Interchangeable Magnetic Tip Screwdrivers. These screwdrivers have a magnet in the shaft so that they not only hold the bit but can also hold the screw. In addition, the variety of bits for this type of screwdriver is limitless and the unused bits can be stored in the handy compartmented handle.

Interchangeable Blade Screwdrivers. The hollow handle of this type of screwdriver will accept a number of different type blades. Sometimes the blades are double-ended with a narrow tip on one end and a wider tip on the other end. Combinations of Phillips, conventional, Clutch Head, Scrulox, and hex head are available.

Insulated Screwdrivers. These are used by electricians and maintenance workers. As their name implies, the shank as well as the handle are completely insulated with a dielectric material intended only as a secondary protection. Never depend on an insulated screwdriver handle, shank cover, or blade to insulate you from electricity. Insulated blades are intended only as a protective measure against shorting out components.

FIG. 22. Careful Cal is using an insulated screwdriver. Handle and shank are covered with an insulated material that is intended only for secondary protection. Turn off current when doing this kind of work.

FIG. 23. Two types of screwdrivers that use interchangeable bits. The one at the left has a hollow handle that will accept any one of the four bits shown. The screwdriver at the right has two double-ended bits held in each end of a tube. The tube is reversible in the handle and the bits are reversible in the tube.

FIG. 24. As usual, Hazardous Harry is wrong again. But this time on two counts. First of all, he never bothered to turn off the current before starting to work on that outlet. Secondly he doesn't
seem to know enough to use an insulated screwdriver when doing such work.

WRONG

**Non-sparking Screwdriver.** Found chiefly on yachts and boats, these screwdrivers are made out of an alloy – usually beryllium copper – that will not emit a spark if accidentally struck against metal. They minimize the risk of explosion when used under hazardous conditions, such as when working in the hold of a ship that may be filled with gasoline fumes.

**The Awl.** A handy accessory to a screwdriver set is an awl. With it, you can make a starting hole in soft wood for a screw.

Force the awl into the wood with a twisting motion. The hole need not be as deep as the length of the screw. With large screws – and especially when working with hard wood – it is always advisable to first drill a pilot hole before attempting to drive the screw.

**FIG 25.** An awl can be used to make a starting hole for small screws in soft wood.

**FIG 26.** This device drills a pilot hole, a clearance hole, and countersunk recess for flathead screws all in one operation.