## EIGHT HANDY TIPS

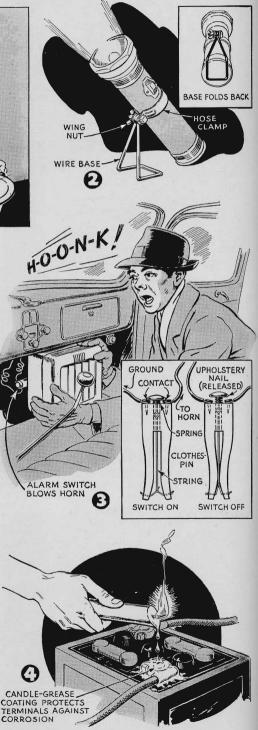


CLEANING DIRTY GEARS and engine parts to which grease, sludge, and gummy deposits are clinging is simplified with a blow torch which has been filled with gasoline and pumped up to full pressure. Place the parts to be cleaned in a pan or a clean pail, and open the torch jet so that it shoots a stream over the dirty surfaces.—C.L.R.

**2** A HANDY FLASH-LIGHT STAND for motorists can be made from a piece of strong steel wire and an old hose clamp. Bend loops in each end of the wire to make a snug fit on the hose-clamp bolt. Bend the wire into a triangle and then bend it again to form the base. Attach the clamp to the flash-light barrel so the base of the stand folds against the base of the lamp. Replace the clamp nut with a thumbscrew.—M.R.

**3** A BURGLAR-ALARM SWITCH attached to your horn and placed behind the heater blows the horn if the heater is removed. Cut and drill a clothespin as shown. The center string is tied to a hook bent in the point of the upholstery nail whose head forms the switch contact when the removal of the heater allows the feet of the clothespin to spread.—P.M.

**4 CORROSION PROTECTION** for battery terminals is afforded by covering them with candle grease. Simply hold a lighted candle on its side over each terminal and let the melted wax flow thoroughly over the exposed metallic surfaces of each terminal until completely covered.—H.T.S.

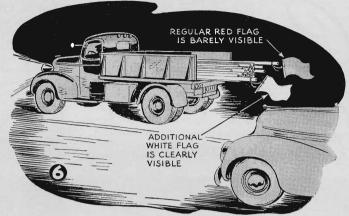


POPULAR SCIENCE

## FOR THE MOTORIST



DRILL 332" HOLE IN REAR AXLE HOUSING



**5** SLEEVE PROTECTORS to keep dust, grease, and oil from spotting your cuffs while doing small jobs on your car are provided by the wax-paper wrappers that store bread comes in. I find it handy to carry a few of them in the car on long trips. An elastic band snapped over the wrists holds them in place.—A.H.W.

6 WHITE FLAGS SHOW UP BETTER than red ones at night. Therefore, whenever I am hauling an overhanging load on my truck at night, I put both a red and a white flag on the overhanging materials, the red to comply with the law, and the white to insure good visibility for other drivers.—A.H.

**7** A VENTED REAR-AXLE HOUSING on some of the older cars will prevent grease from the differential case from being forced through the oil seals of the wheel bearings to damage brake linings. Drill the hole at the top of the housing as shown. Air expanded by changes in temperature can thus escape without building up pressure in the housing to force the grease out—R.S.

**8** FINDING TOP DEAD CENTER of a piston with a toy balloon attached to the base of an old spark plug from which the porcelain has been removed speeds the job considerably. It also provides a good check on whether there is any serious loss of engine compression. Screw the device in a spark-plug hole and crank the engine slowly by hand. When the balloon stops expanding, top dead center has been reached.—R.D.

