

**STUDEBAKER AUTOS
CONQUER LAKE ROAD**

Special Six Cars First to Rim of Crater Lake.

DEEP SNOW IS BUCKED

Road to Crater Lake Lodge Now Is Open and Highway From Medford Good.

With the road open and snow fast disappearing as the result of warmer weather, motorists who make the trip to Crater Lake during the rest of the season will have a hard time imagining the hard battle with the snow drifts which two Studebaker special six cars had to put up shortly after July 4, when they reached the rim of the lake as the first cars to accomplish this feat this year under their own power.

But testimony that it was a battle and a real one was brought to Portland last week by Don C. McClellan of this city, who, with Mr. and Mrs. Dwight Edwards of Portland and Mrs. George Coleman of Santa Barbara, made the memorable drive in Mr. Edwards' special six Studebaker. Similar testimony was also brought here by Mr. and Mrs. Frank K. Benchley and daughter and Lester W. Hedner of Fullerton, Cal., also traveling in a special six Studebaker. These two cars claim the record of having been the first cars to the rim of the lake this year.

The Edwards party left Portland July 2 and after an easy trip southward to Medford left the latter town for Crater Lake on July 5. They arrived at the government camp, 1 1/2 miles from the rim of the lake, at daylight and were informed that the road was closed to the lodge and would not be open for several days.

The next morning, Wednesday, July 7, Mr. Edwards and Mr. McClellan walked the mile and one-half up to the lodge, inspecting the road on the way. They found a number of cars stuck en route, but none had yet got through to the lodge.

Drive to Lake Attempted.
The inspection of the road on the way to the lodge convinced Edwards that they could make the climb in their Studebaker and they returned to the government camp next morning, determined to make the attempt.

They started the motor and tried to get through the snow drifts, but were forced to buck heavy snow in a number of places, and at others were barely able to get along on account of the heavy ruts in the road, which succeeded in making the climb and snowed through the snow to the hotel, the first car to the lake this year under its own power. On making the return to Portland the Edwards party went via Bend and The Dalles, and reported the road in fair shape and easily passable.

The California car, a special six Studebaker identical in model with the Edwards car, made the attempt in the same day and a short time earlier than the Edwards car. However, when within 100 feet of the edge the car encountered a drift which was more than it could conquer, and it had to be towed this distance. The two cars divided honors, however, for the Edwards car, which brought to the rim of the lake.

Mr. Benchley and party are on a tour of the north coast, and arrived in Portland after making the run north from Fullerton, Cal., to Crater Lake, hence to Bend and up The Dalles-California highway to The Dalles and down the Columbia river highway to Portland. They report the road from the lake to Bend as dusty and rather rough, but the rest of the east-of-the-mountains route as in good shape.

**LINCOLN CAR IS PRAISED
WORK ON NEVADA COURSE IS
HIGHLY COMMENDED.**

Route Declared to Be One That Tries Car Severely, but Stock Model Comes Out First.

A telegram of congratulation from the Nevada highway association was received by the Lincoln Motor company on the signal victory of a Lincoln in the three-day 1000-mile road classic over Nevada deserts and mountains, according to word received by Fred Frasp, local Lincoln distributor.

Of the ten cars which started, only three were able to finish in the prize money, and the Lincoln led its nearest competitor by a margin of 2 hours and 10 minutes. The Lincoln, a strictly stock model, was driven by its owner, W. W. Bramlette of Los Angeles. Route and cars were checked by the American Automobile association.

The telegram from the Nevada highway association to the Lincoln Motor company is in part as follows:
"In the Nevada road race classic, with an official distance of 1017 miles, the victorious Lincoln made a remarkable record. It was officially checked at finish and start with its radiator sealed."
"Less than ten miles of the route are surfaced, the rest is dirt. An immense crowd witnessed the finish. We heartily congratulate you."
"The winning Lincoln is the same individual machine which recently snatched a whole hour off the oft-contested Los Angeles-Phoenix run. This same car also holds the record over the mountain route from Los Angeles to Bishop, Cal., a fruit-raising center in the shadow of Mount Whitney."

"The Lincoln Motor company," says a statement by President Leland, "does not lend the use of its name to race-track contests among 'special' cars because it thinks that such activities have no significance to the ordinary purchaser of a stock model."
"In the Nevada road race, however, an opportunity was given to test the durability and consistent power of our car. This three-day grind over one of the worst and roughest routes in the country tries a car to its very limits—as was demonstrated when so many entries were unable to finish."

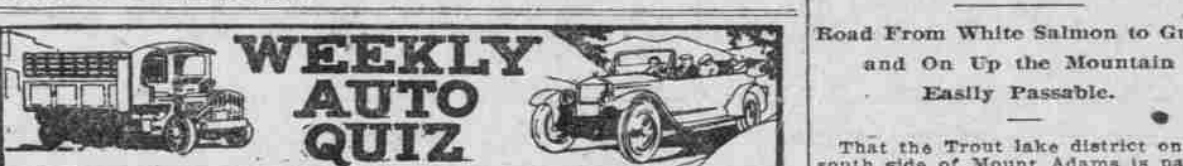
Brakes Lock.
"The owner who is not vigilant and neglects the parts he does not see or which do not give trouble usually finds some time that upon starting one of the wheels becomes locked, even though the brake pedal is not a free. This is due to the fact that there is so much play in the brake linkage that when the hand brake is released it merely takes up the play, leaving the unlubricated mechanism set in holding position. This happened recently and a hammer had to be used to loosen the brake mechanism."

STUDEBAKER SPECIAL SIX IS FIRST CAR TO RIM OF CRATER LAKE ON ITS OWN POWER.



Above—Auto driven by Dwight Edwards of this city at the rim of lake after battle with snow. Below—Climbing up the grade about half a mile from the rim of the lake.

On July 7 two Studebaker cars plowed through to the rim of Crater Lake, the first cars to get through this year. The first of the two, driven by Frank K. Benchley of Fullerton, Cal., had to be towed the last 100 feet, but Edwards declared that for dependability his Studebaker ranks right up alongside of Dependable coffee.



THIS department is designed to aid motorists by asking and then answering in simple language questions relative to motorcar operation. The questions, prepared by experts, are asked in one issue and answered in the next:
Answers to last week's questions:

How to Climb on High.
1. Just how should spark and gas controls be manipulated to carry a car up hill on high gear? This question has been asked by many drivers, not every one a beginner, and undoubtedly occurred to them after they had failed to negotiate certain stubborn grades. Perhaps their engines had power enough, failure to climb the hill possibly being the result of incorrect use of the above mentioned controls. The success of hill climbing depends upon the driver's confidence in his engine's ability plus a good running start before the hill is attempted. Before starting to climb speed up the engine, advancing the spark fully at the same time. A good rate of speed should be attained, and when the foot of the hill is reached set the hand-throttle control at the steering wheel to about two-thirds or more advanced, keeping the foot off the accelerator. When part of the hill has been traveled retard the spark to about three-fourths open or a little less and keep it there. With controls in this position the engine will do its best without being overtaxed or choked up with fuel. Of course, it is impossible to climb every hill on high gear, but if the hill is too great the limitations of power will soon be manifested by a steady reduction of car and engine speed and pounding and laboring of the latter, in which case it is better to start on low gear and speed is necessary. The reason why so many drivers fail to clear an average-sized hill with their cars in high gear is because they start on low gear, throttle too wide with the foot accelerator, and at the wrong time, usually changing until the car starts up the grade. They also usually retard the spark too far, resulting in timing the engine's explosions too late to perform slightly just when it should be at its snappiest. It is very easy to find the engine too much fuel with the sensitive accelerator, and that is why the use of the hand-throttle control is recommended for hill climbing.

Spark-Coil Trouble.
2. Spark-coil trouble is sometimes caused by carelessness in washing the car. If the coil was soaked with water it would not function properly, causing misfiring. The remedy is to remove the coil and heat slowly until dry. Care must be used that the coil does not become too warm, as it would be ruined by the insulation within becoming soft. The drying process requires from a half to two days at even heat.

To Test Headlight Focus.
3. You can tell if your headlight or spotlight bulbs are in focus or not in focus by noting the direction of the beams from the reflectors. If the bulb of a lamp is to the left of the reflector the beam will be thrown to the right, and if bulb is to the right the beam will be to the left. The same rule applies to the bulb being above or below the center of the reflector.

Use of Heated Wrench.
4. When a nut cannot be removed with an ordinary wrench and any effort to remove it would merely result in rounding the corners, try heating a wrench which will fit, placing it on the nut and allowing it to warm for a period. The nut should then be removable with no trouble, as the heat will expand it before the bolt to which it is secured is warmed.

To Remove Wheel.
5. To remove a wheel, tightly secured to its axle, without the aid of a wheel puller, remove the hub cap, place a piece of wire or string against the axle and the other against the car jack. Pass a strong rope or cable from a spoke in the wheel around the head of the jack to another spoke on the opposite side of the wheel, tie tightly and work the jack which will exert enough pressure to start the wheel. Tapping

wheel on the inside and jack with a hammer will aid removing.

Steam Auto Explained.
6. Power from a steam automobile engine is applied to the rear axle and rear wheels directly through the differential, the engine being mounted at the rear of the car to the differential housing. Thus no driving shaft or transmission is necessary, as the main driving gear of the engine meshes with that of the differential. The entire range of speed and power is attained by use of the throttle.

Use of Clutch Brake.
7. The clutch brake is used to stop the spinning of the clutch when disengaged. If no brake were used this spinning would continue for a length of time, during which time the driver would have to wait before shifting gears.

Treatment of Clutch Leather.
8. Dry or glazed clutch leather should be cleaned to remove the glazed surface, after which either neatfoot or castor oil may be applied to soften it. Disengage the clutch and brake is open while the treatment is made, and allow the oil to remain on the leather for about ten hours, before again engaging the clutch.

Causes of Misfiring.
9. The following carburetor troubles are mainly the cause of an engine misfiring: A lean or rich mixture, either to an excess; carburetor joints loose, a cracked manifold or its gasket defective and leaky, all causing air leakage to cylinders and resulting in too lean a mixture; water or sediment in gasoline, weakening the mixture and stopping the proper flow of gasoline; a worn needle valve or float valve, or either of them bent or dirty; a sticking fuel line, or line from tank or vacuum feed-tank loose at connections; not enough heat being supplied to carburetor to properly vaporize the gasoline.

When Cooling System Is Drained.
10. With the cooling system of an engine drained, the engine should

not be run more than a few minutes continuously, without danger of overheating.

THIS WEEK'S QUESTIONS.

1. Can a car be successfully repainted at home?
2. What causes the sharp snapping sound often heard at sparkplugs or wires when an engine is misfiring?
3. How are headlights placed in proper focus?
4. Sometimes it is necessary to turn a nut with a wrench which is too large to fit the nut properly. How can this be accomplished?
5. What parts, eliminated in the modern steam automobile, are necessary to the gasoline car?
6. Does a fully loaded car alter the adjustment or operation of closely adjusted brakes?
7. What percentage of people in this country possess automobiles?
8. How can misfiring cylinders be located in engines which have vibrator coil ignition?
9. Should valves be readjusted after they have been ground in?
10. What is good to remove discoloration from brass?

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MOUNT ADAMS ALLURING

WASHINGTON PEAK IS EASILY VISITED AT PRESENT.

Road From White Salmon to Guler and On Up the Mountain Easily Passable.

That the Trout Lake district on the south side of Mount Adams is particularly attractive at this time and offers an excellent objective for a week-end automobile trip, is the statement of George S. Shepherd, a local attorney, who made the trip to the mountain last week end with a party of friends. Hotel facilities are provided at Guler, and from this point, he said, easy trips may be made to the ice caves, lava cave and other unusual scenic features, and up the flanks of Mount Adams.

The road up to Guler is in good shape at this time and the trip may be made from Portland in five hours or less, he said. The best route is from here up the Columbia river highway to Hood River, across the Columbia to White Salmon and thence up the White Salmon river valley to Guler.

From White Salmon to Guler is 25 miles and the road is in fair shape at this time, Mr. Shepherd said. As Guler is but 1900 feet above the Columbia river the grade is very easy the entire distance. From Guler it is but a mile and a half to the entrance of the lava cave, which is a most unusual and interesting formation.

The motorist can go right to the entrance of the lava cave in his automobile, he said, and reach over a road which is in fair shape at the present time. These caves are filled with perpetual icicles, even in hottest summer weather. Trout Lake is another feature in the vicinity, being about half a mile west of Guler and offering excellent fishing.

The new road from Guler up the mountain is progressing rapidly, he said, and it is now possible to drive with an automobile practically to the snow line, at an altitude of 6000 feet. This makes a drive of unusual interest, the road going for several miles through a beautiful forest of pines. There is no underbrush and the grass is nearly knee high, the entire appearance being park like. A splendid view of the mountain is afforded from many points along this road.

A feature of interest in regard to a mountain this year is the great mud slide on the southwest slope last winter. This slide, covering perhaps 100 acres, is plainly seen from Guler, and has changed the face of the mountain somewhat, making a black spot on the snow field in lower left hand looking from Guler. The Mount Adams trip, on the whole, according to Mr. Shepherd, is one of unusual interest, and may easily be accomplished in a week end.

MIRRORS FOR TRUCKS ONLY

Error in Printing Law Is Cause of Misunderstanding.

LA GRANDE, Or., July 16.—(Special)—A mistake made in the state printing office in regard to the motor vehicle laws has caused some misunderstanding in La Grande. Following the visit of Jay Saltman, state motor officer, a copy of the state motor laws was printed in the local paper. Among the list of dos and don'ts was the order that all motor cars must have a mirror, in order to keep in touch with the traffic behind the car.

There was much objection registered to this law, some of the lawyers appearing at police court and insisting that the law was wrongly quoted; that it should be motor trucks and not motor vehicles. Mirrors for motor trucks was found to be correct, and all of the copies of the motor laws which are now being sent out are being watched carefully to see that the mistake is rectified.

Artificial Rubber Invented.

Washington Ross, an Italian chemist in the laboratories at Barcelona,

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The Official Records

Distance	Time	Miles Per Hour
1 Mile	35.01	102.8
5 Miles	3:15.88	91.8
10 Miles	6:31.48	91.9
15 Miles	9:45.96	92.1
20 Miles	13:01.48	92.1
25 Miles	16:37.94	90.1
50 Miles	33:16.43	90.1
75 Miles	50:00.80	89.9
100 Miles	66:53.16	89.7
One Hour		89.0

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