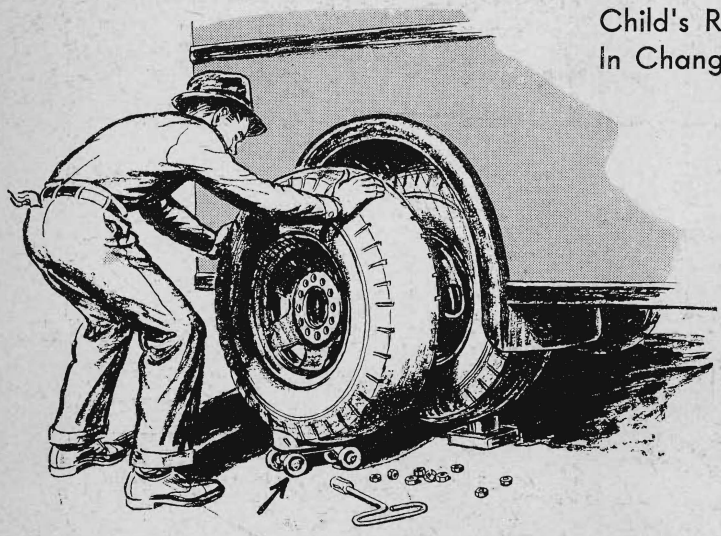
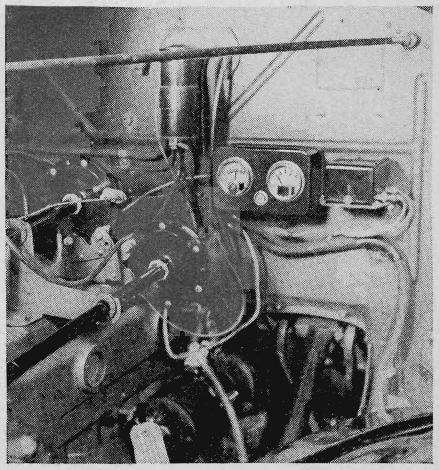
Helpful Hints for Motorists

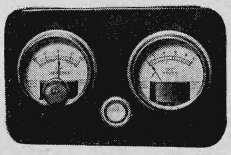


Child's Roller Skate Aids In Changing Heavy Tires

TO LIGHTEN the task of changing a heavy tire, one truck driver carries an ordinary roller skate in his tool kit, and uses it as shown at the left. The skate supports the weight of the tire, leaving him free to slide the spare wheel in place. I've used the same kink when changing tires on my car and find that it eliminates lifting the heavy wheel.—A. H. W.

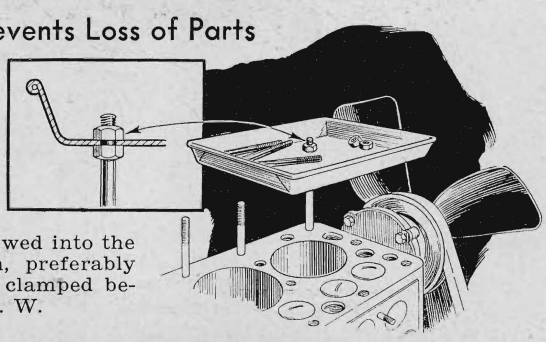


This instrument panel mounted under the hood makes electrical adjustments easy



Handy Repair Rack Prevents Loss of Parts

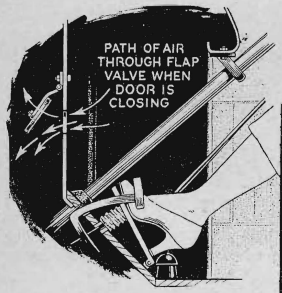
A RACK that will keep small engine parts and repair tools in order without danger of being upset can be easily made from a shallow baking pan, a short threaded rod, and two nuts. The rod should be of the same diameter and thread size as the studs, so that it can be screwed into the cylinder block. The baking pan, preferably of the heavy sheet-metal type, is clamped between the two nuts as shown.—H. W.



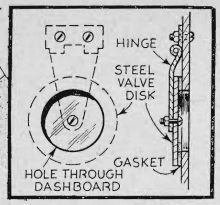
Car's Electric System Checked With Auxiliary Meter Panel

THE man who likes to make his own adjustments to the electrical system of his car will find it worth while to install a voltmeter and ammeter permanently on the engine side of the dash, as shown in the photographs above. This makes it easy to note the effect of each adjustment while the work is being done. The ammeter is connected across the battery terminal of the generator cut-out and the ground (chassis), and indicates the total generator current, including that used by the ignition system. Thus its reading is higher than that of the car's regular ammeter. The generator can be set to the exact charging rate desired by watching this meter while the third brush is shifted. The voltmeter is wired in series with a push button, and connected between the battery lead and the ground. It shows the voltage of both battery and generator.—A. C. C.

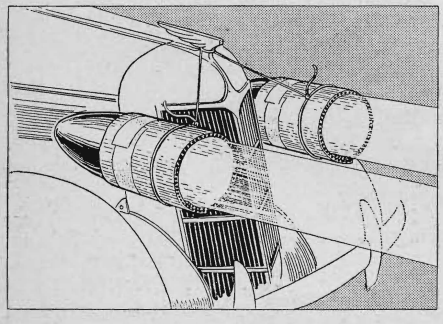
Flap Valve Makes Car Doors Close Easily



The flap valve, and how it is installed



MANY owners of new, steel-roofed cars experience trouble with doors that are hard to close because of air trapped within the rigid body—in fabric-topped cars, the roof yields enough to relieve this pressure. The trouble can be eliminated by installing the simple flap valve illustrated. It consists merely of a hinge and a paper-faced metal disk, and is most conveniently located in the dash.—E. T. G.



Emergency Fog Lights Made from Cardboard Tubing

FOG and darkness are a particularly bad combination of driving conditions because the headlight beams are reflected back into the driver's eyes. This glare can be partially eliminated, however, by making a pair of cardboard tubes and fastening one to each lamp, bracing them with string. The tubes direct the light on the road, and extend the range of vision considerably.—R. T. T.

Funnel and Pliers Form Handy Flash-Light Holders

FOR directing the beam of a flash light just where it is needed, an emergency support can be made by gripping the barrel of the light in a pair of pliers, and slipping a rubber band over the handles. For work under the car, a permanent holder can be made from a large funnel. Cut the neck down to about one inch in length, and make several lengthwise slits in the remaining collar. The torch is gripped firmly by the metal tabs, as shown, and the wide base prevents upsetting.—G. E. H.

For chassis work, the holder above will direct the light where it is wanted. The plier arrangement at the left is fine for tire repairs