

Motor Cars

NEWS OF THE AUTOMOBILE INDUSTRY

Good Roads

MOTORISTS' PROBLEMS  
Solved for Readers of  
The News-Times

By William H. Stewart, Jr.

Motor Department:—Would you kindly tell me what is the matter with my 1917 Ford? I have just cleaned out the engine and ground out the valves. I have plenty of power on level roads, but on the hills it seems to die right down. F. S.

You may have one or more of the following troubles: Poor compression, leaky valves, leaky inlet manifold, choked gasoline line, weak magnets, wrong carburetor adjustment, leaks around hot air intake. Check these over one by one. Most of them you may test for yourself. Have the magnets tested at the Ford repair station.

Motor Department:—What is the probable cause why one or two spark plugs in an automobile become sooted, provided the plug is a good one? The deposit is not altogether dry. When they become sooted the cylinders do not fire and of course the power is lessened. The car is an Overland and has been driven 7,000 miles. F. E.

The piston rings may be leaky or the cylinders scored. This allows oil to get up and foul the plugs. New rings may be all that is necessary. If the cylinders are scored they must be rebored and oversize pistons fitted.

Motor Department:—I intend changing my old style clincher rims to the quick detachable type. My front wheels are 32 inch and the rear 34 inch. Would it be advisable to make them the same size? Are cars equipped with wheels of different sizes any more? Why was this formerly done and why has it been abandoned? If I decide to have 34 inch wheels in front, shall I have to buy new wheels? G. R.

Smaller wheels were used in front to lessen first cost, weight, etc., but it necessitated carrying two spare wheels instead of one and the rear tires could not be moved forward as they wore, to prolong their life. By all means have the front wheels brought up to 34 inch. This may easily be done by the wheelwright who simply builds up the felloe to the right thickness.

Motor Department:—Would it be advisable to use a small addition of oil to the water in the cooling system to prevent rust and scale? Some of my friends are trying it, but as yet we have not had enough time to test it out. Would it interfere with the cooling or rot the rubber hose too quickly? G. F.

Would not advise using oil in the cooling system. Use soft clean water. Oil will rot the rubber connections.

Motor Department:—I have had caustic soda advised to remove carbon. As I shall have to lay up the car occasionally for a few days at a time I thought I might fill the cylinders with a strong solution, let it stand not more than two days and then remove it. Would this harm the engine in any way? G. T.

Caustic soda, caustic potash, will not harm iron if allowed to remain in contact with it several days, but they are excellent solvents for aluminum, bronze, brass, etc. If the solution could be kept away from these it might work. But any of it leaking into the crank case or oil pump would be disastrous. Try some of the other methods of removing carbon, such as water, alcohol, or peroxide of hydrogen fed through the air valve of the carburetor while the engine is running, or kerosene injected through the compression cocks while the engine is hot and allowed to stand overnight. Scraping is the best method if all the powder is blown out afterward. Burning comes next, but may be objected to on account of the expense. The other methods mentioned are inexpensive.

Motor Department:—Please give me a little information about the toeing in of the front wheels. What would be the correct measurements for a car with 34-inch wheels? I have some difficulty in tire adjusting. They tell me the wheels are not lined up right. Would this cause one tire to wear more than the other? My car has a left side drive. Does this make any difference? H. T.

When a car is running on the road the wheels should be absolutely parallel or an equal distance apart front and rear. However, as the steering knuckles of most cars are not within the wheels but to one side there is a tendency for the wheels to spread out, due to road resistance. You will also notice that the bottoms of the wheels come closer together than the tops. This is to bring the bottom of the wheel more nearly under the pivot on which it turns, the "king bolt." This also has a tendency to make the wheels run away from each other. To offset these two forces the fronts of the wheels are brought slightly closer together, but the difference between the two measurements should not be over a quarter of an inch. If not set right, the tires will certainly wear more rapidly, but it is doubtful if one will wear more rapidly than the other. The right tire will always wear more rapidly than the left on account of more ruts, stones, etc., and because there is more weight on it on account of the crowning of the road.

Motor Department:—I have a 1916 Ford which heats up badly.

Water in the radiator boils after only two or three miles running. Recently put X Compound in the radiator to stop several small leaks. It was effective for the purpose used, but I have noticed the overheating since that time and wonder if it was the cause, and if so what is the remedy? I notice in your column that you often recommend the use of washing soda to be used to clean out cooling system, and I have tried nearly every grocery store in Dallas to obtain washing soda, to be met each time with the statement that it was not handled. If you recommend washing soda for my difficulty, where may it be obtained, and what amount should be used? Valves on my car recently ground, new pistons and rings fitted, and it has enough compression to rock the crank, although when it is very hot, it seems tight, and crank will not rock, for that reason I believe. B. R.

If the grocers do not handle washing soda try a druggist or wholesale drug house. Soap manufacturers always have some on hand. Soap powder could be used but washing soda is best. Use about a pound for a Ford and be sure to dissolve it in hot water. When it is in radiator, run car as usual all day and drain out at night. Fill with clean water and change again the following day. Pistons may be a little too tight a fit until they have had a chance to wear in. For that reason be careful of overheating, as you may experience a seized piston and a bent crankshaft.

Motor Department:—I have a Jeffery car model 17. Has the bee cone radiator. Some one put anti-freeze or never leak dope in the radiator, which closed it considerably. Radiator held six gallons of water before this dope was used, now it only holds a scant three gallons. Car heats in five or six miles, so I can't use it. I had boiled soda water in it, but seemed to do no good. Is there anything that will open radiator? SUBSCRIBER.

You might try a solution of lye, if rubber hose at top and bottom of radiator is removed and the holes plugged, but you would best write to the manufacturers of the compound, as they alone know what materials go into their compound.

Motor Department:—I have a model 83 Overland car with Autolite starting and lighting equipment, high tension magneto. Some time ago gave motor overhauling, and since that time motor is very hard to start. After starting car runs fine, doesn't miss at any speed. Compression good and pulls good. Breaker points clean and spark plugs clean. No leaks around intake joints. Would be pleased if you would give me some information on this car. Doesn't start much better when hot than cold. Would also like a little information on my electric equipment. Generator does not begin to make current until car goes at speed of about 10 miles, but out at about 12 amperes. Connections all tight and no shorts that I can find. Are there any adjustments I can make that will give a lower speed cut in and a higher amperage before cut out? C. A.

Difficulty in starting may be due to worn piston rings or grooved cylinders, leaky inlet manifold, improper carburetor adjustment, choked

HELPFUL HINTS.

Check valves which control the flow of oil in a plunger type of pump should be cleaned occasionally to insure proper working. In case the oil does not flow or the gauge shows no pressure it may be due to the pump becoming air bound, but usually cleaning the check valves removes the trouble.

When an engine knocks something is wrong. Whenever there is a rattle something is loose that ought to be tight. It takes quite a little skill to locate the different kinds of knocks, but practice makes perfect. By going over the engine carefully these may be eliminated one by one.

Remember that too much oil is almost as bad as too little. If the oil level is too high too much oil will get up on top of the pistons and a lot of troubles will follow. But too little oil is worse, as it may result in scored cylinders, seized pistons and a bent crank shaft. So watch your oil gauge and keep the system just filled.

When a gasoline feed pipe is looped or otherwise bent in order to avoid liability to breakage, air locks and interruptions of the flow of fuel are likely to occur after filling the tank unless sufficient gasoline is poured in to produce the pressure required to drive out the air that will be trapped if the loop is made in a vertical plane. If the loop is turned so as to be horizontal, however, there will be no such trouble. Incidentally, a complete loop is the best safeguard against crystallization and breakage of the pipe.

And, remember, "safety first!" Inspect the fastenings of the steering gear at least once a week and try the brakes every time you take the car out.

not correctly set and a host of others that would have to be looked for one by one. Changing the tension of the cut-out spring or shifting the brushes on the generator may help your trouble, but it would be better to have an experienced man do the work for you.

Motor Department:—When the storage battery is removed from a car for charging and the car is to be used which is the better to do, connect the terminals of the cables leading to the storage battery or remove one of the generator brushes? Why is it that in some systems using a grounded circuit the positive pole grounds, while in others the negative is grounded? Books which I have read concerning storage batteries state that the negative pole gives off the current. I should, therefore, think the positive would always be grounded. H. W.

Connect the battery wires together. Then the generator may be used to light the car when sufficient speed has been reached. "Positive" always means the terminal or wire from which the current comes. There is no choice as to whether the positive or negative of a battery should be grounded. Some manufacturers prefer one, others use the other. The battery must be connected the way the manufacturer intended or the generator will not charge it properly, but will discharge it instead.

ENGLAND BIDS ON  
ANY SORT OF AUTO

Import Scarcity Brings Lowly  
Fords Up to \$1,000  
Each.

WASHINGTON, D. C., Aug. 9.—Reports received here through government sources indicate that automobiles still are a scarce commodity in England. As practically no motor vehicles can be imported from other countries and the British makers have hardly begun to make deliveries of new models, high prices are paid for any old car that possesses average running possibilities. At a recent auction in London of cars formerly used in the army one of 25 horse power, with no magneto, lamps, dynamo, spare wheel or cushions, and with the mechanism imbedded in oil and mud, brought a little more than \$2,000. Another of the same type without magneto or accessories went for \$2,600 and the car formerly used by Commander Brock of Zebrugame fame sold for \$2,750. Several Ford cars in a bad state of repair sold for from \$800 to \$1,000 apiece. The list included eight Rolla-Royce cars. A 1912 landaulet

JAP SPEED LAWS VARY  
WITH STREET'S WIDTH

BY LOUIS LUDLOW.  
Regardless of how one feels toward the Japanese, he must admit they do things in an original way. Speed limits for motorists, for instance, vary according to the width of the thoroughfares.

On roads between 12 and 28 feet wide machines may run eight miles an hour; between 28 and 35 feet 12 miles an hour; above 35 feet at 18 miles an hour. Within the city limits machines must not travel on streets less than 18 feet wide. They may run at 12 miles per hour on streets between 18 and 26 feet wide and on those wider than 26 feet 18 miles an hour is the limit.

brought a little more than \$9,000. Another one sold for \$17,750. An open, well-equipped touring model brought \$12,600 and a well-titled coupe-cabriolet sold for \$6,309. Among the lot was an ancient Thornycroft car, said to be 20 years old, which found a buyer for \$60.

TIRE CARCASS SHOULD  
BE THIN AND FLEXIBLE

The carcass of a tire should be as thin and flexible as it can be made and still have the necessary strength. The ideal carcass would be as thin as a soap bubble and as strong as steel.

A carcass must be made of cotton fabric, and as strong cotton and as few plies should be used as is consistent with the requisite strength of the tire as a whole. This is because the flexing of a tire on the road causes internal friction and the generation of the heat. The more plies of fabric used, the greater is this heat, and the faster is the consequent deterioration of the rubber in the carcass. Tire life is, therefore, determined by the proper balance between carcass thickness and strength.

GOOD PRACTICE.  
The prohibitionists are now at work in England, just by way of warming up before they tackle Germany.

Willard  
Storage Battery  
SERVICE STATION

SHAFSTALL'S BATTERY  
SERVICE,  
108-10 W. Monroe St.,  
South Bend, Ind.

Frank Collmer, Jr.

DISTRIBUTOR.

Motor Trucks



Sales and Service Station. Twentieth Century Garage

**Ford**  
THE UNIVERSAL CAR

The Ford Sedan—a mighty comfortable car for every day of the year. Has most enjoyable refinements combined with all the utility of the touring car. Finely upholstered—almost luxuriously—with plate glass sliding windows, it is cool in hot weather, while dry and warm in fall and winter. It is the regular simple-to-handle and ever-enduring Ford chassis with a bon-ton body—the family car that not only pleases with its comfort but saves money in low first cost and after operation. Let us give you a demonstration.

**Hinkle Motor Co.**  
Salesroom and Service Station,  
217 N. Lafayette Blvd.  
Branches—Mishawaka, 214 Lincoln Way  
West; North Liberty, Ind.

FRANKLIN BEGINS  
PLANT EXPANSION

Will Bring Production of Air-Cooled Cars to 18,000 a Year.

SYRACUSE, N. Y., Aug. 9.—Construction of a new \$500,000 addition to its present works, opening of another large building as a factory, leasing of many thousand square feet of additional storage space, and the immediate employment of one night shift of 500 men with the possible addition of another, are changes set in motion today by the Franklin Automobile Co.

This expansion policy is the result of an effort to lift the production of Franklin cars to keep pace with the increasing demand and to a point where the yearly output will be 18,000 completed cars, or one car about every seven minutes of each working day.

Ground was broken today for the new seven-story, re-enforced concrete manufacturing building, an addition to the present works, as the first step in the expansion program. The actual building operations will cost \$400,000, exclusive of any equipment and the contractors have tackled a tremendous construction problem in agreeing to have the building ready for occupancy before Jan. 1.

THE HEART OF THE  
TIRE IS THE TUBE

We specialize on tube repairs and are equipped to make any possible repairs.

Many tubes that have been discarded as useless can be put into service again at little cost. Let us quote prices.

We will also appreciate your tire repairs.

Vulcanizing of all kinds. Absolute satisfaction is guaranteed on every repair.

STUBBS TIRE &  
VULCANIZING CO.,

209 E. Jefferson Blvd.  
Home of the Brunswick and  
Marion-Hi-Test Tires.



The Way to Get Delivery  
Of a Hudson Super-Six

The Automobile Which Men Said Would Have  
No Rival, Still Outells All Other Fine Cars

First announcements of the new Hudson Super-Six promised prompt deliveries.

We had arranged a larger production but had underestimated the force of Hudson prestige.

In the interim between writing the announcements and their publication, some four or five weeks, dealers booked orders faster than we could produce cars.

Repetition of Each  
Previous Year

The Super-Six, from the first, has outsold all other fine cars. The present situation is but a repetition of what has happened each of the past four years.

Up to the time the present model was offered, 60,000 Super-Sixes were in service. We are building 20,000 this year—one-third as many as had been delivered in the previous years.

Why This Demand  
For Hudsons

The answer is found in any locality in any group of motorists.

The reliability and endurance Hudsons have proved in every test and to every owner is a matter of official record and common talk. Read the records for speed, acceleration and hill climbing for the past four years. You will find the part the Super-Six played excels that of any other stock

car or special car or stock materials and design.

Or observe Hudson performance on any city street or country highway. Super-Sixes are everywhere. They belong to people who demand the most of their cars. They are the favorite of the hard, fast drivers and of those who demand comfort and reliability.

There are more Hudson closed and chauffeur driven cars than of any other fine grade. They are the choice of those who want elegance and distinction.

The service of those 60,000 earlier Super-Sixes accounts for today's demand.

How to Get a  
Hudson Super-Six

Place your order now. Don't delay even if you can't get immediate delivery of the model you want.

There is a great demand for all good cars. There never was such a shortage. Eagerness for prompt delivery has caused many to accept makes that were not even second choice to Hudson. Avoid the possibility of disappointment by ordering your Hudson now. Accept the earliest delivery you can obtain. Remember that the car you buy must serve you a long time and that a slight inconvenience in delivery now will be offset by the satisfaction your Hudson will give.

SUPERIOR MOTOR SALES CO.  
213-215 South Main Street

**What the Franklin  
DOESN'T NEED**

The kind of service an owner gets from his motor car is visualized by the contents of his garage. Anti-freeze mixtures, scale removers, leak fixers, apparatus of one kind or another, advertise the anxieties that are always with the driver of a water-cooled car—impediments to the full enjoyment of care-free motoring.

With the elimination of all water and delicate water-cooling parts, the air-cooled Franklin Car also eliminates the many water-cooling troubles. And the knowledge that the car is always ready to run without coddling and without a lot of detailed attention, gives a conception of satisfaction that is new to any one but a Franklin owner.

ASK FOR A DEMONSTRATION OF THE FRANKLIN

**FRANKLIN MOTOR CAR CO.**  
BELL PHONE 212 517 LINCOLN WAY WEST