lake of its kind in the United States is by far the finest lake of its kind in the world.



MAP OF CRATER LAKE NATIONAL PARK.

Approaching the lake the observer sees a broad cluster of gentle peaks rising about 1,000 feet above the general crest of the range on which they stand, but not until after he has left the main road, 3 miles

from the lake, does he begin to feel the steepness of the ascent. The way winds over a large moraine littered with lava boulders and well studded with firs. Arriving at the crest, the lake in all its majestic beauty comes suddenly upon the scene, and is profoundly impressive.

"The lake?" writes Joaquin Miller in the *Sunset Magazine*, "The Sea of Silence? Ah, yes, I had forgotten—so much else; besides, I should like to let it alone, say nothing. It took such hold on my heart, so unlike Yosemite, Yellowstone, Grand Canyon, when first seen, that I love it almost like one of my own family. But fancy a sea of sapphire set around by a compact circle of the great grizzly rock of Yosemite. It does not seem so sublime at first, but the mote is in your own eye. It is great, great; but it takes you days to see how great. It lies 2,000 feet under your feet, and as it reflects its walls so perfectly that you can not tell the wall from the reflection in the intensely blue water you have a continuous unbroken circular wall of 24 miles to contemplate at a glance, all of which lies 2,000 feet, and seems to lie 4,000 feet, below. Yet so bright, so intensely blue is the lake that it seems at times, from some points of view, to lift right in your face."

AN UNFORGETTABLE SPECTACLE.

Crater Lake is one of the most beautiful spots in America. The gray lava rim is remarkably sculptured. The water is remarkably blue, a lovely turquoise along the edges, and, in the deep parts, seen from above, extremely dark. The contrast on a sunny day between the unreal, fairylike rim across the lake and the fantastic sculptures at one's feet, and, in the lake between, the myriad gradations from faintest turquoise to deepest Prussian blue, dwells long in the memory.

Unforgettable, also, are the twisted and contorted lava formations of the inner rim. A boat ride along the edge of the lake reveals these in a thousand changes. At one point near shore a mass of curiously carved lava is called the Phantom Ship because, seen at a distance, it suggests a ship under full sail. The illusion at dusk or by moonlight is striking. In certain slants of light the Phantom Ship suddenly disappears—a phantom, indeed.

Another experience full of interest is a visit to Wizard Island. One can climb its sides and descend into its little crater.

The somewhat mysterious beauty of this most remarkable lake is by no means the only charm of the Crater Lake National Park. The surrounding cliffs present some of the most striking pictures of the entire western country. These can best be studied from a boat on the lake, but the walk around the rim of the lake is one of the most wonderful experiences possible.

HOW IT WAS DISCOVERED.

This lake was not discovered until 1853. Eleven Californians had undertaken once more the search for the famous, perhaps fabulous, Lost Cabin mine. For many years parties had been searching the Cascades; again they had come into the Klamath region. With all their secrecy their object became known, and a party of Oregonians was hastily organized to stalk them and share their find. The Californians discovered the pursuit and divided their party. The Oregonians did the same. It became a game of hide and seek. When provisions were nearly exhausted and many of both parties had deserted, they joined forces.

"Suddenly we came in sight of water," writes J. W. Hillman, then the leader of the combined party. "We were much surprised, as we did not expect to see any lakes and did not know but that we had come in sight of and close to Klamath Lake. Not until my mule stopped within a few feet of the rim of Crater Lake did I look down, and if I had been riding a blind mule I firmly believe I would have ridden over the edge to death."

It is interesting that the discoverers quarreled on the choice of a name, dividing between Mysterious Lake and Deep Blue Lake. The advocates of Deep Blue Lake won the vote, but in 1869 a visiting party from Jacksonville renamed it Crater Lake, and this, by natural right, became its title.

THE INDIAN LEGEND.

According to the legend of the Klamath and Modoc Indians the mystic land of Caywas was the home of the great god Llao. His throne in the infinite depths of the blue waters was surrounded by giant crawfish, his warriors, who were able to lift great claws out of the water and seize too venturesome enemies on the cliff tops.

War broke out with Skell, the god of the neighboring Klamath marshes. Skell was captured and his heart used for a ball by Llao's monsters. But an eagle, one of Skell's servants, captured it in flight, and a deer, another of Skell's servants, escaped with it; and Skell's body grew again around his living heart. Once more he was powerful and once more he waged war against the God of the Lake.

Then Llao was captured; but he was not so fortunate. Upon the highest cliff his body was torn into fragments and cast into the lake and eaten by his own monsters under the belief that it was Skell's body. But when Llao's head was thrown in, the monsters recognized it and would not eat it.

Llao's head still lies in the lake, and white men call it Wizard Island. And the cliff where Llao was torn to pieces is named Llao Rock.

UNUSUAL FISHING.

This magnificent body of cold, fresh water originally contained no fish of any kind. A small crustacean was found in its waters in large numbers, the suggestion, no doubt, upon which was founded the Indian legend of the gigantic crawfish which formed the bodyguard of the great god Llaó.

In 1888 Will G. Steel brought troutlings from a ranch 40 miles away, but no fish were seen in the lake for more than a dozen years. Then a few were taken, one of which was fully 30 inches long.

Since then trout have been taken in ever-increasing numbers. They are best caught by fly casting from the shore. Anglers of experience in western fishing testify that, pound for pound, the rainbow trout taken in the cold, deep waters of the Crater Lake are the hardest fighting trout of all.

Persons desiring to fish in the waters of Crater Lake National Park must first obtain a fishing license under the laws of the State of Oregon. A license may be obtained by any person of the age of 14 years or more, either a resident or a nonresident of the State of Oregon, who shall apply in person or who shall send an application signed by two freeholders of the State of Oregon to the county clerk. In this application must be set forth his residence, age, height, weight, occupation, color of hair, and color of eyes. The fee for this license is \$1. All fishing must be done in conformity with the State laws regarding open season, size of fish, and limit of catch.

ADMINISTRATION.

The Crater Lake National Park has an area of 159,360 acres.

The tourist season extends from July 1 to September 30. The address of the supervisor is Crater Lake, Oreg., during the tourist season, and Medford, Oreg., during the balance of the year. General information may be obtained from the supervisor, and complaints should be addressed to him.

TRANSPORTATION.

The park may be reached from Klamath Falls, Kirk, Medford, and Ashland, on the Southern Pacific Railway. There is train service between Klamath Falls and Kirk on only Monday, Wednesday, and Friday. The Southern Pacific Co. will sell excursion tickets to Crater Lake from May 1 to September 25, inclusive. Rates may be obtained from local agents.

Section 34 of circular 2539 of the Southern Pacific Co., as amended by supplement 5, contains the following regulation regarding stop-overs to visit Crater Lake:

All classes of tickets carrying necessary stop-over privileges and covering passage between Roseville or Davis, Cal., or points beyond, and Portland, Oreg.,

or points beyond, will be honored in direction they read any day from July 1 to September 25 of each year via Weed, Cal., to Klamath Falls or Kirk, Oreg., and from Medford, Oreg., or vice versa, without additional charge, when passengers desire to visit Crater Lake National Park, Oreg.

Between Kirk and Medford, Oreg., passengers must pay their own transportation expense. * * *

Passengers desiring to make the side trip should so inform train conductor into Kirk or Medford, as may be. The latter will indorse tickets on back "Off at Klamath Falls" or "Off at Kirk" or "Off at Medford," as may be, showing train number and date, thereafter signing his name.

Baggage.—Hand baggage not to exceed 25 pounds in weight will be transported with each whole-fare passenger free of charge between Klamath Falls or Kirk and Medford. Excess baggage charges will be at rate of 2 cents per pound. Trunks or other heavy baggage will not be handled over the route shown, necessitating their transportation over Southern Pacific direct.

See baggage tariff No. 2, I. C. C. No. 2, C. R. C. No. 1, C. R. C. No. 1 (H. C. Engle, agent), supplements thereto or reissues thereof, relative waiving charge for storage of baggage at specified points for passengers making Crater Lake National Park trip as above.

The Crater Lake Co. operates a triweekly automobile service between Medford and Crater Lake and between Kirk and Crater Lake as follows :

Autos leave the Hotels Medford and Nash, Medford, at 9 a. m. Monday, Wednesday, and Friday, stop for lunch at Prospect, and reach Crater Lake in time for 6 o'clock dinner. Returning, leave Crater Lake at 9 a. m. Tuesday, Thursday, and Saturday, reaching Medford in time to connect with the outgoing evening trains.

Autos leave Crater Lake for Kirk at 10 a. m. Monday, Wednesday, and Friday, connecting with the local Southern Pacific train from Klamath Falls. Returning, leave Kirk at 1 p. m. the same day, and reach Crater Lake in about 2 hours, over a very beautiful mountain road constructed by the United States.

Automobile rates from Medford and Kirk to Crater Lake.

Medford to Crater Lake and return.....	\$16. 50
One way (either direction).....	9. 00
Kirk to Crater Lake and return.....	6. 00
One way (either direction).....	3. 50
Medford to Crater Lake, thence to Kirk, or vice versa.....	11. 25

HOTELS AND CAMPS.

Partly because it is off the main line of travel, but chiefly because its unique attractions are not yet well known, Crater Lake has been seen by comparatively few. Under concession from the Department of the Interior, a comfortable camp is operated 5 miles from the lake, and a newly completed hotel and camp on the lake's rim. The hotel is built of the stone of the neighborhood and is fully equipped with baths. Tents may be had for those who prefer camping.

Automobiles are allowed in the park under the regulations given on pages 17 and 19. The Crater Lake Co., under a concession from the Department of the Interior, operates a camp 5 miles from the lake and a hotel and camp on the rim of the lake, but every person is at liberty to provide his own means of transportation and to camp, subject to the regulations given on pages 13 to 17.

Crater Lake Lodge, on the rim of the lake, is of stone and frame construction and contains 64 sleeping rooms, with ample bathing facilities, as well as fire protection. Tents will be provided at the lodge as sleeping quarters for those who prefer them, meals being taken at the lodge.

At Anna Spring Camp, 5 miles below the rim of Crater Lake, the Crater Lake Co. maintains a camp for the accommodation of guests, a general store (with branch at Crater Lake Lodge) for the sale of provisions and campers' supplies, and a livery barn.

The authorized rates are as follows:

Hotel and camp charges, Crater Lake Co.

CRATER LAKE LODGE.

Board and lodging, each person, per day (lodging in tents).....	\$3.00
Board and lodging, each person, per week (lodging in tents).....	17.50
Board and lodging, each person, per day (hotel).....	3.50
Board and lodging, each person, per week (hotel).....	20.00
Board and lodging, each person, per day, in rooms with hot and cold water....	4.00
Board and lodging, each person, per week, in rooms with hot and cold water..	22.50
Baths (extra).....	.50
Fires in rooms (extra).....	.25
Single meals.....	1.00

ANNA SPRING TENT CAMP.

Board and lodging, each person, per day.....	2.50
Board and lodging, each person, per week.....	15.00
Meals: Breakfast or lunch, 50 cents; dinner, 75 cents.	
Fires in tents (extra).....	.25
Children under 12 years, half rates at lodge or camp.	
Automobile fare between Anna Spring Camp and Crater Lake Lodge:	
One way.....	.50
Round trip.....	1.00
Automobile transportation, 10 cents per mile within the park.	
Saddle horses, pack animals, and burros (when furnished), per hour.....	.50
Saddle horses, pack animals, and burros (when furnished), per day.....	5.00
Launch trip, Wizard Island and return, per person.....	1.00
Launch trip around Wizard Island and Phantom Ship and return (about 15 miles), per person.....	2.50
Launch trip around the lake.....	3.50
Rowboats, per hour.....	.50
Rowboats, per day.....	2.50
Rowboat, with boat puller, per hour.....	1.00
Rowboat, with detachable motor, per hour.....	1.00
Rowboat, with detachable motor, per day.....	5.00
Provisions, tourists' supplies, gasoline, motor oil, hay and grain, fishing tackle, drugs, kodak supplies, and baker's goods at reasonable rates at the general store at Anna Spring Camp and branch store at Crater Lake Lodge.	

PRINCIPAL POINTS OF INTEREST.

Distances from Anna Spring Camp to principal points in park.

Name.	Distance and direction from Camp Arant.	Elevation above sea level.	Best means of reaching.	Remarks.
Anna Spring Camp.....	Miles.	Fect.		
		6,016		
Crater Lake.....	5 NE.....	6,177	Auto or wagon.....	Near this point are located supervisor's headquarters, post office, and park ranger station. Beautiful scenery; good fishing. Extinct volcano; crater in summit.
Wizard Island.....	7 NE.....	6,940	Auto and boat.....	
Phantom Ship.....	8 NE.....	6,339do.....	Columns of rock 162 feet high, resembling ship.
Pinnacles.....	15 E.....		Auto or wagon.....	Many pinnacles; fine scenery; good camping.
Anna Creek Canyon.....	0 to 8 SE.....	{ 5,000do.....	{ 500 feet wide, 500 feet deep. Creek in bottom; good scenery.
Anna Creek Falls.....	6 SE.....	5,480		
Garden of the Gods.....	1½ SE.....	6,000		
Union Peak.....	5 SW.....	7,698	Horseback.....	Fine peak; good scenery.
Victor Rock.....	5 N.....	7,200	Auto or wagon.....	One of best viewpoints of lake.
Watchman Peak.....	9 N.....	8,025	Wagon or horseback.....	Fine scenery.
Glacier Peak.....	10 N.....	8,156do.....	Do.
Garfield Peak.....	6 NE.....	8,060	Auto and on foot.....	Do.
Scott Peak.....	12 NE.....	8,938	Horseback.....	Highest point in park.
Dewey Falls.....	1½ E.....	6,000	Auto road.....	Beautiful falls and magnificent canyon of solid rock.

For trips to any of the above-named points in the park the ordinary outing clothing will be sufficient.

For trips to Mount Thielsen, Diamond Lake, and other remote points some camp equipage, pack horses, and a guide will be necessary. These can be secured at Crater Lake Lodge.

Saddle horses, pack animals, and necessary equipment can usually be obtained in the near-by valleys, and guides can also be secured when wanted.

RULES AND REGULATIONS.

GENERAL REGULATIONS OF MARCH 30, 1912.

By act of Congress approved May 22, 1902, the tract of land bounded north by the parallel 43° 4' north latitude, south by 42° 48' north latitude, east by the meridian 122° west longitude, and west by the meridian 122° 16' west longitude, having an area of 249 square miles in the State of Oregon, and including Crater Lake, has been reserved and withdrawn from settlement, occupancy, or sale under the laws of the United States, and dedicated and set apart forever as a public park or pleasure ground for the benefit of the people of the United States, to be known as Crater Lake National Park.

The park by said act is placed under the exclusive control of the Secretary of the Interior, and these rules and regulations are made and published in pursuance of the duty imposed on him in regard thereto:

1. It is forbidden to injure, or destroy in any manner, any of the natural curiosities or wonders within the park, or to disturb the mineral deposits in the reservation, except under the conditions prescribed in paragraph 11 of these regulations.

2. It is forbidden to cut or injure any timber growing on the park lands, except for use in the construction of places of entertainment and in connection with the working of located mining claims, or to deface or injure any Government property. Camping parties and others on the reservation will be allowed to use dead or fallen timber for fuel in the discretion of the supervisor.

3. Fires should be lighted only when necessary and completely extinguished when not longer required. The utmost care must be exercised at all times to avoid setting fire to the timber and grass.

4. Hunting or killing, wounding or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the supervisor and held subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the supervisor thereof.

5. Fishing with nets, seines, traps, or by the use of drugs or explosives, or in any other way than with hook and line, is prohibited. Fishing for purposes of merchandise or profit is forbidden. Fishing may be prohibited by order of the supervisor in any of the waters of the park, or limited therein to any specified season of the year, until otherwise ordered by the Secretary of the Interior.

All fish less than 8 inches in length should at once be returned to the water with the least damage possible to the fish. Fish that are to be retained must be at once killed by a blow on the back of the head or by thrusting a knife or other sharp instrument into the head.

6. No person will be permitted to reside permanently, engage in any business, or erect buildings, etc., upon the Government lands in the park, without permission, in writing, from the Secretary of the Interior. The supervisor may grant authority to competent persons to act as guides and revoke the same in his discretion. No pack trains will be allowed in the park unless in charge of a duly registered guide.

7. Owners of patented lands within the park limits are entitled to the full use and enjoyment thereof; the boundaries of such lands, however, must be determined and marked and defined, so that they may be readily distinguished from the park lands. While no limitations or conditions are imposed upon the use of such private lands so long as such does not interfere with or injure the park, private owners must provide against trespass by their stock or cattle, or otherwise, upon the park lands, and all trespasses committed will be punished to the full extent of the law. Stock may be taken over the park lands to patented private lands with the written permission and under the supervision of the supervisor, but such permission and supervision are not required when access to such private lands is had wholly over the roads or lands not owned or controlled by the United States.

8. Allowing the running at large, herding, or grazing of cattle or stock of any kind on the Government lands in the park, as well as the driving of such stock or cattle over same, is strictly forbidden, except where authority therefor has been granted by the supervisor. All cattle or stock found trespassing on the park lands will be impounded and disposed of as directed in regulations approved March 30, 1912.

9. No drinking saloon or barroom will be permitted upon Government lands in the park.

10. Private notices or advertisements shall not be posted or displayed on the Government lands within the reservation, except such as may be necessary for the convenience and guidance of the public.

11. The act provides that, under such regulations as the Secretary of the Interior may prescribe, the reservation shall be open "to the location of mining claims and the working of the same." It was not the purpose of this provision to extend the mining laws to the park without limitation, but only to authorize the location and working of mining claims thereon, under regulations to be prescribed by the Secretary of the Interior, and in such manner as not to interfere with or prejudicially affect the general purpose for which the reservation was established. It is therefore prescribed:

(a) That persons desiring to locate mining claims within the park shall enroll their names and addresses with the supervisor of the reservation, and shall file with such supervisor a description, in writing, of the land desired to be located. They shall also file with the supervisor evidence that they are severally qualified to make locations under the mining laws, and before entering upon the park for such purpose they must obtain from the Secretary of the Interior through the supervisor a written permit to do so. Such permit will be issued only upon condition that the applicant or applicants

therefor, while upon the reservation, will not destroy or damage any game, fish, timber, or natural objects therein, and will strictly observe and comply with the requirements of the law and these regulations.

(b) Lands in the park upon which valuable deposits of mineral shall have been or may be found may be located under the mining laws by any person or persons duly qualified and holding a permit, such as is described in the preceding paragraph, and such person or persons, his or their successor or successors in interest, may work the claim or claims so located; but in carrying on the work he or they shall in all respects observe and comply with the provisions of the statute creating the park and with these regulations: *Provided*, That such person or persons may, as the proper working of such mining claim or claims shall require, be permitted to use, for mining purposes, such timber or stone found upon the land located as in the judgment of the supervisor may be so used without injury or damage to the reservation "as a public park or pleasure ground:" *And provided further*, That within 30 days after the location of any mining claim within the park, and before development work thereon shall be commenced, a copy of the notice of location shall be filed with the supervisor, together with proof satisfactorily showing that discovery of a valuable mineral deposit has been made within the limits of the location, and, if it be a placer location, that every 10-acre tract embraced therein has been found to contain valuable deposits of mineral.

(c) The statute does not authorize the purchase of or the acquisition of the legal title to lands located as mining claims within the park. The rights of the locator or locators, therefore, will be at all times subject to forfeiture upon breach of any of the conditions mentioned in the permit herein provided for, or upon refusal or failure to comply with any of the provisions of the statute or of these regulations.

(d) Upon breach of any such conditions, or upon refusal or failure to comply in all respects with the provisions of the statute and of these regulations, or where locators of mining claims do not appear to be acting in good faith, or who after location do not work their claims in such manner as to show good faith in the assertion thereof, the supervisor will revoke their permits, forthwith remove them from the park, and report the facts to the Secretary of the Interior.

12. Persons who render themselves obnoxious by disorderly conduct or bad behavior, or who violate any of the foregoing rules, will be summarily removed from the park and will not be allowed to return without permission, in writing, from the Secretary of the Interior or the supervisor of the park.

No lessee or licensee shall retain in his employ any person whose presence in the park shall be deemed and declared by the super-

visor to be subversive of the good order and management of the reservation.

13. Any person who violates any of the foregoing regulations will be deemed guilty of a misdemeanor, and, upon conviction, be fined not more than \$500, or imprisoned not more than one year, and shall be liable for any loss sustained by the United States as a result of such violation, as provided by the act creating the park.

14. The supervisor designated by the Secretary is hereby authorized and directed to remove all trespassers from the Government lands in the park and enforce these rules and regulations and all the provisions of the act of Congress aforesaid.

INSTRUCTIONS OF SEPTEMBER 17, 1913.

Visitors to the Crater Lake National Park are hereby notified that when dogs are taken through the park they must be prevented from chasing the animals and birds or annoying passers-by. To this end they must be carried in the wagons or led behind them while traveling and kept within the limits of the camps when halted. Any dog found at large in disregard of these instructions will be killed.

AUTOMOBILE REGULATIONS OF MARCH 1, 1916.

Pursuant to authority conferred by the act of May 22, 1902 (32 Stats., 202), setting aside certain lands in the State of Oregon as a public park, the following regulations governing the admission of automobiles into the Crater Lake National Park are hereby established and made public:

1. *Entrances*.—Automobiles may enter and leave the park by either of the three entrances.

2. *Automobiles*.—The park is open to automobiles operated for pleasure, but not to those carrying passengers who are paying, either directly or indirectly, for the use of machines (excepting, however, automobiles used by concessionaires under permits from the department). Careful driving is demanded of all persons using the roads. The Government is in no way responsible for any kind of accident.

3. *Fees*.—Entrance fees are payable in cash only, and will be as follows:

Single trip permit.....	\$2
Season permit.....	3

4. *Automobile permits*.—Automobile permits must be secured at the checking station where the automobile enters the park. This permit must be conveniently kept so that it can be exhibited to park rangers on demand. Each trip permit must be exhibited to automobile checker at point of exit, who will stamp across the back of the permit: "Void after —— (hour and date)" and return to

owner or driver. The automobile may then reenter the park by the same or any other road (or entrance) within 12 hours from time of leaving park.

Automobile permits will show (a) name of station issuing permit, (b) name of owner or driver, (c) State and license number of automobile.

5. *Muffler cut-outs.*—Muffler cut-outs must be closed while approaching or passing riding horses, horse-drawn vehicles, hotels, camps, or checking stations.

6. *Distance apart—Gears and brakes.*—Automobiles while in motion must not be less than 50 yards apart, except for purpose of passing, which is permissible only on comparatively level or slight grades. All automobiles, except while shifting gears, must retain their gears constantly enmeshed. Persons desiring to enter the park in an automobile will be required to satisfy the guard issuing the automobile permit that the machine in general (and particularly the brakes and tires) is in first-class working order and capable of making the trip, and that there is sufficient gasoline in the tank to reach the next place where it may be obtained. The automobile must carry two extra tires. All drivers will be required effectually to block and skid the rear wheels with either foot or hand brake, or such other brakes as may be a part of the equipment of the automobile.

7. *Speeds.*—Speed is limited to 10 miles per hour, except on straight stretches, when, if no team is nearer than 200 yards, it may be increased not to exceed 20 miles per hour.

8. *Horns.*—The horn will be sounded on approaching curves, or stretches of road concealed for any considerable distance by slopes, overhanging trees, or other obstacles; and before meeting or passing other machines, riding or driving animals, or pedestrians.

9. *Teams.*—When teams, saddle horses, or pack trains approach, automobiles will take the outer edge of the roadway, regardless of the direction in which they are going, taking care that sufficient room is left on the inside for the passage of vehicles and animals. Teams have the right of way, and automobiles will be backed or otherwise handled as may be necessary so as to enable teams to pass with safety. In no case must automobiles pass animals on the road at a speed greater than 8 miles per hour.

10. *Accidents.*—When, due to breakdowns or accidents of any other nature, automobiles are unable to keep going, they must be immediately parked off the road, or, where this is impossible, on the outer edge of the road.

11. *Stop-overs.*—Automobiles stopping over at points other than the hotels or permanent camps, must be parked off the road, or where this is impossible, on the outer edge of the road.

12. *Reduced engine power—Gasoline, etc.*—Due to the high altitude of the park roads, ranging between 4,000 and 7,000 feet, the power of all automobiles is much reduced, so that about 50 per cent more gasoline will be required than for the same distance at lower altitudes. Likewise one lower gear will generally have to be used on grades than would have to be used in other places. A further effect that must be watched is the heating of the engine on long grades, which may become serious unless care is used. Gasoline can be purchased at regular supply stations as per posted notices.

13. *Penalties.*—Violation of any of the foregoing regulations for government of the park will cause revocation of automobile permit, will subject the owner of the automobile to immediate ejection from the park, and be cause for refusal to issue new automobile permit to the owner without prior sanction in writing from the Secretary of the Interior.

14. *Damages.*—The owners of automobiles will be responsible for any damages caused by accident or otherwise.

15. All persons passing through the park with automobiles are required to stop at the supervisor's headquarters or the rangers' headquarters and register their names.

16. *Motorcycles.*—These regulations are also applicable to motorcycles, which may use the roads on payment of a fee of \$1 for each machine per annum; permits issued therefor shall expire on December 31 of the year of issue.

MAP.

The following map may be obtained from the Director of the United States Geological Survey, Washington, D. C. Remittances should be by money order or in cash.

Map of Crater Lake National Park: 13 $\frac{3}{4}$ by 18 $\frac{3}{4}$ inches: scale, 1 mile to the inch. Price, 10 cents.¹

The roads, trails, and names are printed in black, the streams and lakes in blue, and the relief is indicated by brown contour lines. On the back of the map is a description of the lake.

PANORAMIC VIEW.

The view described below may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C.

Panoramic view of Crater Lake National Park: 16 $\frac{1}{2}$ by 18 inches: scale, 1 mile to the inch. Price, 25 cents.¹

This view is based on accurate surveys and gives an excellent idea of the configuration of the surface as it would appear to a person flying over it. The meadows and valleys are printed in light green, the streams and lakes in light blue, the cliffs and ridges in brown tints, and the roads in light brown. The lettering is printed in light brown and is easily read on close inspection, but merges into the other colors when the sheet is held at some distance.

¹ May be purchased by personal application to the supervisor of the park, but that officer can not fill mail orders.

LITERATURE.

GOVERNMENT PUBLICATIONS.

Government publications on Crater Lake National Park may be obtained as indicated below. Separate communications should be addressed to the officers mentioned. The sale publications may be purchased by personal application to the supervisor of the park, but that officer can not fill mail orders.

DISTRIBUTED FREE BY THE SECRETARY OF THE INTERIOR.

The two following publications may be obtained free by written request addressed to the Secretary of the Interior, or by personal application to the office of the supervisor of the park:

General information regarding Crater Lake National Park.

This circular is issued each season and contains data regarding hotels, camps, and principal points of interest, list of books and magazine articles, a sketch map, and the rules and regulations.

Annual Report of the Superintendent of Crater Lake National Park.

This is the annual administrative report. It does not contain illustrations or descriptive matter.

Glimpses of our National Parks. 48 pages.

Contains descriptions of the most important features of the principal national parks and the Grand Canyon of the Colorado.

SOLD BY THE SUPERINTENDENT OF DOCUMENTS.

The following publications may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., at the price given. Remittances should be by money order or in cash:

Geological History of Crater Lake, by J. S. Diller, 32 pages, including 28 illustrations. Price, 10 cents.¹

Contains an account of the formation of Crater Lake.

Forests of Crater Lake National Park, by J. F. Pernot. 1916. 40 pages, including 26 illustrations. Price, 20 cents.¹

Contains descriptions of the forest cover and of the principal species.

BOOKS.

ALLEN, E. F. A guide to the national parks of America. 1915. 286 pages.

BRYCE, JAMES. University and historical addresses. 1913. 433 pp.

National Parks—The need of the future, pp. 389-406.

DILLER, J. S., and PATTON, H. B. Geology and petrography of Crater Lake National Park. Professional Paper No. 3, U. S. Geological Survey. 1902. 167 pp.

FINCK, H. T. Pacific coast scenic tour. 1890. 309 pp., illustrated.

Crater Lake on pp. 157-158; Yellowstone on pp. 279-293; Mount Rainier on pp. 209-216; Yosemite on pp. 81-107.

FOUNTAIN, PAUL. The eleven eaglets of the west. 1906. 362 pp.

Crater Lake on pp. 46-49; Yellowstone on pp. 173-195; Yosemite on pp. 21-27; Mount Rainier on pp. 110-112.

HERBERTSON, F. D. and A. J. Descriptive geography from original sources; North America. 1901. 252 pp.

Crater Lake on pp. 166-167; Yellowstone on pp. 171-180; Yosemite on pp. 194-196.

RUSSELL, I. C. Lakes of North America. 1895. 125 pp.

Crater Lake on pp. 20-21.

Volcanoes of North America. 1897. 346 pp.

Crater Lake on pp. 235-236; Mount Rainier on pp. 241-245.

¹May be purchased by personal application to the office of the supervisor of the park, but that officer can not fill mail orders.

STEEL, W. G. The mountains of Oregon. 1890. 112 pp.

Crater Lake on pp. 12-33; Mount Rainier on pp. 23-51; 55-65.

VICTOR, FRANCES FULLER. Atlantis arisen. 1891. 412 pp.

Crater Lake on pp. 179-183.

MAGAZINE ARTICLES.

AMERICAN CIVIC ASSOCIATION (Washington, D. C.) NATIONAL PARKS, 32 pages.

Contains "National parks, the need of the future," by James Bryce; Address on a bureau of national parks, by W. H. Taft; Address on a bureau of national parks, by Walter L. Fisher; "Are national parks worth while?" by J. H. McFarland.

AMERICAN JOURNAL OF SCIENCE, 4th s., vol. 3 (March, 1897), pp. 165-172. Crater Lake, Oreg., by J. S. Diller.

AMERICAN NATURALIST, vol. 22 (November, 1888), pp. 996-1005. Sketches of the Cascade Mountains of Oregon, by E. D. Cope.

ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE, vol. 35 (March, 1910), pp. 1-12. The parks and recreation facilities in the United States, by John Nolen.

— vol. 35 (March, 1910), pp. 15-24. Our national parks and reservations, by W. E. Curtis.

APPALACHIA, vol. 12 (July, 1911), pp. 213-226. A western mountaineering summer, by E. W. Harnden.

ATLANTIC MONTHLY, vol. 81 (January, 1883), pp. 15-28. The wild parks and reservations of the West, by John Muir.

COAST, vol. 8 (July, 1904), pp. 29-30. Crater Lake, by H. V. Grubbe.

COUNTRY LIFE, vol. 23 (January, 1913), pp. 33-36. Touring in our national parks, by E. A. Mills.

FORESTRY AND IRRIGATION, vol. 9 (May, 1903), pp. 236-240. Crater Lake National Park, by J. M. Baltimore.

GOOD ROADS AND CYCLIST (October, 1896). Awheel to Crater Lake, by E. M. Wilbur.

HARPER'S WEEKLY, vol. 40 (Sept. 19, 1896), p. 932. Crater Lake, by G. W. Kirkman.

— vol. 41 (June 5, 1897), pp. 563-567. The national parks and forest reservations, by John Muir.

INDEPENDENT, vol. 49 (Feb. 25, 1897), p. 240. Crater Lake, Oreg., by G. F. Wright.

INLAND EDUCATOR, vol. 4 (June, 1897), p. 209. Crater Lake, by B. W. Evermann.

JOURNAL OF GEOGRAPHY, vol. 11 (June, 1913), pp. 322-324. Mount Mazama and Crater Lake, by L. Martin.

JOURNAL OF GEOLOGY, vol. 13 (September, 1914), pp. 9-12. Crater Lake, by J. F. Chamberlain.

JOURNAL OF SCHOOL GEOGRAPHY, vol. 1 (November, 1877), pp. 266-269. Crater Lake, Oreg., by J. S. Diller.

LITERARY DIGEST, vol. 46 (June 7, 1913), p. 1303. Western mountain and national parks.

MAZAMA, vol. 1 (1897), pp. 139-150. Description of Crater Lake, by E. M. Wilbur.

— vol. 1 (1897), pp. 150-161. The discovery and early history of Crater Lake, by M. W. Gorman.

— vol. 1 (1897), pp. 161-170. The geology of Crater Lake, by J. S. Diller.

— vol. 1 (1897), pp. 170-203. The August vegetation of Mount Mazama, Oreg., by F. V. Coville.

— vol. 1 (1897), pp. 204-230. The mammals of Mount Mazama, Oreg., by C. H. Merriam.

— vol. 1 (1897), pp. 230-238. U. S. Fish Commission investigations at Crater Lake, by B. W. Evermann.

— vol. 1 (1897), pp. 239-242. The Mazamas' Outing of 1896, by C. H. Sholes.

MOTOR AGE, vol. 25 (Apr. 9, 1914), pp. 1-10. Uncle Sam—his parks, by C. G. Sinsabaugh.

— vol. 25 (Apr. 9, 1914), pp. 10-12. How to get to the national parks, by John P. Dods.

- NATIONAL GEOGRAPHIC MAGAZINE, vol. 8 (February, 1897), pp. 33-48. Crater Lake, Oreg., by J. S. Diller.
- vol. 23 (June, 1912), pp. 531-579. Our national parks, by L. F. Schmeckebier.
- NATURE, vol. 57 (Feb. 17, 1898), pp. 375-376. Crater Lake, Oreg.
- OREGON NATIVE SON, vol. 1 (July, 1899), pp. 135-137. Legend of Crater Lake, by M. B. Kerr.
- OUT WEST, vol. 17 (August, 1902), pp. 173-187. The story of Crater Lake, Oreg., by H. W. Fairbanks.
- OUTDOOR WORLD AND RECREATION, vol. 49 (July, 1913), pp. 22-26. Vacation jaunts to Uncle Sam's playgrounds, by Arthur Chapman.
- OUTING, vol. 31 (December, 1897), pp. 257-260. A pilgrimage to Crater Lake, Oreg., by S. G. Bayne.
- vol. 11 (December, 1873), pp. 548-554. Klamath Land, by Samuel H. Clarke.
- OUTLOOK, vol. 95 (May 28, 1910), pp. 157-169. Scenery as a national asset, by Allen Chamberlain.
- vol. 100 (Feb. 3, 1912), p. 246. A national park service.
- vol. 102 (Dec. 14, 1912), pp. 811-815. National parks, the need of the future, by James Bryce.
- OVERLAND MONTHLY, 2d s., vol. 1 (March, 1883), pp. 295-301. Mountaineering in Oregon, by F. F. Victor.
- Contains a short account of a trip to Crater Lake.
- 2d s., vol. 41 (May, 1903), pp. 334-348. Crater Lake National Park, by Nora Batchelor.
- 2d s., vol. 60 (October, 1912), pp. 393-398. Klamath and Crater lakes, by R. W. Neighbor.
- PACIFIC MONTHLY, vol. 6 (October, 1901), pp. 187-189. Oregon's majestic Crater Lake, by D. H. Stovall.
- vol. 6 (October, 1901), pp. 190-191. Wimawita, a legend of Crater Lake, by M. B. Kerr.
- PACIFIC NORTHWEST (June, 1896). Crater Lake, by H. L. Wells.
- PACIFIC UNITARIAN (October, 1896). A trip to Crater Lake, by E. M. Wilbur.
- POPULAR SCIENCE MONTHLY, vol. 52 (March, 1898), 716. Crater Lake, Oreg.
- vol. 80 (June, 1912), pp. 531-547. The national parks from the scientific and educational side, by L. F. Schmeckebier.
- REVIEW OF REVIEWS, vol. 40 (July, 1909), pp. 44-48. The Nation's playgrounds, by G. O. Smith.
- SCIENCE, vol. 7 (Feb. 26, 1886), pp. 179-182. Crater Lake, Oreg., a proposed national reservation, by C. E. Dutton.
- n. s., vol. 4 (Sept. 25, 1896), pp. 446-448. Meeting of the Mazamas at Crater Lake, Oreg., by C. H. Merriam.
- n. s., vol. 15 (Feb. 7, 1902), pp. 203-211. Wreck of Mount Mazama, Oreg., by J. S. Diller.
- SCIENTIFIC AMERICAN, vol. 75 (Dec. 5, 1896), p. 405. Crater Lake, Oreg., by E. M. Wilbur.
- SIERRA CLUB BULLETIN, vol. 8 (January, 1912), pp. 236-239. National parks: Are they worth while? by J. H. McFarland.
- SUNSET, vol. 9 (May, 1902), pp. 68-73. Crater Lake by night and day, by C. W. Hodgson.
- vol. 13 (May, 1904), pp. 14-25. In the Klamath country, by G. B. Oceltree.
- vol. 13 (September, 1904), pp. 395-404. The sea of silence, by Joaquin Miller.
- vol. 28 (March, 1912), pp. 299-304. Crater Lake, Oreg., in winter, by H. H. Hicks.
- TECHNICAL WORLD, vol. 9 (August, 1908), pp. 655-662. In a drowned volcano's crater, by Rene Bache.
- vol. 17 (July, 1912), pp. 627-628. Lowering a boat into Crater Lake.
- TRAVELER (November, 1896). The Mazamas at Crater Lake.
- WORLD'S WORK, vol. 16 (May, 1908), pp. 10250-10261. Playground on a crater's edge, by O. Wilson.
- vol. 24 (May, 1912), pp. 68-77. Unknown wonders of our national parks.

OTHER NATIONAL PARKS.

The circulars containing information about National Parks listed below may be obtained free of charge by writing to the Secretary of the Interior, Washington, D. C.

Yellowstone National Park.
Mount Rainier National Park.
Yosemite National Park.
Mesa Verde National Park.
Sequoia and General Grant National
Parks.

The Hot Springs of Arkansas.
Glacier National Park.
Rocky Mountain National Park.
Wind Cave National Park.
Casa Grande Ruin.



MAP SHOWING RAILROAD CONNECTIONS TO CRATER LAKE NATIONAL PARK.