

Owners' Service Department

It is the purpose of this department to answer intelligently queries regarding the automobile.

Could I ask you to further explain your answer to the recent question of J. K. Hill in which he asked if fitting a plate on top of pistons would increase compression. You say that this will increase the power of the engine. I contend that there would be no increase in either power or compression. This is not a criticism of your valuable department, but I simply can't figure the matter out.—C. G. Wilson.

Certainly, the plate will increase compression because it reduces the compression space. It does not matter whether you drop the cylinder or increase the piston crown, the results are the same. I do not recommend the use of plates, because it is difficult to keep them firmly in place.

Will you please answer the following questions? (1) Where can I get an automobile road guide for the whole United States? (2) What can I do to or what can I get to make the light on my 1918 model Ford car stronger.—H. Garner.

(3) You will have to get guide books, which, however, are issued in volumes covering certain sections.

thus there will be one volume for New England, another for the Middle West, etc. Also the American Automobile Association in New York City issues road maps at a very moderate price and these are very useful. (2) If you are using the magneto to furnish current, the only improvement I can think of is the installation of a cut-out control. To get more light you need more current and larger bulbs, and a generator and battery system gives much the best results.

(1) Would you change carburetors on a Ford car and if so what do you recommend? (2) What are some good starting-lighting systems?—P. T. Johns.

(1) Not unless I were having trouble with the present system. Stromberg, Rayfield, Stewart, and Schebler are all good.

(2) Gray & Davis, Genomotor, North East, are good systems.

Why hasn't the four-valve per cylinder engine come in much faster? It seems to me that with its obvious advantages there should be more on the market.—Adams.

Cost is one drawback and then it is difficult to design the water system so that all the valves are properly cooled.

I've got a rattle somewhere in the chassis of my car, but I haven't been able to locate it, because it stops as soon as the car is still. Where do you suppose it lies?—J. Z. Newman.

Get someone to drive your car down a long, gentle grade; shut off the engine, while you are standing on the running board. You may be able to locate the rattle at once. Noises of this kind are generally caused by loose mud guards, brakes or some of the operating rods, which extend from the levers or pedals to the various parts. It is difficult for me to tell what it is in your case, not knowing where the noise comes from or the nature of the noise.

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AND ANSWERS

BY Llewellyn Powers Jones

Editorial note: In the absence of our mechanical expert, Mr. Llewellyn Powers Jones, the Questions and Answers for this issue has been left in the capable hands of his secretary—

MISS GWENDOLINE O'HALLORAN.

Stop Knocking.
"I am having trouble with my engine. I cannot go up a hill on high without it knocking badly. I have had it in several shops and the trouble does not seem to lessen. What would you suggest?" D. A. S.

It is doubtless the altitude on the high hills which causes your trouble. Either keep the car in low altitudes, wrap the motor breather with red flannel or spray some soothing lotion into the motor breather with an atomizer. Any corner druggist will suggest some standard remedy for shortness of breath. We cannot use in these columns the name of any proprietary article which does not appear in the advertising pages. For rates, address the Business Manager.

Wormy Steering Gear.
"I find a scraping, grinding noise in my worm gear when turning a left hand corner. It is very annoying and the trouble seems eliminated when the car is not traveling. Mechanics are unable to find it. How can I remedy it?" R. J.

Your trouble, R. J., is doubtless due to an old steering gear worm. A traveling worm, when a bit old gets into the habit of humping itself up in the middle and it is no doubt this hump rubbing against the gear case that causes the scraping sound. Remove the worm, cut out the four humped sections with a sharp knife, bring the front and rear sections of the worm together and cover with surgical dressing, then carefully replace in the gear case. See sketch.

Charity Begins at Home.
My car is working perfectly, but there is a constant odor of gasoline, very annoying to driver and front-seat passengers. Can this be remedied?" ALBERT.

Albert: You must buy 30 cents worth oforris root and put it in the gasoline tank. Do not use the powder as there is danger of an explosion when the powder passes through the teeth of the carburetor. Albert, had you ever thought of carrying your own wife in the front seat with you?

We Won't Tell.
"What is the best car which has been put on the market this season?" H. C.

We are not permitted to recommend any particular motor in these columns, but as we were passing down Pennsylvania avenue yesterday we saw a lallapalooza painted ecru with a red stripe around the rim and on the bias panel set in between the front door and that long snout which runs out in front.

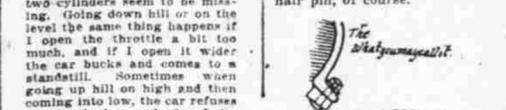
Hairpin, Of Course.
"I am having trouble with the hexagonal washer under the bolt which fastens a nut on the rear axle differential carrier and housing cover gasket. It loosens constantly and I seem unable to keep it tight. Would like a suggestion." A. J.

A. J.: We cannot resist telling you that we feel that there should be an examination on the rudiments of mechanics before a driver's license is issued. Use a hair pin, of course.

Why Repeat?
"I am having trouble with my engine. Running up hill on high the engine bucks and one or two cylinders seem to be missing. Going down hill or on the level the same thing happens if I open the throttle a bit too much, and if I open it wider the car bucks and comes to a standstill. Sometimes when going up hill on high and then coming into low, the car refuses to take the low, and when I slip in the clutch she will not take it either and dies altogether. What is your opinion of my trouble?" HURRIED.

(Questions on scientific mechanical subjects cheerfully answered in this department. Nothing of a frivolous nature published.—Ed.)

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ON A PAR WITH THE BEST

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THE RADIATOR

I bought, second handed, a car from the street. Shamedal from lack of repair; And, laying me under the driver's seat, I tinkered it, lying there.

I hid all trace of the tin machine. I fashioned a racer, undressed; I painted it red, with a stripe of green. The worst camouflaged like the best.

And I found me a sucker, and sped him away. As came, with a knowing nod, A connoisseur, and I heard him say, As his eyes bulged out: "My God!"

But I patted my pocket, and whistled an air. (For 'twas sold—and I had my fee). Now it lies on the District junk pile, there. For you and all to see. (Apologies from Robert Service accepted.)

"WHAT THE COURTS ARE SAYING ABOUT THE AUTO."
"YOUR HONOR, HE ASSAULTED ME WITH AN AUTOMOBILE!"
One striking another, on the highway, with a defective automobile which he is driving in excess of the statutory speed limit without lights, is not guilty of assault with intent to inflict great bodily injury if he did not know of the presence of the injured person, says the supreme court of Iowa.

CAVEAT TAXI RIDERS.
The supreme court of Pennsylvania has said recently that one, who, without protest, permits the chauffeur of a hired automobile to drive at a manifestly dangerous speed on the wrong side of the road cannot hold the owner of a vehicle with which the car comes into collision liable for the resulting injury to himself.

CHAUFFEUR, BUMP THAT BUGGY NOT.
The Pennsylvania case goes further to state that failure of one driving along a highway at night to carry the lights required by statute does not render him liable for injury caused by collision with an automobile if the lights on it were sufficient to enable its driver to see and avoid the vehicle.

DON'T KILL HIM BECAUSE HE'S YOUR GUEST.
The driver of an automobile who has invited a guest to ride with him is not absolved from responsibility for negligence or imprudence merely because he is performing a gratuitous service or favor to his companion, says a Louisiana case.

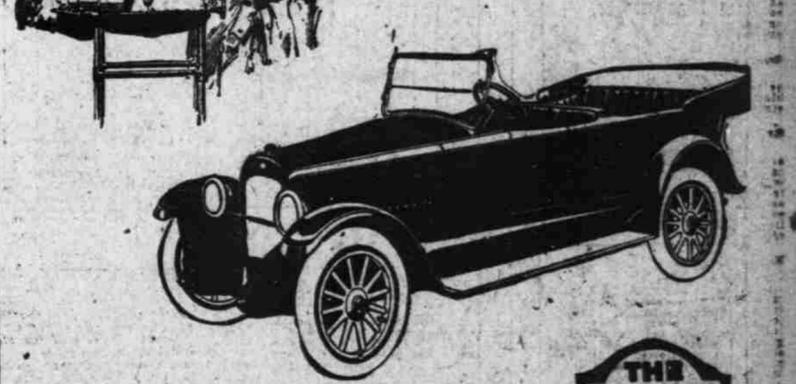
ALAN BE PRAISED! THE AUTO HAS SOME RIGHTS.
The same Louisiana case further holds that a person driving on a public highway, especially in an incorporated city, has a right to presume and to act upon the presumption, that the way is safe for ordinary travel, even at night; and he is not required

to be on the lookout for extraordinary dangers or obstructions to which his attention has not been called.

CITY OR CAR OWNER, WHO PAYS?
It was held by the supreme court of Massachusetts that a municipality is liable for injury to a bystander by the skidding of a carefully driven automobile, due to the unreasonably slippery condition of the pavement

because of oil placed thereon by the municipality.

hand automobile, not in first class condition at the time of the accident, at least, not in Indiana.



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