

Edited by Thomas H. Russell, A. M., M. E., author of "The American Cyclopaedia of the Automobile," "Motor Boats: Construction and Operation," etc., etc.

NOTICE TO READERS—The readers of this department are cordially invited to write to the editor regarding any troubles they may experience in any branch of motoring, either ashore or afloat—on land, lake, river or sea, or in the blue empyrean above. Inquiries from automobilists, motor-boatmen, or power-yachtsmen, amateur aviators and all others interested in motoring, will be welcomed and carefully answered through this department.

Contributions of motoring experiences are also invited and the editor will likewise gladly receive suggestions for articles and features of a helpful nature that will tend to make the department increasingly useful and interesting to all who use the motor as a means of transportation. Let us "get together," particularly on the subject of engine troubles and how to remedy them.

Address Editor Motoring Department, Outdoor Life, Denver, Colorado.

Spokane to Seattle and Return by Automobile

Three Spokane, Wash., boys—Vance Wolverton, Joe Stenstrom and Ralph Hayward—recently completed one of the longest and roughest automobile tours ever undertaken by Spokane people. The route lay from Spokane to Portland by way of Walla Walla, from Portland to Tacoma and Seattle, following the coast from Astoria, and then from Seattle back to Spokane by way of Ellensburg, crossing the Cascades through the Snoqualmie Pass.

In many places, as the accompany pictures depict, the hardest kind of going was encountered, while in others, what were said to be the best highways through the mountains were found to be nothing more than rock piles. After crossing the mountains on the return trip the trio ran through some of the sage brush of central Washington, where it was difficult to breathe on account of the dust and where the mercury often neared the 100 mark. The auto pushed ahead night and day, the boys standing regular watches, sleeping in the tonneau when off duty.

The car used on the trip was Vance Wolverton's Chalmers "30" and no mishap of

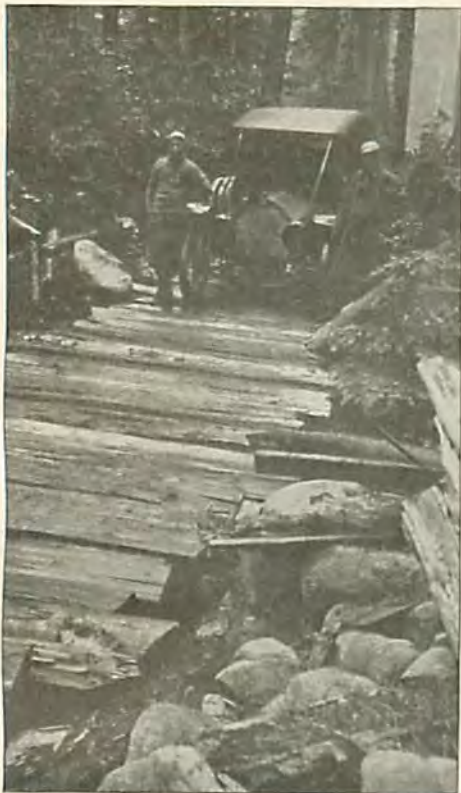
any kind, outside of tire trouble, was experienced. There was plenty of the latter, however, with five punctures on the first day's running to Walla Walla. The start was made at 9:45 one morning and Walla Walla was reached at 3:45 the next morning.

The equipment carried was extensive and was found necessary in the bad roads of the western portion of the state. Here the block and tackle was found necessary nearly every day in hauling the car out of a bad hole and in fording streams where it was impossible to secure traction, due to large boulders, worn smooth by the water's action.

The equipment carried comprised one full set of tools, including large Stilson wrench, five extra inner tubes, three tire casings, one complete set block and tackle, 150 feet extra rope, one set tire chains, one 100-mile Warner speedometer, one Australian water bottle, three laprobes, one pair of blankets and one quilt, one trunk on the rear for good clothes, one ax, one shovel and one hand-ax. The car was dubbed the "Fish Hound," which name was printed on the

trunk on the right hand running board.

The course taken lay from Spokane to Marshall, then to Spangle and Plass. On this portion of the journey a great deal of



CORDUROY ROAD BETWEEN PORTLAND AND ASTORIA, OREGON. THIS WAS THE FIRST MOTOR CAR TO TRAVERSE THIS ROAD.

dust and rocky road was encountered. From Spangle the road leads to Rosalia, Thornton, Colfax, Wilcox and the Central Ferry on the Snake River, 113 miles from Spokane. Central Ferry is reached by way of Dead Man's Gulch, which, quoting the log of the trip, "is rightly named, being infrequently traversed; weeds were as high as the car." From the ferry the road proceeds to Walla Walla via Waltsburg.

The route from Walla Walla passed through Lowden, Touchet and Wallulla, where the boys had the experience of taking an unruly drunk out of town in their automobile at the request of Mayor Ash, who is mayor, constable and leading bartender in one. The drunk naturally gave

the boys the wrong route, taking them out into the desert toward Pasco. On the way the car got into the sand, which came up to the hubs. The drunk became disgusted with autoing and left on foot.

Two days after the start, at 5.10 p. m., the trio crossed the Columbia River on the ferry and proceeded down the northern banks of the river toward the Dalles, where the automobile was to be shipped to Portland. Before reaching the Dalles the boys passed through Kennewick, from which place they went to the Celilo rapids, a short distance above the Dalles, where the auto was put aboard the steamer "Twin City." A short distance above the Dalles the auto was again unloaded on the Oregon side of the river and the trip to the Dalles made over the portage railroad.

They intended to take the boat to Portland, but on getting up the morning after their arrival, the boys found to their dismay that the boat they expected to board had pulled out. Undaunted, they got into the Fish Hound and started in pursuit of the steamer, hoping to overtake it at Hood River. The following extract from the log kept by the trio tells the novel story of chasing a steamboat with an auto.

"Seven-thirty a. m.—On getting up we found that we had missed the boat; we decided to race it to Hood River. We crossed two very steep hills. The trip is at least seven miles longer by road, being twenty-four miles overland. We had the car wide open all the way; ran into a big car; they were afraid to get out on the edge of the precipice and broke our fender and hub cap. However, we did not stop. Later we nearly scared a team off into the cañon, but could not stop coming down the mountain; road is very narrow and hardly room to pass.

"Nine-thirty a. m.—Caught boat at Hood River; broke muffler on the rocks getting the car aboard the boat. Had only three minutes to spare."

The car was unloaded at Vancouver and the trip made overland to Portland, where a day or so was spent in taking in the sights.

From Portland the trip was made through the Cascade mountains to Astoria. This was among the roughest on the tour and in one place, from Delena to Clatskamine, it



A WASHED-OUT BRIDGE MADE IT NECESSARY TO FORD THIS RIVER.



A SAMPLE OF THE ROAD IN THE CASCADE MOUNTAINS BETWEEN SEATTLE AND ELLENSBURG, WASH.

was found necessary to dig out the center of the road to prevent the crank case from hitting the stumps. This was the first time that an automobile had ever made that trip. It was frequently necessary to use blankets to protect the tires and to keep the crank case clear.

One night, as the boys were passing the livide before reaching Astoria, the car became stuck in mire over the hubs, on a summit seven miles west of Jewel. The boys walked to the foot of the hill, where some men had been working on a bridge,

the boat and the wheels hung over on either side. It was a rough, wet crossing. From Ilwaco the boys proceeded to the Hayward cottage, near Sea View.

There they rested several days and then resumed the trip via Chehalis and Tacoma to Seattle. The road between Frances and Wallville was so bad that the trio took to the railroad and bumped along on the ties with the auto for six miles. Several days were spent at Seattle taking in the sights.

The eventful part of the journey, however, began after leaving Seattle and start-



CROSSING THE SNOQUALMIE RIVER, WHERE BOULDERS WERE SO LARGE THAT IT WAS NECESSARY TO LIFT THE REAR AXLE TO GET OVER THEM.

and left a note for help. Then returning to the car, the trio, hungry and tired, spent a restless night in the big auto waiting for help. In the morning three men came up the mountain with picks and shovels and assisted them in pursuing their journey, building a plank road for the car to run on in getting out of the mire.

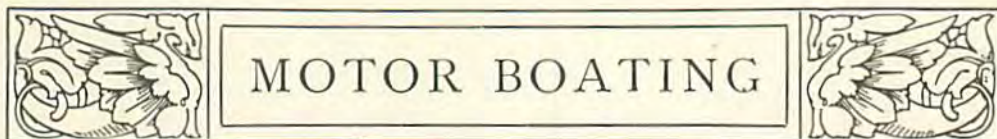
They reached Astoria at 10 a.m. of the ninth day. At 2 p.m. the auto was loaded on the launch "Hulda L." and taken across the Columbia. The auto was too wide for

ing across the Cascades. In several places it was found necessary to ford mountain streams, and in one place the bridge over the Snoqualmie River was gone, so it was necessary to ford that swift stream. The bed of the river was filled with big boulders which would catch the differential and make the engine useless, necessitating the use of the block and tackle in taking the car through the river. The boulders encountered on many of the roads also were a great handicap to comfortable riding.

They reached Ellensburg in fifty-six and one-half hours, actual running time, and the long grind to Spokane began. From Ellensburg they entered the dry sage brush country and in several places it was necessary for the tourists to wear handkerchiefs over their faces to keep the dust out of their lungs.

In all, the boys traveled 1,228 miles of

Washington and Oregon roads before reaching Spokane, twenty-five days after the start. During the entire trip no stops were made for engine trouble, but tire trouble was a great nuisance and the roads were far from suitable for "joy riding." In the mountains the going was especially difficult at all times and the three boys were glad to see "Sunny Old Spokane" again.



The boating season of 1911 will soon open and owners everywhere are already outfitting. It is expected to be the greatest season of popularity the motor boating sport has enjoyed. As a form of outdoor recreation the sport is unexcelled, but to enjoy it to the full each individual owner should study and learn his engine thoroughly. Then when it balks, as gasoline engines will at times, he will be in possession of the knowledge that will minimize trouble. We give below a number of valuable tips to new members of the power boating fraternity.

Starting a New Engine.

Before starting a new engine for the first time go over it carefully and ascertain all its leading features, such as the lubrication and ignition systems, whether or not the spark time is variable, the character of the igniters and how they may be removed and cleaned, the arrangement of the wiring, and the method of turning the engine to start it. A spring pin in the fly-wheel rim is a rather dangerous cranking device, unless it is hinged so that it automatically folds into the fly-wheel when the explosion comes. If the engine is cranked in its running direction, the spark should occur when you are in the act of pulling upward, since then a back-kick is not likely to do harm.

Do not start the engine until you are satisfied that it is fully supplied with oil and that the ignition apparatus is working perfectly—a point which you can easily test before attempting to start. When starting for the first time, give the carburetor time to fill after opening the tank valve.

One-Man Control.

It is on every account desirable that the man at the wheel shall be able to control

the engine. This involves locating the spark and throttle levers, as well as the reverse lever, at the wheel. Suitable operating systems for distance control of the spark and throttle are to be had and should be used. Above all things, flimsy connections, wire liable to stretch or break, and springs too light to be reliable, should be avoided. If wire connections and springs are used, the wires should run through brass tubes for protection. For turning a corner, a chain may be run through a brass tube with an easy bend, or over a sheave; or brass bell cranks may be employed. It is well also to be able to shut the gasoline valve without leaving the steering wheel.

To Stop the Engine.

Open the switch; close the oil cups and the valve in gasoline pipe.

To start again within an hour or so it is usually not necessary to use any gasoline in the priming cups, an explosive mixture having been left in the base of the engine when shutting down.

A little experience, remembering that a cold engine needs more gasoline and a warm engine less gasoline through the priming cups, will make starting very easy.

In cold weather it is recommended that a supply of warm air from the exhaust pipe be piped to the carburetor.

In the case of an engine having three or more cylinders, before stopping if the engine is speeded up for a moment or so and the switch thrown out, the engine can generally be started by throwing in the switch and moving the timer handle rapidly to the left and quickly back again to the center.

Caution.—That boat should never be cut loose until the motor is running, nor should the motor be stopped until the boat is secured to its moorings.

A Winged Motor-Boat

A new craft which the builders believe is going to revolutionize transportation over the water is illustrated herewith. This is

the combined motorboat and aeroplane, appropriately named the "Flying Fish," designed and built by the Detroit Boat Com-