

IN THE AUTOMOBILE WORLD

HINTS FOR THE MOTORIST

by ALBERT L. CLOUGH
Editor Motor Service Bureau. Review of Reviews

Back Into Service Again

Car Parts Become Stiff From Disuse And Must Be Limbered Up

HERE ARE A FEW SUGGESTIONS as to restoring to service a car which has been laid up through the winter. Before inflating the tires, it will usually pay to put in new valve-insides, as the old ones will quite likely prove leaky. Assuming that all the wheels have been jacked up, before letting the front ones down, try the steering gear to see if it operates perfectly freely and if it does not, apply kerosene to all the motion points to limber them up and follow this with oil or grease, whichever is customarily used. Let down one rear wheel and with the gears in neutral, turn the jacked up wheel to free any parts which may have become set. Make sure that all drain-cocks in the cooling system are closed and that draw-off plugs are replaced—at the bottom of the radiator at the pump and in the engine jacket—and fill the cooling system completely, tightening the hose-clamps, if rubber connections prove leaky, and setting up on the pump stuffing-box nut, if water escapes there. If the fuel system has been emptied, see that all drain-cocks are closed and draw-off plugs are replaced, before filling the main tank. Remove the plug at the top of the vacuum tank, pour in a pint of gasoline through this opening and replace the plug tightly. Watch the carburetor for a time to see that it does not leak gasoline. If it does tapping it will sometimes cause its needle-valve to seat tightly. Assuming that the battery has been removed, replace it, taking care that it is not reversed and for end, tighten its hold down clamps and see that its terminals and the inside surfaces of the cable clamps are clean and coated with vaseline. Fasten one of the cables firmly to its terminal, but before connecting the other make sure that all switches are in the off position and then touch the clamp to its terminal, watching for the slightest spark between them. If any appears don't make a permanent connection until the cause of such leakage of current has been removed. It is bad judgment to replace the battery in the car, unless it is known to be fully charged and in good order. Try the brake pedal and lever and if they seem to work hard, apply kerosene to every joint in the entire braking system, following this up with lubricating oil. If the clutch has been blocked out, remove the blocking and if the pedal action seems stiff, lubricate all its joints.

Care In Re-Assembling Parts

EXPERIENCE TEACHES that it is much easier to take things apart than it is to put them together properly, and this is especially true of such a complicated mechanism as an automobile, the parts of which are fitted together with extreme exactitude. Before separating any car part from another notice the exact relationship of the two and bear it in mind or still better make marks with a scratch awl or chalk on both pieces, which must coincide when the parts are in correct relationship. The diagrams contained in the better class of instruction books are very helpful in showing the right way of assembling. When any part of a car is "pulled down," adjustments are of course destroyed and the greatest care is required in re-assembling, that the newly created adjustments shall be right. Unless parts are put together as securely as they originally were, there is bound to be serious trouble, and for that reason all nuts and other holding devices should be gone over several times for tightness before the job is considered finished. The locking devices, which prevent nuts from working loose—locknuts and cotter pins—must every one be properly replaced or the most serious consequences to the car and even injury to passengers are likely to follow. If parts go together very hard or do not seem to fit exactly, do not try to force them into place by brutal hammering. Their failure to fit is very often caused by their being wrongly placed.

TESTING DISUSED BATTERY



P. E. writes: I have had my battery laid up in my cellar all winter, while my car was out of use. How can I tell if it is in good enough condition to be put into service again?

Answer: If you have or can borrow a hydrometer, test the liquid in each of the cells as to its gravity. In case all the cells give a reading of 1200 or above the battery is more than one-half charged and it should work all right when installed in the car. If the gravity of the liquid in any cell tests much below 1200 it will be well to take the battery and have it fully charged before installing it. Be sure that there is one-quarter inch of liquid above the plates of each cell, distilled water only being used to bring up the level. Do not supply any water until after the hydrometer tests are made. The terminals should be clean and free of evidence of corrosion. If there is a bluish white substance around them, clean this off, wash the parts with ammonia water, scrape the metal of the terminals clean and coat the surfaces with vaseline.

especially as I keep my car in a cold garage and start it and run without the radiator cover on, but it does not seem that the engine should carbonize so soon. What can you suggest?

Answer: This engine may collect carbon rather faster than many others because it has no hot-spot manifold, but depends for intake heat upon taking the carburetor heat through a passage in the block from a stove around the exhaust. Unless the radiator front is kept covered sufficiently to keep the jacket water hot, poor vaporization and heavy carbon deposits may be expected. You might try using high-test or aviation gasoline during cold weather, as being more readily evaporated. The use of two cylinder-head gaskets instead of one, is found by some to delay the time when a knock results from carbonization.



LET WELL ENOUGH ALONE

J. W. E. asks: When installing a new wrist-pin and bushings in a piston, is it best at the same time to renew the piston-rings or to replace the piston with its old rings, if these are still working well?

Answer: By all means retain the old rings as long as they serve their purpose properly, as they are thoroughly smoothed and well and as to the use of the cylinder, it will be quite a long time before a new set of rings will have worn in weather affects the gas mixture, so as to give their best service.

ENGINE CARBONIZES RAPIDLY

F. J. writes: Unless I clean the carbon out of the engine of my car, after each 1500 miles of running, it knocks on hills, although I am careful about my oil and as to the use of the choker. Of course, I realize that cold weather affects the gas mixture.

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

ACTION OF PISTON-RING

J. W. E. asks: Do piston-rings change their positions, while the piston is in motion?

Answer: Very little is positively known as to what piston-rings do, when in actual service, but as wear is known to occur between their sides and the sides of their grooves, there is every reason to believe that they move in and out of their grooves more or less, when there is any substantial clearance between the piston and the cylinder wall or any material variation in the cross-section of the bore at different points thereof. After the ring and groove have worn so as to have considerable clearance, there is good reason to believe that the ring moves up and down in its groove, with changes in gas pressure and direction of motion. Whether a ring has a motion of rotation in its groove, after it once assumes a running position, seems doubtful, but some believe that some alteration of its position occurs.

VACUUM-TANK RUNS DRY



M. F. D. writes: The vacuum tank of my car will not keep filled. The engine will run for a short time and then stop with the tank nearly dry. My mechanic advises me to put in a new tank, as he cannot find the trouble with this one. What do you suggest?

Answer: We suggest that you take your car to a service station of the manufacturer of this vacuum system and have them locate and correct the trouble. They can do this much quicker and more effectively than any mechanic who is not a specialist on this class of work. No doubt, if you care to take the trouble, you can find out what is wrong. Most probably something prevents the establishment of a vacuum in the upper compartment of the tank. It may be that the flapper valve fails to close tightly, at times, or that the air-vent valve does not seat reliably. The leaflet, which accompanies these tanks, tells how to diagnose and correct their ordinary troubles.



The golden rule policy is away head of the rule or ruin kind. Those not content to wait may get things quicker than the other class. Many of us forget that actions speak.

SPECIAL DODGE BROTHERS MOTOR CARS IN FOUR TYPES

Four special types have recently been added to Dodge Brothers standard line of motor cars—

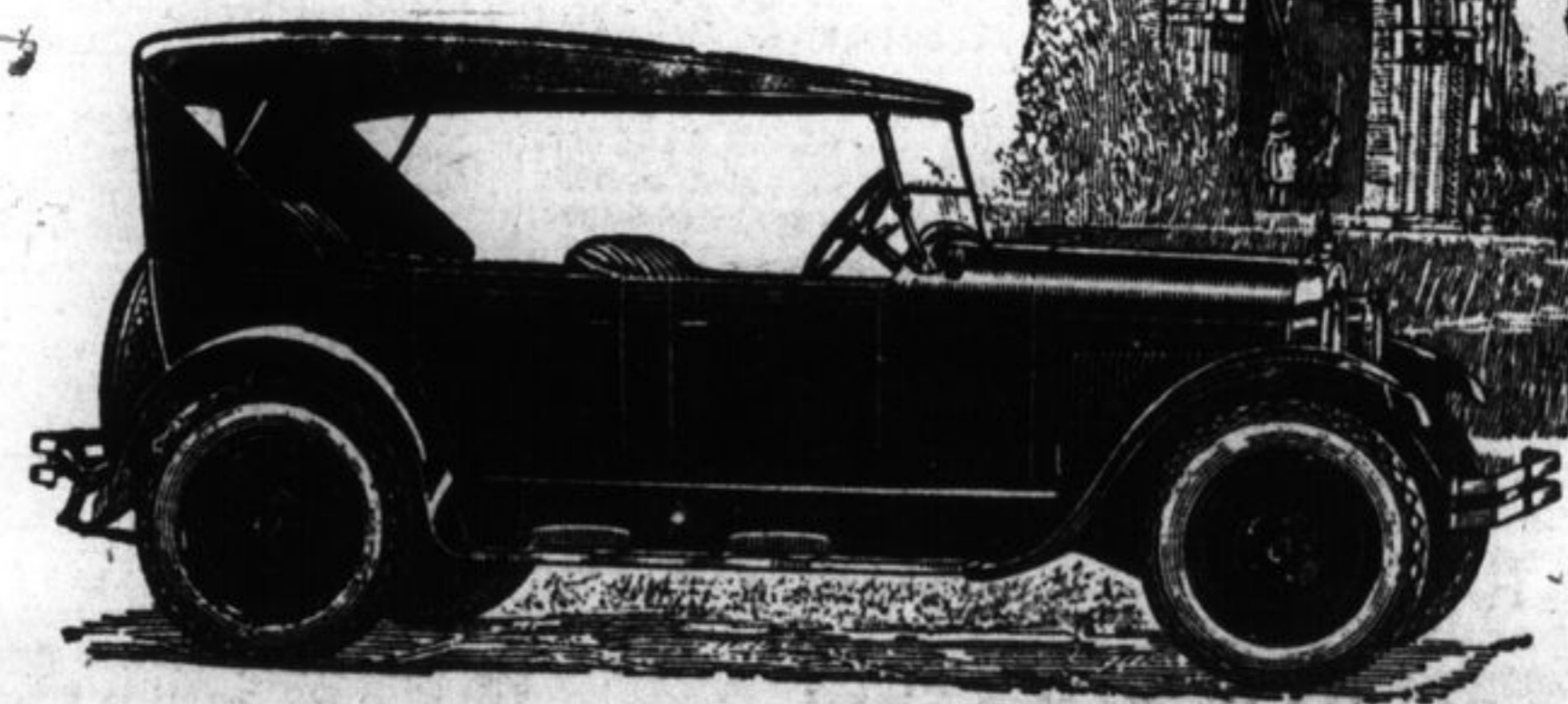
A Touring Car, a Roadster, a Type-A Sedan, and a 4-Passenger Coupe.

These types have been created for that substantial group of motorists who favor individuality in motor car appointment and design.

In fundamental construction they are identical with Dodge Brothers standard product. Their accentuated smartness, however, is strikingly obvious in many elaborations of equipment and refinements of detail.

Special 6-ply, balloon-type tires, nickel-trimmed radiator shell on touring car and roadster (optional on closed types) front and rear bumpers, motometer with lock, special blue leather upholstery (for touring car and roadster) special body striping, rear view mirror, automatic windshield wiper, scuff plates, cowl lights and steel disc wheels constitute the more important items of special equipment.

M. OBERNDORFFER
124 CLARENCE STREET.



STANDARD PARTS FOR AUTOMOBILE TRAILERS

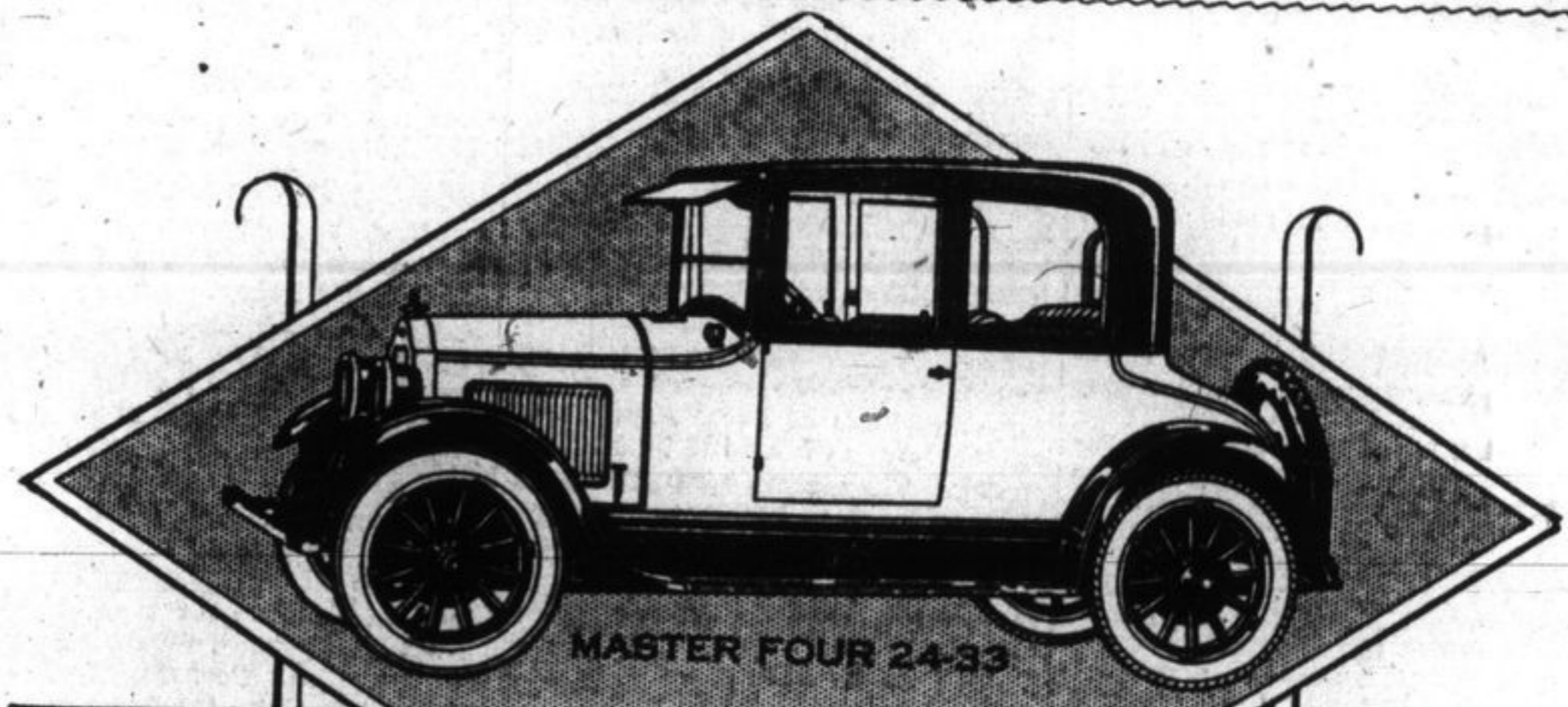
Costs Will Be Lowered By Cutting Out Unnecessary Specifications.

A definite step toward standardization and simplification was taken by the Trailer Manufacturers' Association at its recent meeting held at the Hotel Statler, Detroit. After consultation with representatives of leading firms engaged in the manufacture of axles, springs and wheels, the members of the association decided to confine their first efforts to these products. The association will start immediately gathering blue prints and specifications from trailer manufacturers for use in considering how reductions may be made in the number of types and sizes of axles, springs and wheels.

All manufacturers of these three parts will be asked to co-operate in this work, and after the preliminary steps have been taken assistance will be sought from the Division of Simplified Practices of the Department of Commerce. It is planned to hold the next conference in Detroit on April 22nd.

Mr. J. F. Beans, of the J. F. Beans Company, spring manufacturers, told the trailer makers who attended the meeting that if they succeeded in agreeing upon standards the springs manufacturers would undoubtedly carry these sizes in stock. As an example of the saving that might be made, he said that the springs manufacturers could easily afford to make a reduction of two cents a pound on any one model which ten trailer manufacturers agreed upon. Mr. H. M. Bock, of the Northern Wheel Company, and Mr. H. W. Helms, of the Continental Axle Company, spoke along similar lines regarding possibilities through the simplification of wheels and axles. Mr. Bock said that volume production was bound to come in the trailer industry as well as in other automotive industries. While at present his company builds hundreds of models, Mr. Bock said that 12 to 25 models would blanket the entire line of trailers. Mr. Helms said that the saving on an order of 300 or more axles would be better than 10 per cent, as compared with the present system of small quantity orders.

In order to facilitate team work along standardization and simplification lines the association decided to admit firms manufacturing trailer parts as associate members.



The Ideal Car for Personal Transportation

THE professional man, the salesman who carries samples, the contractor, the business man, the ladies who drive—in fact, anyone who requires the means for personal transportation, will favor this new 4-passenger Master Four Coupe.

The rugged efficiency of the McLaughlin-Buick Master Four valve-in-head motor and chassis insures a day in day out service. The gasoline mileage is very high. Upkeep is extremely low, yet in appearance and performance this car is typically McLaughlin-Buick. Four-Wheel Brakes assure safety, prevent skidding, provide quicker negotiation of congested traffic.

A short turning radius facilitates easy parking. Although ideally suited for personal transportation, the car has ample room for four. Space for small parcels and for luggage is provided by a compartment immediately behind the driver and a larger compartment in the rear of the body.

Local Distributors:
Angrove's Auto Sales,
148 Sydenham Street.

McLAUGHLIN-BUICK

What Makes a Good Car?

PRIMARILY the intention of the men who build it. If they want to build a good car and have experience and money, they will build a good car. The men now at the head of Gray-Dort Motors want, above all else, to build the best automobiles in the Gray-Dort class. To enable them to do this they have an organization with great experience and ample funds. As a result the Gray-Dort today has reached a record degree of quality and reliability. Every car is right and will stay right.

As an instance of the intention of the new management, a new disc clutch and a Gray-Dort rear axle were specially designed and built just to be absolutely sure that no Gray-Dort owner would have trouble at these points. See the new Gray-Dorts. See the refinements which have been made in them. Learn the amazingly low Gray-Dort prices.

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