

Hints for Repairing Your Car

Old steering wheel with hand crank attached saves crawling from under car while at work—Welding rod can be used to remove broken axle

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 H. P. Swope, Danville, Pa. (Figure 4). Contributions are requested from all auto mechanics.

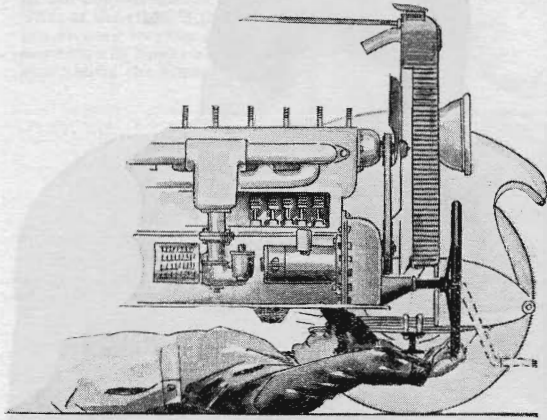


Fig. 1. How to attach hand crank to old steering wheel and save time in adjusting connecting rod bearings.

MANY jobs around a car make a man wish he could be in two places at once. Adjusting connecting rod bearings is one of them because it is necessary to crawl out from underneath the car every time you want to turn the crank to a different position. Fig. 1, above, shows a simple way to turn the crank and remain under the car. Get an old steering wheel and fasten it to a spare hand crank.

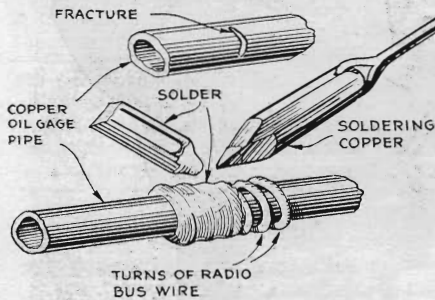


Fig. 2. Leak in pipe line can be repaired by winding wire around pipe and soldering.

PUNCTURES are hard enough to locate without having to spend time doing the job all over again if you happen to lose the place. Fig. 3, below, shows an easy way to prevent "losing" the hole and at the same time deflate the tube. Stick the end of an old oil can spout through the puncture.

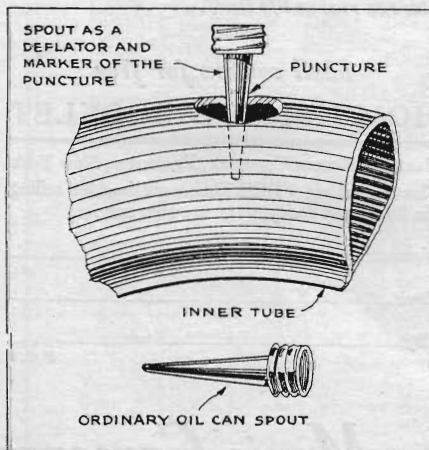


Fig. 3. When a puncture is found in a tire you can keep it located with an oil can spout.

WHEN a valve spring breaks, the broken pieces turn into each other and no longer exert any pressure on the end of the valve stem. While the correct cure is replacement, in an emergency an ordinary washer can be used to keep the two portions of the spring apart as shown in Fig. 5, at the right.

FIG. 2, at the left, shows a good way to repair a gasoline or oil pipe line that has sprung a leak or chafed through. First sandpaper the surface of the pipe down to the bright metal for a half inch each side of the leak. Then wind radio bus wire or No. 14 bare copper wire loosely around the pipe to cover the polished portion. Flow solder over the wire and pipe.

WHEN air pressure fails to clear out clogged oil lines try the method shown in

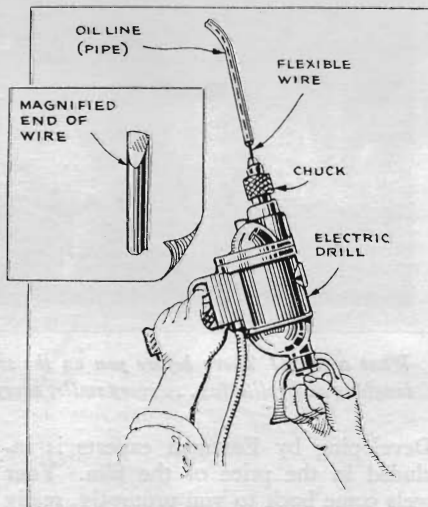


Fig. 4. Clogged oil lines can be cleared by use of a piece of piano wire, with chisel shaped end, inserted and then rotated.

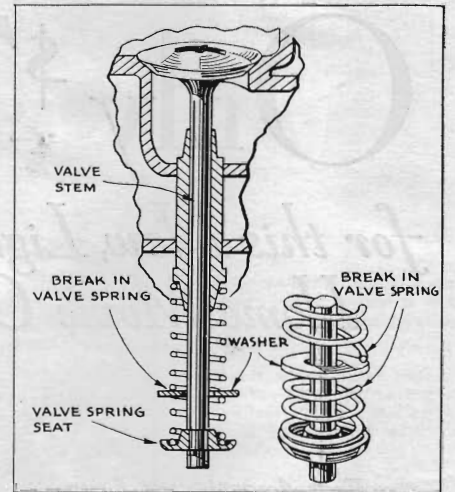


Fig. 5. When a valve spring is broken, it can be repaired temporarily with a washer.

FIG. 4, at the left. Take a piece of flexible wire, preferably piano wire, and grind one end chisel shaped as shown. Stone off the corners to prevent it from cutting into the pipe at the bends and use an electric drill or a hand drill to rotate it.

THE method of removing the remaining portion of a broken axle by means of a "lasso" of wire has been shown in a previous number of POPULAR SCIENCE MONTHLY. In many cases the axle breaks off so short that the "lasso" can't be used. Fig. 6, below, shows a way to weld a rod to the stub so it can be pulled. An arc is drawn and then the welding rod jammed against the axle stub as the switch is opened.

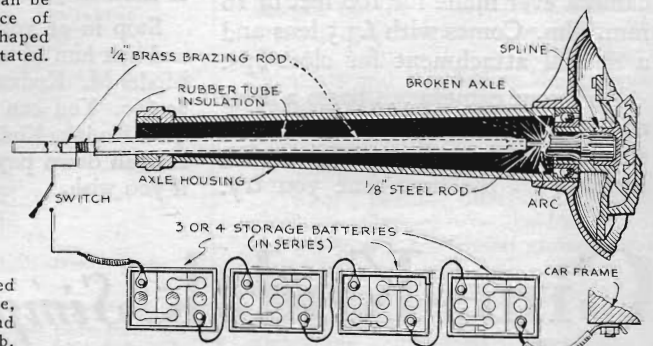


Fig. 6. A rod can be welded to the stub of a broken axle, as shown at the right, and used to pull out the stub.