

# Some New Ideas for the Motorist

## Half a Dozen Ways to Save Money on Your Automobile

**I**N STEADY driving, the motorist's left foot is used only to work the clutch occasionally and this idle foot can be used very well to operate the windshield wiper by the arrangement shown in Fig. 1. Two ordinary hand-operated windshield wipers are clamped on the windshield with a coil spring at the right attached to the arm of the right-hand wiper. Then a simple pedal is placed on the floorboard next to the clutch pedal. This pedal can be made of a small piece of wood hinged to the floorboard.

At the left end of the windshield a small pulley is fastened and a cord run from the pedal through the pulley and to the left and then the right wiper arms. Pressing down on the pedal pulls both wipers to the left and the spring pulls them back across the glass when the foot is lifted from the pedal.

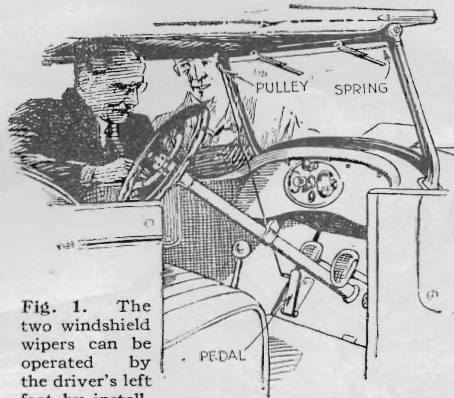


Fig. 1. The two windshield wipers can be operated by the driver's left foot by installing a simple hinged pedal and pulley next the clutch pedal of your car

**S**OME auto-drivers are under the impression that a car can be driven home when the front spring breaks, simply by blocking up the axle with a piece of wood. This is true if the long leaf that holds the spring-shackle bushing remains intact; but if every leaf is broken, the flexibility of the shackle at the rear of the spring will allow the axle to move back under the car so far that steering will be difficult if not actually dangerous. As Fig. 2 shows, a clamp and an extra spring leaf used in conjunction with the wooden block will bring you home safely.

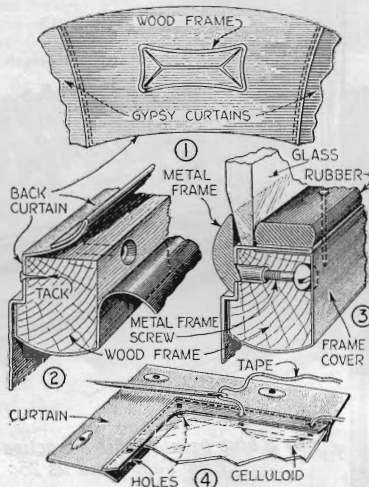


Fig. 3. How one man set up and made a new back curtain for his car

**A**TORN celluloid window plus a few rents in the material itself will make the back curtain of a car very unsightly. Of course, a simple remedy is to buy a new curtain, but some owners will prefer to do the work themselves.

Figure 3 shows how this was accomplished by an auto-owner who takes great pride in doing a neat job. After the new curtain material was tacked in place, he held the wooden frame in the position to be occupied by the rear light and cut the curtain material as shown in the upper part of the illustration. The lower part shows the details of the frame that held the glass in place. If a celluloid window is to be used instead of glass, a good stunt is to cut the window the shape desired, sew a strip of material around the opening, and sew in the celluloid with a bobbin and black tape. The holes in the celluloid should be punched with a paper punch. Then if the celluloid cracks or tears, a new window can be made in a few minutes.

**T**HE most common cause of trouble with the gasoline supply system is clogged pipes, due to dirt or scale from the tank. Such trouble usually is found

easily enough, but a plugged vent hole in the gasoline-tank cap sometimes produces mystifying results, because the flow of gasoline is interrupted only partly. Air must be allowed to enter the main gasoline tank to take the place of the supply drawn into the vacuum tank by the suction of the manifold. The simplest way to protect the vent hole in the gasoline-tank cap is to solder a small piece of bent copper pipe over the opening, as shown in Fig. 4.

**T**HE injection of air heavily laden with water vapor into the manifold of a gasoline engine helps to keep down carbon deposits and, according to some motorists, actually gives the motor more power. In Fig. 5 is shown a simple way to make a device for feeding water vapor into the cylinder at regular intervals, requiring no attention on the part of the driver.

The glass container is an old mason jar, held in place on a piece of heavy sheet metal bolted to the cylinder head. A defunct ammeter supplied the metal top, which is drilled for the two elbows and the filler cap. The pipe that goes from the vacuum tank to the manifold is cut, and the end of it, which is attached to the vacuum tank, is connected with the elbow that has a pipe extending into the solution. The other elbow is connected with the section of the pipe that goes to the carburetor or manifold. At the bottom of the pipe in the jar is placed a small cork float on the end of a pin.

Each time that air is drawn from the vacuum tank into the manifold to replenish the supply of gasoline in the vacuum tank, the air is made to bubble up through the water in the jar and becomes heavily laden with moisture. The check valve is used to prevent sudden pressure in the engine manifold from forcing water back into the vacuum tank.

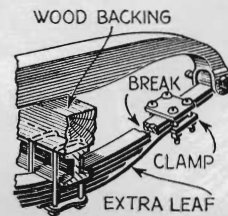


Fig. 2. An emergency repair for a broken front spring

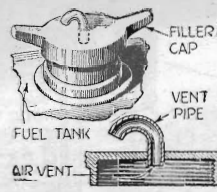


Fig. 4. Small bent pipe on gasoline tank cap keeps out dirt

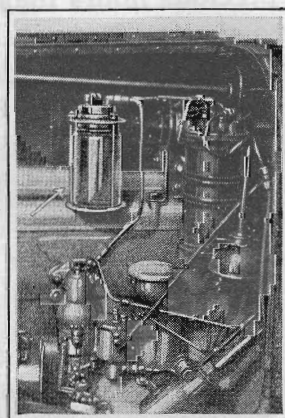


Fig. 5. This simple device for feeding water vapor into the cylinders to cut down carbon deposit works automatically

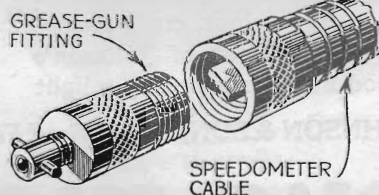
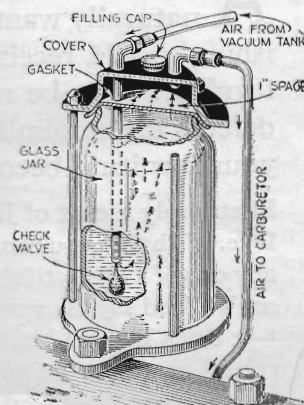


Fig. 6. An old grease-gun fitting screwed to speedometer cable shaft helps lubrication

**F**IGURE 6 illustrates a simple way to force grease down around the flexible shaft inside the speedometer cable. An old grease-gun fitting was found in the scrap pile that could be screwed into the coupling on the end of the shaft. A hole was drilled and tapped in the end of this fitting to take a pressure

grease nipple. It is a good idea to force light grease or heavy transmission oil into the speedometer cable at least once every 5000 miles and, while you are about it, check up on the meshing of the fiber gear that meshes with the larger metal gear attached to the front wheel. See that the fiber gear is in position, or it will wear out in short order.