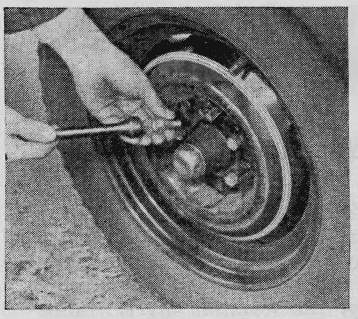

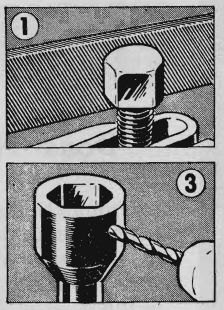

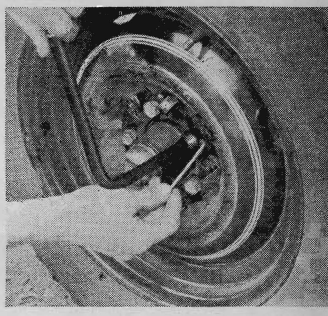

TIRE THEFT is made extremely difficult if you make use of the simple procedure outlined in the photos and drawings above. In principle, the method consists of rounding one tire-retaining nut or bolt so that it cannot be turned by a lug wrench without a special key. The idea is adaptable either to the nuts or the bolts variously used with pressed-steel wheels.

Remove one nut or bolt from each wheel, as in the photo at the left; since only one is taken from each wheel, it isn't necessary to jack up the car. Secure each nut or bolt in a vise (protecting the threads if you have bolts), and file off the corners as in Fig. 1. The job can also be done on a grinding wheel. Test the nut or bolt to make sure that the wrench won't hold; then drill a 3/16″ hole through it, as in Fig. 2. A similar hole, Fig. 3, should be drilled through the lug wrench, located about ¼″ back from the edge. For the key, use a 20-d. nail with a right-angle bend about ¾″ from the end (Fig. 4). The photo at the right shows how the key is held in changing a tire safeguarded this way.—C. P. FITZPATRICK.

TESTING THE BATTERY can be done in an instant with the handy dashboard meter shown in Fig. 1. It consists of a storage-battery tester, a push button, and a block of wood that serves as a mount. When in doubt about your battery, it's necessary only to press the button and note where the meter hand stops to tell whether the battery is dangerously low or sufficiently charged.

The tester should be the inexpensive voltmeter type, calibrated in zones to indicate degree of charge. With an expansive bit or chisel and gouge, hollow out the back of the 1″ mounting block to receive the tester, as in Fig. 2. Determine which of its terminals should be connected to the ungrounded side of the battery, and install a push button in series with this side. Run a well-insulated wire from the button to the end of the battery cable that is connected to the starter switch. The other terminal on the tester should be grounded through the mounting bracket to the dash. Figure 3 shows this metal bracket, which also serves to hold the tester in its recess. A piece of cardboard will insulate the meter case from the bracket.

Take readings after the car has been idle for a time; you may not get accurate results after the generator has been charging the battery or after a heavy starting drain. To verify calibration of the meter, note the reading when the battery has been fully charged, and use that as a subsequent reference point.—W. E. B.