

TU-BE OR NOT TU-BE

By Dr. S. J. Fort.

The Ford owner who is driving a car, say of the 1916 vintage, equipped with demountable rims, has no doubt, like the writer dropped sundry small sums for repairing slow leaks in tubes, especially those nasty little ones which let one down when least expected.

Repairs, due to accidental punctures and blow-outs, are to be expected in the day's work. But, many of the more insidious ones can be prevented by a little watchfulness and care upon the part of the driver.

A demountable rim, like everything made of iron, is subject to the ravages of rust, especially that part in closest relation to the interior of the tire and exterior of the tube. Drive with what care you may, water will obtain entrance between the tire and rim, the accumulated moisture bringing out a rich crop of flaky rust, particles of which may, and frequently do, cut a minute hole in the tube.

Driving through mud or deep sand, sharp, gritty particles, entering at the same place, are another source of small but effective abrasions. The rear wheels are apt to accumulate grease from the hubs, some of which, in time, works its way into the rims, and remains long enough to exert its fell action upon the rubber of both tire and tube.

All this may occur in a reasonably new car, but it is in the older cars, driven by careless owners, that slow leaks are most apt to occur. Most of us who are driving "used cars," from motives of economy, have known the difficulty experienced in removing a tire from the rim of a recent purchase, finding it almost cemented to the rim by accumulation of rust—to say nothing of rust debris in the interior of the tire.

The remarkable resistance of rubber, to these destructive agents, occasions little thought or consideration, until a series of leaks call attention to the causes. Then we wonder why in thunder we did not find it out sooner and apply the remedies.

Returning a tire to a well-rusted rim, without attempting to get rid of present rust, and preventing it in the future, is simply storing up trouble. A good wire brush will remove most of that present and this treatment, supplemented by coarse sandpaper, gives a fairly smooth surface upon which to apply one or two coats of graphite paint as a protective. Before painting it may be well to go over the edges of the rim to remove sharp points created by dents.

One of the vulnerable places, through which water, sand and grit obtain entrance, is the valve stem hole. In new cars this hole is fairly protected by the valve cap and its base. But, in older cars, constant unscrewing and screwing back into place gradually wears the wood, leaving considerable space through which extraneous matter may obtain entrance.

Or in other cases, the valve stem of a new tube is not of the same length as that of the old one, and the old cap will not fit the new stem. Then away goes the driver, without any protection over the stem, except the

little dingus screwed over the top which, turned end for end, is used to remove the valve from the stem.

Another money saver is to take good care of spare tubes, carried in the car as a reserve. Jostling it around in the rear seat compartment, along with chains and miscellaneous junk, or throwing it carelessly in the tool box, is bad business. Carefully deflated and neatly rolled, placed in a strong cloth bag and well dusted with talcum, it can be carried in its original box with safety almost anywhere about the car.

Before placing a new tube in an old tire, the interior surface of the tire requires some overlooking. Generally there is more or less accumulation of dust, which requires a bit of bouncing and juggling to remove. Quite recently I had small leaks develop in two new tubes and discovered the cause in the point of a tack which protruded through the tire just far enough to cut the tube and was hardly visible, so it is a good plan to feel all over the interior of the tire for such possibilities.

Talcum, dusted into the tire, is good, but all surplus requires removal, for fear it will harden and prove an abrasive.

The valve stem must set straight in its hole or there is constant strain on it which will eventually break the rubber around its base. Any kinks in the tube must be straightened out before inflating.

Under-inflation is perhaps worse than over-inflation. I mean by that if you drive with say 60 pounds pressure as a maximum, a loss of from 10 to 15 pounds, which is hardly noticeable to a casual observer, may produce a weakening or cracking of the tube or tire or both.

Over-inflation is not apt to occur when one uses the average tire pump, but in any case the air-gauge is a necessity in every driver's equipment. Inflating the tires, by guess or by gosh, is bad business. Speaking of over-inflation, be careful when using a compressed air outfit. Notice its pressure and, if around 100 pounds, remove the valve frequently and use the gauge, or you stand a chance of bursting the tube. Blessed be the man who invents a tire pump which will stand up to its work and not wear blisters on the hands or make one get his air by the sweat of his brow.

The catechism of Fordowner's "don'ts" is long enough without a recapitulation here of the necessity for trued-up wheels or the effects of sudden stops and starts, skidding, ruts, car tracks, loose stones, etc., on the life of tire and tube.

The special points mentioned are offered more for the beginner than the expert, those being the ones most frequently in trouble from small things which are avoidable. Whether the aforesaid beginner can save time and money by making his own tube repairs, I cannot state from experience, but I have it in mind that it is safer to have a spare tube or two at hand rather than to attempt road repairs.