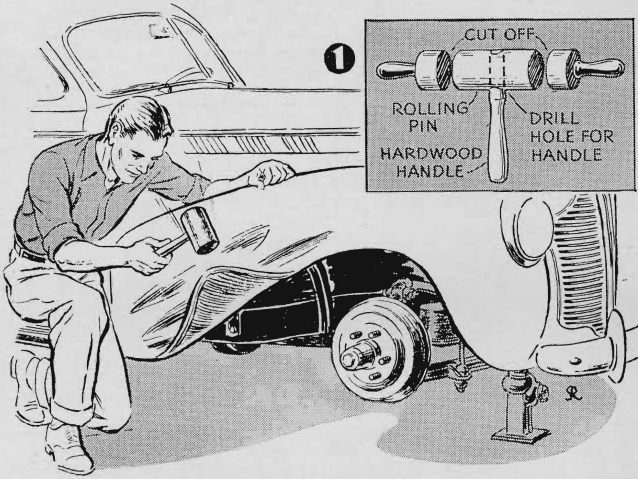
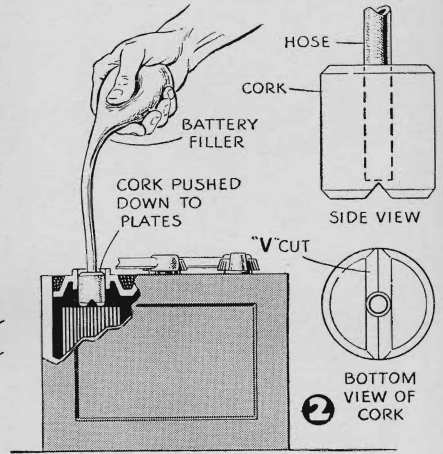


EIGHT TIMESAVERS



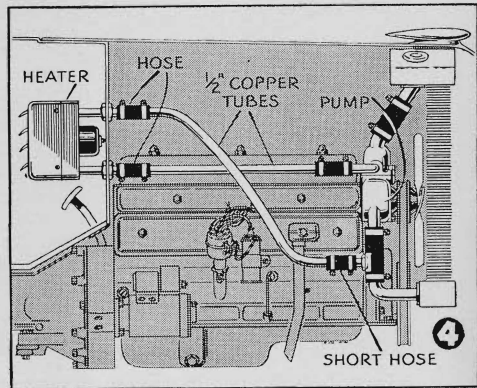
1 A GOOD WOODEN FENDER Mallet for hammering out dents in your car fenders can be made from an old rolling pin. Saw off both ends of the pin, leaving the center section about five or six inches long. Through the center of this, drill a one-inch hole at right angles to the axis of the rolling-pin section. Force a hardwood dowel tightly into the hole to provide a handle of appropriate length. I've been using such a mallet on fender work for a year and it is still good.—J. S.

2 TO AVOID OVERFILLING BATTERIES when adding distilled water, get a cork from a gallon jug and cut it as shown to a loose fit inside the filler holes. Drill a hole through the center of the cork and insert the end of the battery filler hose, shellacking it in place. To fill the battery, insert the cork in each hole in turn, adding water until it just shows at the top of the filler hole. When the cork is removed, the water will drop the correct amount below the top.—P. M.

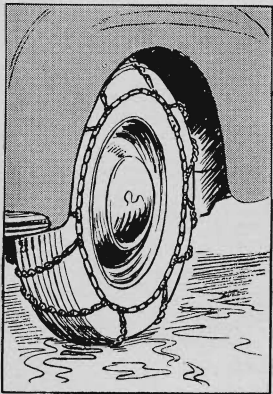


3 TESTING A CARBURETOR FLOAT for tiny leaks that require soldering is simplified by submerging the float in a pail of hot water. Heat instantly expands the air within the float, forcing it out through any holes, which can be readily spotted by the resulting bubbles.—A. H. W.

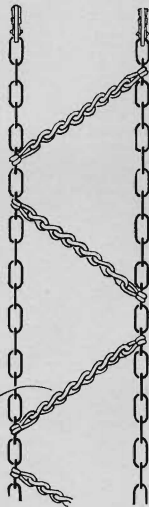
4 COPPER INSTEAD OF RUBBER TUBING will add greatly to the life of the water-supply system of your car heater. Half-inch tubing is easily shaped by hand to the required curves and readily cut to proper lengths. Short pieces of rubber hose are clamped to the tubing and fittings, providing flexible connections, and a neat job.—W. F. B.



FOR CAR OWNERS



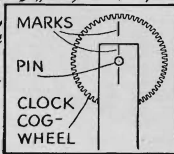
5 ATTACHING CROSS CHAINS DIAGONALLY REDUCES SIDE SLIP



5 ZIGZAG CHAIN CROSS LINKS, I believe, offer greater resistance to side skidding on ice than straight-across links. An easy way to fix up conventional chains is shown in the accompanying illustrations. First unhook the cross chain at one side nearest one end, and attach it near the second cross chain. Then unhook the second cross chain from the opposite side and move it near the third cross chain. When you've come to the end, you may find that a few extra side links may be needed to make the redesigned chains fit the wheels.—H. W.



6 ROLL COGWHEEL ALONG INTENDED ROUTE, COUNTING ITS REVOLUTIONS



6 A MILEAGE ESTIMATOR for road maps can be made from a heavy drawing pencil, a cogwheel from an old clock, and a pin. Cut a slot in one end of the pencil, insert the cogwheel from which the shaft has been driven out, and insert the pin through a hole drilled through the pencil. Make a mark on the edge of the cog as shown. Now run the wheel over a planned route on the road map and count the wheel turns. Find out how many miles each turn represents on the map's scale, and multiply this by the wheel's turns.—F. G.

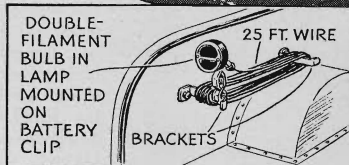
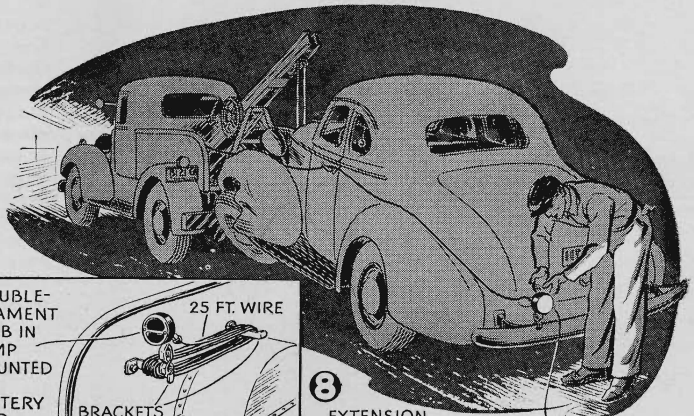
7 BLACKENED LIGHT BULBS SHOW UP QUICKLY if they are held against a white card in a good light. The entire bulb appears smoky if it has begun to age beyond the point of reasonably good efficiency. Oddly, the same bulb simply held up to the light may not show its condition at all.—W. A.



LAMP BULB

WHITE CARD

8 AN EXTENSION TAIL LIGHT for tow trucks, fitted with a strong spring-jawed clamp to hold it on the rear bumper of a towed car at night, can be assembled from old parts. A three-line cord at least 25 feet long should be used.—M. K.



DOUBLE-FILAMENT BULB IN LAMP MOUNTED ON BATTERY CLIP

25 FT. WIRE

BRACKETS

8 EXTENSION TAIL LIGHT CLIPPED ON BUMPER