

# VALUABLE IDEAS for Auto Workers

OF THE common mistakes most motorists make, leaving the car with the ignition switch turned on and attempting to start with the emergency brake set head the list. Ideas to warn against these lapses of memory have appeared on this page before. Here is a single indicator light that serves both purposes. Note the arrangement in Fig. 1.

Any kind of colored glass indicator light is fitted to the dash. If the latter is of metal, the light should be insulated so that neither terminal is grounded. One terminal is connected to the wire that supplies current to the ignition circuit. The other terminal should be attached to the single contact of the grounded type of stop-light switch.

Fasten the latter at some convenient point to the metal framework under the floor boards in such a position that a piece of strong wire or chain can be attached to the emergency brake linkage. Adjust it so that the switch is closed when the brake is on.

When the car is standing with the brake set and the ignition switch off, the light will be out. When you turn on the ignition switch, the light will glow and will

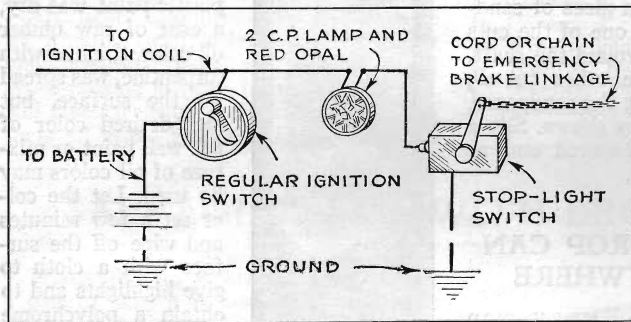


Fig. 1. Red light installed on the dashboard will warn driver against trying to start car with brake set or leaving it with switch on

then go out again when you release the emergency brake. As it is quite unlikely that you will leave the car with the ignition on and the brake off, the single light will enforce the correct use of both.

A jewel light can be obtained from a radio store, or use the red glass jewel from an indicating type of wall switch.

## Rear Seat Foot Rest

FIGURE 2 shows a simple type of foot rest that will protect the upholstery on the "short-coupled" type of coach. Strap iron brackets, shaped as shown, are attached to the underside of the front seats. The crossbar should be made of tough, hard wood. Grooves as deep as the thickness of the strap iron give the job a finished appearance, but a straight rod of wood or a section of iron pipe capped at both ends could be used.

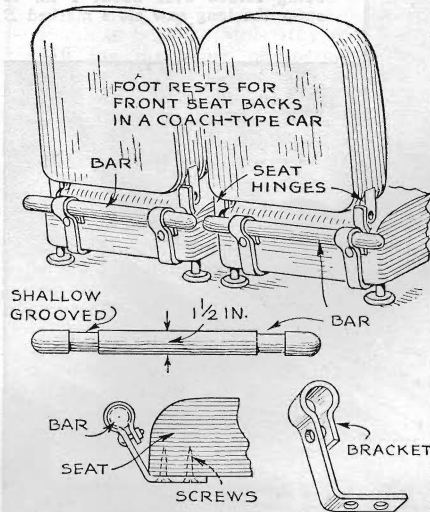


Fig. 2. Strap iron brackets, fastened to front seats in a coach, hold crossbar for foot rest

## To Remove Carbon

THE usual method of cleaning the hard carbon deposit from the valve stems is by scraping after the valves have been removed. Figure 3 shows a way to do the job without removing the valves at all. A piece of clock spring should be bent as shown, with the edge curved on one end and the other fitted to any convenient type of handle.

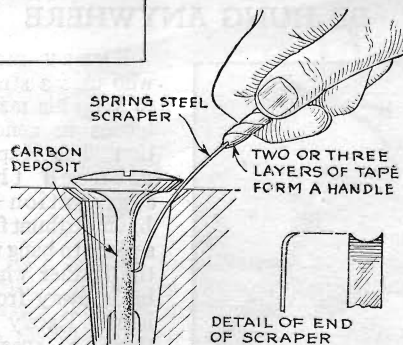


Fig. 3. A piece of bent clock spring can be used to remove carbon with valves in place

## WIN A \$10 PRIZE

Each month we award \$10 for the best idea sent in for motorists. This month's prize goes to L. A. Griggs, Nanaimo, B. C. (Fig. 1). Contributions are requested from auto mechanics and if published will be paid for.

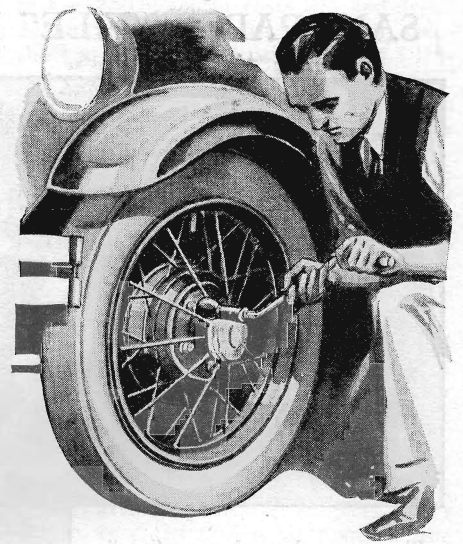


Fig. 4. Tire wrench won't knock enamel off wire wheels if a piece of rubber is wound around it

After the carbon has been scraped from the cylinder head and the tops of the pistons in the usual way, turn the motor over so that No. 1 exhaust valve is open, then scrape the valve stem as shown and repeat for the other cylinders. The inlet valves need not be scraped as carbon rarely forms on them.

## Protect Wire Wheels

WIRE wheels are strong, light, and good looking, but they are a nuisance to clean. It is still harder to keep them looking well if the enamel is chipped off. Many cars are fitted with wire wheels fastened to the hubs by means of six or more bolts.

In changing tires, the steel wrench is sure to knock off some of the enamel unless the end of the wrench is covered with rubber. A section of inner tube wrapped around the end of the wrench, and held in place with rubber bands cut from the same scrap tube, will save the spoke enamel as shown in Fig. 4.

## Flashlight Holder

A GOOD flashlight should be part of the equipment of every motorist. However, the common practice of tossing the flashlight into the tool kit usually results in a flashlight that is out of commission just when you need it most. Figure 5 shows a convenient way to mount the flashlight on the steering column, where it is handy and yet out of the way.

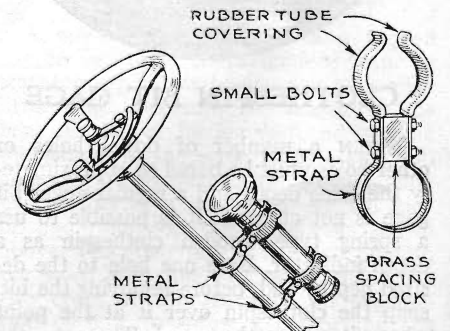


Fig. 5. To keep your flashlight in good condition, mount it, as shown, on steering post