

Answers Found Here To Motorists' Queries

By W. H. STEWART, Jr.

Motoring Department, The Times—While passing through Boston recently I was told that ordinary tap water could be used for the storage battery, yet the directions call for distilled water. Is there any danger in using tap water? Also please tell me when sulphuric acid should be used in the water.

In some parts of the country the tap water is pure enough to be used in a storage battery, but it is well to be careful. Most waters contain mineral salts which will damage the plates. Distilled water is cheap and can be obtained at any drug store. Acid should never be put into a battery unless some of the electrolyte has leaked out or been spilled. Use chemically pure acid only.

Motoring Department, The Times—What is the best way to winter a car? There is no heat in the garage, and I do not intend to use the car this winter. How should the storage battery be taken care of in the winter? What should be done with the tires? Please answer in motor column.

See answer to A. F. in this department. The storage battery should be taken care of in the winter by disconnecting it from the car and recharging every month. The electrolyte cannot freeze if kept at 1.300, but will freeze readily between 20 and 30 degrees if discharged.

Motoring Department, The Times—Some of my motoring friends claim that the brakes must be applied gently and others apply them vigorously. Please let us know which is right.

The brakes must always be applied gently, otherwise they are apt to lock the wheels and cause them to skid. The braking or retarding effect is exerted between the brake and brake drum, while the wheel turns because of the traction between the rubber tire and the road. If the brakes are jammed on suddenly the wheels are locked and the car slides forward. The best way to stop the car is to throttle down when approaching the place, throw out the clutch, and allow the car to coast, gradually applying the brakes.

Motoring Department, The Times—Occasionally I draw off a small quantity of water from my carburetor, although I have not had the car out in the rain. Where does it come from and what can I do to avoid it?

The water gets in from the underground tank, where it is condensed from the air. Being heavy it sinks to the bottom and is so drawn out first. It is poured into your tank and finds the outlet immediately running down into the carburetor. Fit a drain valve to your carburetor, if one is not already provided, and open it occasionally. This will carry off sediment, as well as water and so forestall trouble. Also provide a chamber skin for your funnel and pour the gasoline through it. This should end all troubles from water and to a great extent from dirt.

Motoring Department, The Times—I have obtained a hydrometer for my storage battery, following your advice, but if it becomes broken I should not be able to test the battery. Please let me know through the motoring department if there is any other way of testing a battery. I am frequently a long way from any assistance and like to have several methods to fall back on.

Carry a voltmeter and test battery while it is delivering current to engine or lights. 2.25 v. per cell shows full charge and 1.8 v. shows discharge. A small trouble lamp may be used. If it burns dimly the battery is low, but this gives you no warning in advance. The hydrometer is best and will last for years if carefully protected against leakage.

Motoring Department, The Times—What should the driver do when the car is skidding? Some tell me it is best to steer the way the car is going and others say to put on the brakes to hold the wheels and steer the way you want to go. Will this bring the head of the car in the right direction?

The car should be pointed in the direction it is trying to go and the brakes applied gently. If you can get the wheels going in the right direction you can get traction and so hold the car by means of the brakes. If you jam the brakes on hard the wheels will continue to skid. This will not bring the head around, but will make matters worse.

Motoring Department, The Times—Would like to have your advice on the following questions: A slight knock developed in our engine. I took it to a garage and asked the foreman what it was. He said probably a bearing. I took it to the shop and they tightened up bearings, etc., and the knock could not be heard. Only one week had passed when the same knock came back. Some people tell me it is in the wrist pin. When the engine runs with spark retarded it can be heard more distinctly. I would like to have your opinion of above. I hope to see this answer in the automobile page, and I thank you in advance for same.

P. S.—What advantage has an overhead camshaft to others? Would a correspondence course in automobile engineering help a fellow to know about an automobile?

The only thing to do is to keep hunting until the cause of the knock is found. One of the bearings may have loosened or it may be a loose wrist pin, worn piston (giving piston slap), or glowing carbon. If flywheel is fastened to shaft by a key, that may be loose. Also look for a glowing point of metal in cylinder heads. The overhead camshaft is more accessible, but it requires more attention for oiling and is apt to become noisy. There are several good correspondence courses, but for the man who simply wants to understand his car and take good care of it careful reading and consultation with experienced men should give him all the information necessary.

Motoring Department, The Times—I have a 1913 Twin X motorcycle, and I want to repair engine and put in some new engine bearings. I would like to know the best way to remove the old brass bearings and fit the new bearings in without cracking the crank case. Could I use bearings made of Babbit? Do you think it advisable to use the brass bearings made by the manufacturers? I would like to know the best way of putting the crank case together to prevent the oil from leaking out around joint. When I put a little oil in the crank case the engine smokes badly and when engine is not smoking (oil coming out of the exhausts), I can take out drain screw and the crank case empty. One engine bearing leaks badly. I thank you for the above information in any way you can advise me.

By all means use the brass bearings as Babbit bearings might be too soft. If old bearings do not come off readily they may be pried out or cut away with a cape chisel. The new bearings

SAXON MAKES TOUR OF BORDER CAMPS

Goes From San Antonio to San Diego Over Many Bad Roads Along Border.

Just recently a Saxon Six touring car made a run from San Antonio, Tex., to San Diego, Cal., taking in every militia camp on the border and traversing roads in the Texas wastes that never before have felt the wheels of a motor car. It carried representatives of a motion picture company. Starting from San Antonio, the party of movie operators encountered the severest rain storms that have swept across that section of the country in twenty-two years. Near Finley, Tex., the Saxon plowed through miles and miles of mud up to the axles. Unlike the usual border trip, which follows a more or less beaten path, the route of the "movie" car was circuitous and led into the desert country. Uncle Sam's soldiers, late militia-men of the forty-eight States, are not all encamped along the main trails. They are lodged in little passes, at waterholes, and along the bluffs of the Rio Grande, miles from villages or railroad.

STORAGE BATTERY NEEDS LITTLE CARE

Your starting battery must have its drink of distilled water every ten days, or it is going to get sick on your hands, and it will usually do this at the most critical time—right in the dead of winter, when the oil in your crankcase is so stiff you can barely "turn her over."

Only one tool is necessary for the care of your battery. That is a hydrometer, and it will pay you to get a good one, for the cheap ones are worse than none at all. This instrument is used to read the condition of your battery and also to fill the battery when distilled water is needed. Incidentally only distilled water, or rain water that has not come in contact with metal, should be used. Rain water collected through metal gutters or pipes is not safe, as it is liable to contain iron, which will ruin any battery in a short time. Test your battery every ten days with the hydrometer, removing the hard rubber caps on the top of the battery to do this. If possible, take your reading without removing the hydrometer from the battery. In this way you will avoid any chance of spilling the battery liquid. After reading distilled water should be added to take the place of what has evaporated since the last reading. Battery acid does not evaporate, and acid should never be added by the owner. This is a delicate operation, and should be left to the service station man. Your hydrometer should read between 1.300 and 1.350 for a fully charged battery. If the float rises higher than this out of the liquid, giving a reading of 1.300 or 1.310, your battery is weak and needs recharging. Always read the condition of your battery before adding distilled water. Many owners go astray on this point

and get unnecessarily alarmed about their batteries, for the addition of water first will give an inaccurate reading. It is to be remembered that a weak battery is very likely to freeze in winter. This always cracks the hard rubber jars and ruins the battery. It cannot happen to a fully charged battery. Consequently owners should always look to their batteries very carefully in the cold months.

HUDSON SUPER-SIX (SEDAN)

This car is NEW in the most literal sense. It has been driven 168 miles. It has never been driven over 25 miles an hour. It has extra equipment in engine driven tire pump, rear-view mirror, bumper front and rear, clear-vision double windshield, extension pedals and gear lever, and reversed front seat. The owner offers it at a tremendous reduction over the initial cost. Here is a rare opportunity. Sterrett & Fleming Electric Garage & Battery Recharge Station, Champlain Street at Kalorama Road, North 5650.

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