# Useful Hints for Car Machinists

How to Use Tire Pump to Fill Vacuum Tank
—Siphon in Lye Solution to Clean Radiator

PROVIDED the filler cap on the gasoline tank can be screwed down tight enough to prevent much air getting by the threaded portion, Fig. 1 shows a good way to fill the vacuum tank after the car has run out of gasoline. There is always a tiny hole in the cap. By placing the end of the tire pump over this hole and operating the pump plunger several times as rapidly as possible, sufficient gasoline usually can be forced into the vacuum tank to start the engine.

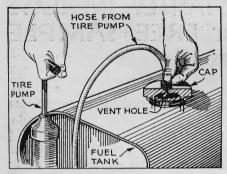


Fig. 1. Raising the air pressure in fuel tank will force gasoline into empty vacuum tank.

## SOLDERLESS TANK REPAIR

An ingenious way to repair a hole in a gasoline tank is shown in Fig. 2. If a hole develops on a flat surface, it can be enlarged to the size of a small screw. Then a disk is cut from the end of a cork and a hole made in it just large enough for the screw, with a washer under the head, to be forced through. With the aid of a wire clip, the screw is passed through the filler hole in the tank and set into the hole. Then a nut is screwed on. The pressure on the cork will make it gas-tight around the screw and against the inner surface of the tank.

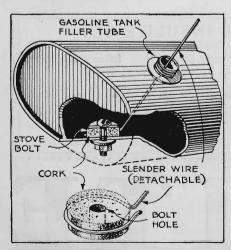


Fig. 2. A cork, a screw, and a washer can be successfully used to repair hole in gas tank.

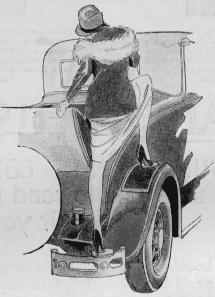


Fig. 3. Putting a rubber mat under the step plate will save the mudguard from scratches.

#### MUDGUARD SCRATCHES

CLIMBING into the rumble seat of the roadster is easy enough by way of the step plates provided, but the heel often scratches the mudguard enamel around the plate. Remove the step plates on the mudguard; then replace it with a piece of rubber matting under it as shown in Fig. 3.

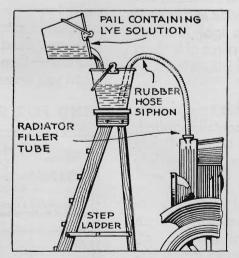


Fig. 4. To save car finish from lye solution start siphon with water and then pour lye in.

POPULAR SCIENCE MONTHLY awards each month a prize of \$10, in addition to regular space rates, for the best idea sent in for motorists. This month's prize goes to Walter E. Wikdahl, Brockton, Mass. (Fig. 4). Contributions are requested from auto mechanics.

## LYE IN RADIATOR

A SOLUTION of lye is fine for cleaning radiators but it is bad medicine for auto finish. If you want to get the solution in the radiator without spilling any over the car finish, use method shown in Fig. 4.

#### SIMPLE DOOR STOP

STICKS of wood and a couple of hinges make up the novel and simple door stops shown in Fig. 5. As the drawing shows, two sticks are driven into the ground for

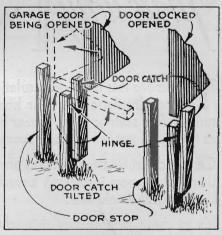


Fig. 5. Hinged sticks set at side of garage door, as shown above, will make a simple door stop.

each door, one a trifle more than the thickness of a stick lower than the edge of the door and the other to act as a stop. Then sticks are hinged to the uprights.

# GET RID OF POUNDING

Tool marks on the braking surface of the drum may cause a pounding noise. The remedy is to polish out the tool marks as shown in Fig. 6, below.

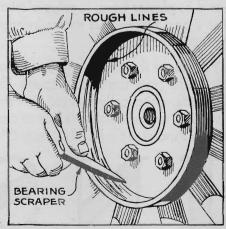


Fig. 6. Tool's marks on braking surface of drum cause pounding. Polishing ends it.