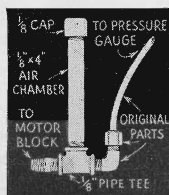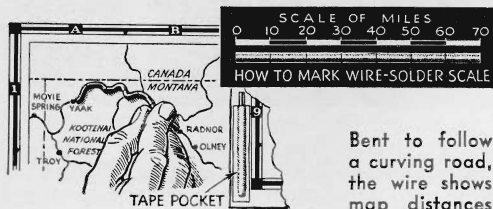# Useful Hints for Motorists

## Air Chamber Cushions Oil-Line Knock

WHEN my new car knocked, I traced the noise to the oil line. I could even feel the pounding by touching the pipe leading to the oil-pressure gauge on the dashboard. The sound obviously was caused by the alternate stopping and releasing of the oil flow from the pump by the drilled crankshaft. I secured a ⅛" pipe tee, a ⅛" by 4" pipe, and a pipe cap, and assembled them as shown. I inserted the assembly into the motor block in place of the oil-line elbow, which I connected to the device. The upright pipe then provided an effective air chamber to cushion the pulsating oil and stop the knock.—E. G. G.

Installed in the oil-gauge line, the device eliminates oil knock

⅛ CAP / TO PRESSURE GAUGE / ⅛"x4" AIR CHAMBER / TO MOTOR BLOCK / ORIGINAL PARTS / ⅛" PIPE TEE

## Soft-Wire Scale Tells Map Distances

SCALE OF MILES
0  10  20  30  40  50  60  70
HOW TO MARK WIRE-SOLDER SCALE

CANADA / MONTANA / MOYIE SPRING / YAAK / KOOTENAI NATIONAL FOREST / RADNOR / OLNEY / TROY / TAPE POCKET
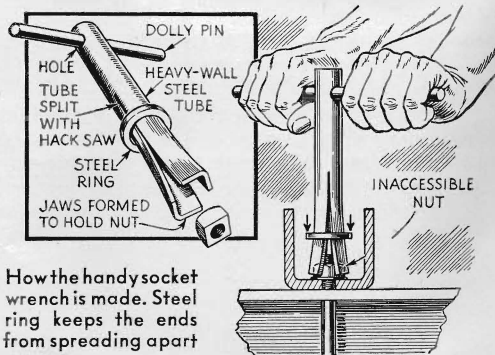
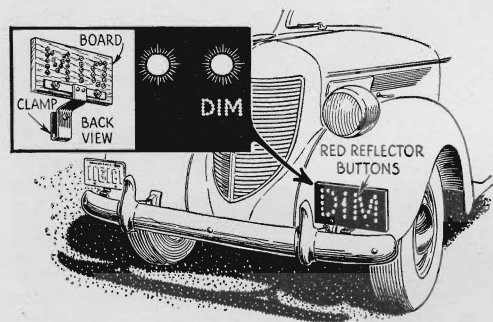Bent to follow a curving road, the wire shows map distances

A SHORT piece of lead wire or wire solder, notched at intervals to conform to the mileage scale on a road map, helps you to estimate distances on trips. The soft metal wire bends so easily that you can shape it with your fingers to conform to the projected route on the map. The distance is then indicated by the notches. You can tape the wire to your map to keep it handy.

## Homemade Socket Wrench Gets in Tight Places

FOR getting at inaccessible place, a socket wrench can be made by hacking a slit halfway through the length of a piece of steel tubing, and drilling a hole in the solid end for a dolly pin. Add a steel washer as shown at the right, and form angles at the slotted end of the pipe. The washer will keep the wrench from spreading when severe pressure is applied to turn a nut in an out-of-the-way place.

DOLLY PIN / HOLE / TUBE SPLIT WITH HACK SAW / HEAVY-WALL STEEL TUBE / STEEL RING / JAWS FORMED TO HOLD NUT / INACCESSIBLE NUT

How the handy socket wrench is made. Steel ring keeps the ends from spreading apart

## Reflector-Button DIM Sign Reminds the Other Fellow

BOARD / CLAMP / BACK VIEW / DIM / RED REFLECTOR BUTTONS

RED reflector buttons mounted on a board to spell the word DIM, and fastened to the front bumper of your car, give an impressive but courteous hint to the driver of an approaching car at night to dim his headlights. Illuminated by the bright beams of the approaching lights themselves, the buttons appear to the approaching driver to go out as soon as he switches his lights to their depressed beams.—A. H. W.