
Types of Crosscut Saws

One-Person Crosscut Saws

A one-person crosscut saw's blade is asymmetrical. The saw has a D-shaped handle. The saw also has holes for a supplemental handle at the point (tip) and the butt (near the handle). The saws are usually 3 to 4½ feet long (figure 2).

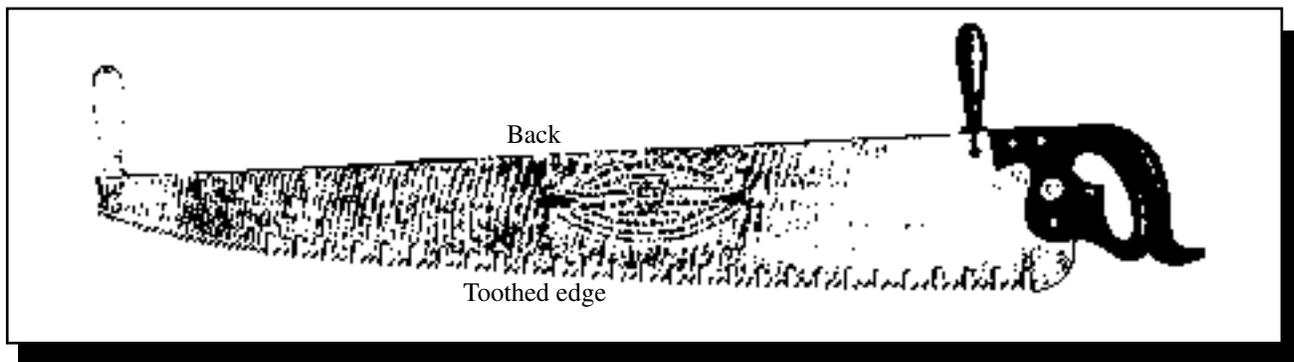


Figure 2—One-person crosscut saw. The handle can be placed in either of two locations on this vintage Disston saw.—*Henry Disston & Sons catalog (1902)*, with permission of Astragal Press, Mendham, NJ

Two-Person Crosscut Saws

Two-person crosscut saws are symmetrical (figure 3). They cut in either direction. Two-person saws were 4 to 12 feet long for general sawing and up to 16 feet long for working in the California redwoods. If a longer saw was needed, two shorter saws were sometimes brazed together. Saws from 4 to 7 feet were made in ½-foot increments. Saws longer than 7 feet were made in 1-foot increments.



For felling, I try to select a saw that is twice the average diameter of the material I'll be sawing consistently. For bucking, I have found that it is easier and more efficient to use a shorter saw for an occasional large log than to carry a saw that is longer than I typically need.



Figure 3—Two-person crosscut saw.—*Simonds, Inc., saws and knives catalog (1919)*, with permission of Roger K. Smith, Athol, MA

Many vintage saws have teeth all the way to the ends, but saws manufactured today do not. I recommend using saws with teeth all the way to the end of the saw. This allows the greatest versatility for starting or ending a cut, for under-bucking, and for using a shorter saw.

Historically, two-person saws were manufactured with 15-gauge steel for the shorter 4- to 5-foot saws and a thicker 14-gauge for saws between 5 and 7 feet. Longer saws were typically 13-gauge. These thicknesses are measured at the tooth and represent the thickest metal in the saw. Straight taper and crescent taper saws were often a full 5 gauges thinner at the center back of the saw.

Felling Saws

Felling saws (figure 4) are best suited for felling standing timber. They cut best in a horizontal position. Felling saws have a concave back and are narrower than bucking saws. The combination of a concave back and narrower width give felling saws the following characteristics:

- The saw is more flexible.
- The saw is lighter, so less effort is needed to hold it horizontally.
- The saw has only one handle hole on each end.
- The sawyer can insert a wedge sooner.

The flexibility of the felling saw allows it to conform to the arc of the faller's arm. As the saw is pulled towards the sawyer, the saw rises, keeping it from binding. Historically, fallers standing on spring-boards (small platforms used to cut the tree) were able to transmit some of the energy from their

legs into the saw much as you would if you rock forward on your toes when using a maul to split wood.

Because felling saws are limber and require two people to use them, they do not make good bucking or general all-around utility saws. I recommend instead that the bucking saw be the standard saw used for most trail and construction applications today.

Bucking Saws

Bucking saws (figure 4) have a straight back. They are thicker than felling saws, so they are heavier and stiffer. For example, my 6-foot Simonds 513 felling saw weighs 6¼ pounds, and my 6-foot Simonds 503 bucking saw weighs 8½ pounds.

Bucking saws can be used for occasional felling. Some saws were manufactured to incorporate the best characteristics of both felling and bucking saws.



I recommend the 5½-foot vintage bucking saw with teeth extending to the ends of the saw as the standard saw for most trail and construction applications today. This saw is used by a single sawyer.

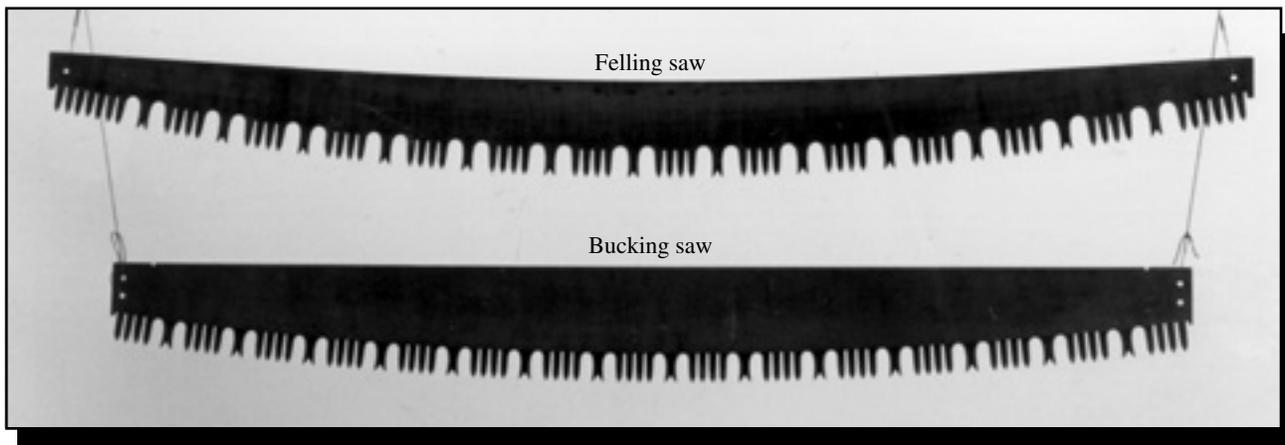


Figure 4—Felling saws have a curved back and often have just one handle hole per side. Straight-backed bucking saws often have two holes per side.

Sawyers need to master the skill of operating a two-person bucking saw solo before working with a partner as a bucking team. Because the bucking saw is usually operated

by one person, it cuts on both the push and pull strokes. The saw's additional stiffness helps prevent the saw from buckling on the push stroke.



Appalachian family wedging a chestnut log, Tallulah Ranger District, Chattahoochee National Forest, Georgia.—*USDA Forest Service photo, date unknown*