For MOTORISTS Useful Hints for Emergency Car Work Contributed by Our Readers

A tool that aids in the

removal of a rear axle can be quickly put together with an iron rod, a section of pipe, and two regular axle nuts

IMPACT NUT

Homemade Tool Aid
In Removing Axle

AXLE END
NUT HALF WAY ON
ROD AND WELDED
ROD SAME SIZE AS AXLE END

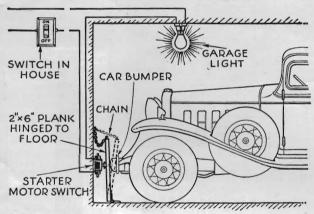
REAR axles that are to be removed can be loosened with a tool made from a twenty inch length of iron rod, a twelve-inch section of pipe large enough to fit over the rod, and two axle nuts. The rod should be the same diameter as the threaded end of the axle. One nut, which matches the axle, is screwed half-

way on one end of the rod and is welded as indicated in the drawing. The pipe is then slipped on the rod and the second nut screwed in place. By means of the free threads on the welded nut, the tool is screwed on the threaded portion of the axle. Bumping the pipe against the outer nut drives the axle loose.—B. A.

Board in Garage Turns on Light

A DISCARDED automobile starter motor switch can be rigged to form an automatic control for the garage lights. As shown in the illustration, the switch is fastened to the rear wall of the garage on a level with the axles of the car. A board, two inches thick, six inches wide, and three or four feet long is hinged at its bottom in such a way that its upper end comes in contact with the switch button when it is pushed up against the wall. The upper end of the board should be sup-

ported with a short length of chain. When the car is driven into the garage, the bumper pushes against the board and operates the switch, turning on the lights. The hand brake is then set to hold the car in



Drawings shows how starter motor switch, a board, and a piece of chain can be used to make an automatic garage light switch

this position. Another switch in the house turns the lights out. With the car in place, the lights likewise can be turned on. When the car backs from the hanging board, the lights will be turned off.—W. R. W.



An Easy Way to Make Your Own Mud Chains

EASILY adjusted mud chains can be assembled from scrap pieces of chain and double-ended snap fasteners. Each mud chain consists of a piece of chain long enough to fit snugly around the tire and the wheel rim. The loop end of the snap clamps to the link at one end of the chain. To apply the chains, the snap end of the fastener is hooked into the other end of the chain.—K. C. M.

Handy Socket Wrench

YOU can tighten a bolt that requires a socket wrench by using an end wrench and an adjustable wrench. Fit an end wrench over the head of the bolt in a vertical position. The adjustable wrench is used to supply

the necessary leverage as shown. It is best to place it close to the head of the end wrench to reduce the twisting movement on the handle of the end wrench.—C. R. W., Jr.



Leather Ends Radiator Rattle

RADIATOR shutters of the permanent type often become worn and noisy. To remedy this I devised the leather supporting strip shown in the illustrations.



This fits over the edges of the shutter blades at the bottom of the radiator front. The strip was made from a piece of leather belting, about one and one half inch wide. First, I marked the locations of the shutter blades on the strip. Then I drilled holes at each mark and cut narrow slits to the edge. The anti-rattler slips in place as shown.—J. G. P.

