

grav defect. The hoops are badly cut by this hatched face, and the barrel head is also marked, even by the slightest tapping. The hammer face should be smoothed on an emery wheel or grindstone. The notch for pulling nails is usually placed on the inner side of the cutting edge and in a position that is not convenient for barrel use. A nail pulling notch should be cut in the edge one third of an inch from the outside corner. (Plate I, A). Care should be taken in selecting a hatchet to secure one that has a notch cut in the throat for nail pulling, with the upper surface bevelled so as to go easily under the head of a nail that is already out one-eighth of an inch or less. Only hatchets of the very best steel should be used. The pulling of nails is an important part of the use to which they will be put and for this purpose the thin edge of the point has to be used. If the temper is too hard or the steel poor the outside corner is likely to be broken off immediately. On the other hand the steel must be tough enough so that it can be made hard to maintain a reasonable good cutting edge. Discretion should be used in the weight; a medium weight is usually better than either a heavy or light weight.

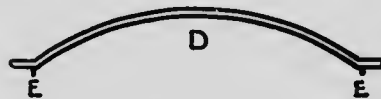
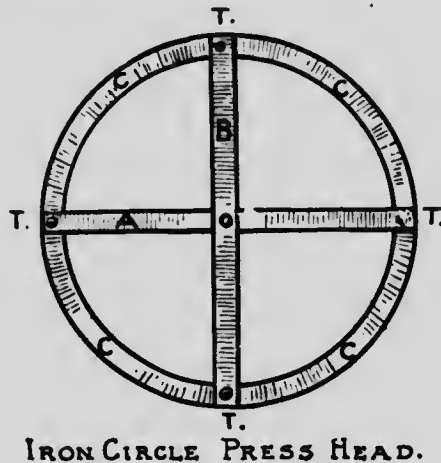


FIG. 2.

A COOPER'S DRIVER.

Occasionally apple packers use a cooper's driver made of apple wood. This, of course, is easier on the hoops and with certain rough workmen it is perhaps absolutely necessary that a driver should be used. If, however, the workmen are careful in driving hoops with a smooth faced hatchet, much more rapid work can be done than by using the driver, and quite as effective.

NAILS AND NAILING.

For the heads of barrels and for liners $1\frac{1}{4}$ inch nails are quite heavy enough. For the quarter hoops inch clout nails are preferable, although most packers use