Cutter jaws should have the hardness specified by the manufacturer for the particular kind of material to be cut By adjustment of the bumper stop behind the jaws, cutting edges should be set to have a clearance of 0 003 in when closed

Wood-cutting tools

Edged tools should be used so that, if a slip should occur, the direction of force will be away from the body For efficient and safe work, edged tools should be kept sharp and ground to the proper angle A dull tool does a poor job and may stick or bind A sudden release may throw the user off balance or cause his hand to strike an obstruction Dressing of wood-cutting tools is covered earlier in this chapter

Wood chisels. Inexperienced employees should be instructed in the proper method of holding and using chisels Handles should be free of splinters The wood handle of a chisel struck by a hammer or mallet should be protected by a metal or leather band to prevent its splitting

The work to be cut should be free of nails to avoid damage to the blade of the chisel Should metal be struck by the cutting edge, a chip from the chisel might fly

The wood chisel should not be used as a pry or a wedge The steel in a chisel is hard so that the cutting edge will hold, and is therefore brittle enough to break if the chisel is used as a pry

When not in use, the chisel should be kept in a rack, on a workbench, or in a slotted section of the tool box so that the sharp edges will be out of the way

Saws should be selected for the work they must do For cutting across the grain of the wood, use a crosscut saw, for cutting with the grain, a ripping saw The difference between them is their teeth angle For fast crosscut work on green wood, use a coarse saw (4 to 5 points per inch), for smooth, accurate cutting of dry wood, use a fine saw (7 to 8 points per inch) Points per inch is stamped on the heel of a saw

Saws should be kept sharp and the teeth kept well set to prevent binding When not in use, saws should be kept in racks or hung by the handle to prevent the teeth from being dulled A Teflon-coated saw is available that minimizes binding

Axes. To use an axe safely, workmen must be taught to lift it properly, to swing correctly, and to place the stroke accurately The proper grip for a right-handed person is to have the left hand about 3 in from the end of the handle, and the right hand about three-fourths of the way up A left-handed person should reverse the position of the hands

A narrow axe with a thin blade should be used for hard wood, and a wide axe with a thick blade for soft wood A sharp, well-honed axe yields better chopping speed and is much safer to use because it bites into the wood (Fig 35–9) A dull axe will often glance off the wood being cut and may strike the user in the foot or leg

An axeman should make sure that he has a clear circle in which to swing his axe before he starts chipping Also, he should remove all vines, brush, and shrubbery within the

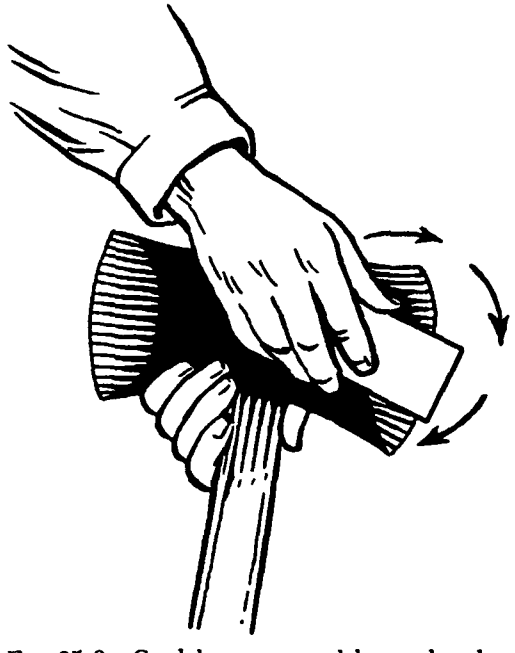

Fig 35–9 —Good honing saves labor and makes an axe safer to use The axe should be honed after each sharpening and each use Correct honing motion is shown here