AUTO SENSE

DON'T BE TOO FUSSY

Cooling System.

sign is displayed.

Insist on having it.

THE BUMPER PROBLEM

FOR BEST PROTECTION

A BUMPER SHOULD BE THE SAME HEIGHT AS THE CENTER OF THE HUB CAP. THE AVERAGE

TIRE IS 32 INCHES HIGH

SO THE BUMPER SHOULD

BE IS INCHES ABOVE

THE GROUND.

NOW, IF YOU ARE A

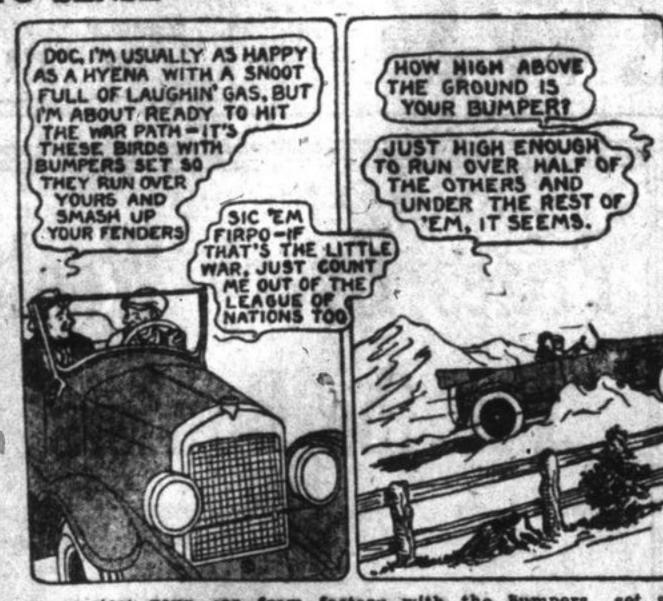
MEMBER OF AN AUTO

BE-LET'S START A FIGHT FOR A LAW THAT

WILL REGULATE THE

AS A MEASURE FOR C

CLUB-AND YOU SHOULD



Bumpers protect your car from | factory with the Bumpers set so | . If you are using a single-bar bum- | of one through it. Drilling the parking bumps and minor collisions, high that they will pass over the per you can get more protection itself would weaken it. If you want but a bumper is not heavy enough top of even the wide double-bar out of it by clamping vertical strips the bumper to look dressed up when to afford very much protection in a type which is properly set. Drivers of steel, about the thickness of the you finish, you can have the strips real crash. When a car weighing who buy bumpers and put them on bumper, on the bar in two or three of steel nickel plated at a small more than a ton is travelling 30 themselves seem to have no idea places. Cut the strips long enough cost. miles per hour and strikes a solid of how high they should be. Unless to extend about four inches above Park your car nearest the interobject your car is going to suffer, re- some steps are taken to regulate and below the bar. gardless of the bumper. Bear this their height these bumpers will conin mind and do not take chances, tinue to get your fenders. These them on, one in front and one he- parking. You can not always pick with the idea that you are protected. steps will not be taken unless some- hind the bar. There should be a these places, but watch for them as There is one car which leaves the one starts the movement. Let's go. bolt above and below the bar instead you drive along.

The old mechanic says: Whenever of a molehill. look at that fellow's car over there in the corner I think of old Doc car troubles. That car over there's ken. I happened to be off on a tow- oil system. Smith and the advice he once gave supposed to have a piston slap, but me when I came to him with the I'll bet all I own that if I was to omplaint that I was goin' deaf. Doc tear it down I wouldn't find anysays to me, "Maybe it's just a little thing of the sort. There's some sort cold in your ear. Why don't you rest of noise in the valve gear that

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of non-freeze mixtures of unknown ingredients. They

strongly recommend denatured Alcohol for your

up for a day and keep a hot water sounds like a slap, but I can't seem handle, fan, valve-rocker ABOUT YOUR MOTOR bottle on it when you go to bed?" to convince the owner that it pays wheel hubs. Sounded like quack advice to me, to take it easy and weit. Some Drivers Make Mountains Out but I took his advice and it worked.

was just makin' a mountain out if he doesn't take it easy this'll cost brake and gear-shift levers, and him a lot of money. One day he rocker shafts, water pump, torsion A lot of people do that with their got a notion that a valve had bro- and radius rods. Clean forced-feed in' job and when I got back here Every 500 miles Inspect transwas my man takin' the head off the mission and differential cases and

ter you've told 'Im your tale of woe. es

ed it. A few weeks later-if he tion and take up all play. takes it easy-the chances are that he'll have the finest performance TIRES DO NOT PICK

Lubrication Time-Table.

two or three turns.

lubricated: Steering apparatus, and luggage he stops to read the

section, fire plug or "No Parking" Drill holes through them and bolt sign and no one will back into it in

Every 250 miles-Give same care He's let his imagination loose and to braking apparatus, emergency

engine on a wild goose chase. All refill if necessary; pack steering they found was everythin' in Al or- worm housing; apply neatsfoot oil der. I imagine a valve stuck for to cone clutch facing; clean gravity a moment, but the owner wouldn't and circulating splash systems. wait until the trouble remedied it-Every 1,000 miles-Pack univer-

sal joints, ball and socket boots, hub You can save a lot of money on caps; oil magneto, electric generarepairs by lettin' things take care of tor; clean disc clutch; clean splash themselves. Of course you've got to system; lubricate leaves by jackknow what's what, but a good rule ing up frame of car. spreading to go by is to take things easy when leaves apart, and putting graphite a repairer fails to get excited af- mixed with gasoline between leav-

Remember the old rule that Every 5,000 miles Drain transthings sometime improve with use. mission and differential cases and I've cleaned carbon out of many an renew lubricant; clean wheel bearengine only to have the owner com- ings and repack hubs with grease. plain, and imagine that I had spoil- . Give all bearings a careful inspec-

UP AIR PRESSURE Tires do not pick up air pressure in riding. What happens is this: A freely; turn all grease cups down rage before he starts out. There is no one in his car. Later on when Be sure that these parts are well the car is loaded with passengers holts, crank pressure, only to find it higher than

ALBERT L. CLOUGH

How Transmissions Wear Out Brutal Handling Hastens The Process

IF ALWAYS KEPT WELL LUBRICATED and handled considerately the transmission should give very little trouble and prove one of the longest lived parts of a car. But carelessness in meshing gears will sooner or later seriously damage their teeth. The clashing that occurs upon attempting to engage low, without fully throwing out the clutch, especially if the engine is running fast and that which takes place when reverse gears are jammed together with the car moving forward being almost certain to break chips off the teeth, if the gears are of very hard steel or to round off and deform them if they are not properly heat treated. If this destructive action goes far enough, the effective width of the teeth is reduced, noisy operation results, and there is a tendency unintended toward demeshing and increased liability of stripping. Habitual heavy clashing is very likely to make premature replacement necessary.

Second And High Speeds The great proportion of shifts being between these two speeds, their engaging members usually suffer most rapid deterioration, particularly as so few operators can change down from third to second without severe clashing or are careful about throwing from second to high; the result often being that second speed early becomes very noisy.

Worn Bearings And Noise Accuracy of fit of transmission shafts in their bearings is essential to keep the teeth of gears meehing to exactly the correct depth and if bearings become worn and loose teeth no longer engage properly and become noisy and inefficient. The countershaft usually being located near the bottom of the housing, its bearings are rather more copiously oiled from the splash than are the others, but the bearing of that shaft from the clutch and that of the final drive shaft that transmits to the universal joint may be inadequately lubricated if the lubricant is low or so viscous as not to splash.

The Pilot Bearing But the bearing within the rear end of the clutch shaft, upon which the front end of the final drive shaft rotates when "high" is not in use—known as the pilot bearing—is usually the first one to show wear, especially because it is not so likely as others to receive splash inbrication when over viscous or scanty lubricant is in use. This bearing is so close to the second speed sliding gear, that when it gets loose, the mesh of this gear is seriously disturbed and second speed ecomes very noisy.

Questions of general interest to the motorist will be answered by Mr. Clough in this column, space permitting. If an immediate answer is desired, anclose self-addressed, stamped anvelope.

TIRE INPLATION AND



argument might be invoked to show that the tires inflated to 60 pounds that the tires inflated to 60 pounds would be more likely to skid than those with 45 pounds inflation, because of reduced contact area. If tires are inflated so high that they bounce badly, there is undoubtedly some loss of braking power and some increase of skidding tendency on hubbly roads, but we doubt if you would find any very noticeable difference between tires pumped to the two pressures that you specify. the two pressures that you specify, so far as skidding is concerned.

WEIGHT DISTRIBUTION H. C. W. asks: Is the weight of an automobile equally distributed on all four wheels?

H. C. W. asks: Will the brakes | Answer: No, the intent is to load of a car apply quicker and harder, the rear wheels considerably heavenusing an increased skidding tendency, when pumped to 60 pounds pressure than when pumped to 45 pounds?

Answer: We cannot answer this question with assurance, but the policy is becoming quite general that a large area of contact between the tire and the road contact between the tire and the road conduces to its "holding power" and quately. Too much load cannot be duces to its "holding power" and thus increases maximum braking taken from the front axle, however, effect and resistance to aids allp, without the sacrifice of steering this being one of the arguments in favor of balloon tires, which have very large contact area. The same spidenty on a very steep up grade.

By Williamson it was back at the garage. It figures that he has "picked up air," wheras it is simply increased air pressure as a result of squeezing the tire by making it support more

A low speed engine can be made to wear out just as quickly as a high speed one. It depends upon the use to which the driver puts his car. If a lower speed motor is made to deliver a car speed of forty miles an hour too frequently there is every reason why it should wear out as quickly as a high speed motor that is cafled upon to deliver only thirty miles per hour as a steady diet.

Pure Water.

Even a novice knows that radiators, piping, jackets, etc., are injured and made inefficient through incrustations resulting from mineral substances inherent in all of nature's aqua pura products, save, perhaps, rain water. The only safe thing to use, therefore, is distilled water. This is not always obtainable, but few indeed are places nowadays where artificial ice cannot be found. That's the answer; melt the ice and you have the purest water.

Kingston Markets

Friday, Dec. 26. Grapes, Cal., 1b., 25 to 30 Prunes, Cal., 1b. 15 to 30 Peaches, Evap., lb., 18

Apples, peck.. 40 to 90 Vegetables.

Cabbage, lb 4 for 25 Carrots, peck 30 Onions, lb 6 for 25

Unclussified. Sugar, granulated, Ib 8 to Sugar, yellow, Ib 7 to 8 Sugar, icing, Ib 121/4 Flour, standard, cwt. .. \$3.75 to \$4

Cod, Ib 18 Finnan Haddie, Ib 18 Halibut, fresh, Ib 27 to 32 Kippers, pair 20 to 22 Salmon, 1b 27 to 30

Trout, salmon, lb... 18 to 25

Dairy Produce. Butter, creamery, Ib38 to 40 Cheese, new, Ib 23 to 30 Eggs, new laid, doz 70

Meats and Poultry

Steak, porterhouse, lb 22 to 30 Stewing cuts, lb.. 5 Loin, roasts, Ib 24 Bacon, breakfast, 28 to 32 Ham, smoked, 35 Lamb: Hinds, 10 25 Fronts, Ib 20 Wutton, chops, [b. 20 to 25] Wutton, carcase 16 Poultry Goose, 1b 25 Chickens, Ib 22 to 26 Turkey 35 Hay and Grains, Barley 80 to 85

Bran, ton \$32 to \$33 Buckwheat, bus 80 to 85 Hay, baled, ton \$11 to \$12 Hay, loose, ton\$10 to \$11 Middlings, ton .. 4. ..\$40 to \$41 Shorts, ton \$31 to \$32 Wheat, local \$1.25 to \$1.30 Corn, imported \$1.35

Deacon skins, each 80 to \$1 Horse hides up to \$3 Bulls, over 60 lbs. 07 Sheep skins, fresh . . . up to \$2.50 Tallow, rendered in cakes, Ib ... 06 Bees wax, clear, 1b 25 Wool, unwashed, Ib 25 to 30 Wool, washed, Ib up to 38

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32x4 Dunlop Traction Cords . \$17.30 31x4 Dunlop Ribbed Cords . \$14.95 A few 30x3½ Cords at . . \$7.55

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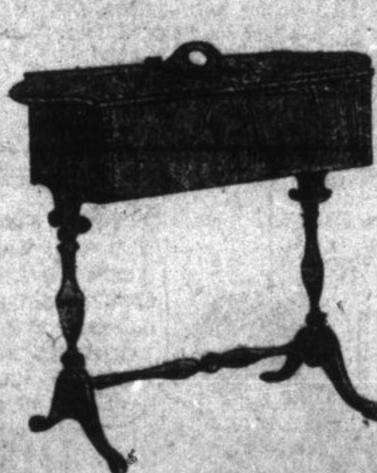
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