#### **Buck Bow Farm Saw**



A **bucksaw** is a hand-powered frame saw similar to bow saw and generally used with a sawbuck<sup>[1]</sup> to cut logs or firewood to length (*bucking*). Modern bucksaws usually have a metal frame ("H" or "C"-shaped) and a removable blade with coarse teeth held in tension by the frame. Lightweight portable or foldable models used for camping or back-packing are also available. It is often referred to as a bow saw in the North American hardware market, but that term traditionally refers to a different type of saw with a wooden frame. Thanks Ben Shaw.

#### Description

A bucksaw is a crosscut saw: it is designed to cut across the grain. The width of the blade is constant from the teeth to the back. It is meant to cut wood fibers that are under tension, and is thick so that it is more difficult to bend on the push stroke. It can be either a one or two-man saw. Coopers often use bucksaws in their work.

Bucksaws can be used for a number of tasks like clearing land, chopping firewood, cutting lumber, and sometimes kept handy for small logging projects. Due to their portability, these hand tools are often preferred by people that like to go camping and enjoy the outdoors lifestyle. Bucksaws feature coarse teeth that allow them to work with very big timber and are designed to allow replacing the blades after extensive woodworking projects.

If people use them for furnishing crafts, the blades can be substituted with more polished ones. The cuts produced with these smaller toothed blades are smoother and cleaner. The advantage of this tool is that electric power (or cord) is not needed to use it, and its affordability makes easily replaceable.

# 2 Handed Hay Saw



A hay knife is an agricultural hand tool: a long-bladed knife which may have large rounded serrations on the edge, or a smooth edge used for sawing off sections at the end of a stack or compact pile of hay or silage. In the south of England hay knives may have smooth edges.

Hay knives are needed as loose hay or silage becomes compacted within a stack: to remove it a hay knife is used to make a vertical cut so that sections can be removed easily as the intertwined stalks are cut. The offset handle allows the user to work down a face. Once one section has been removed the worker starts again at the top creating another section to be removed. Thanks Ben Shaw.

# **Hay Pitch Fork**



A **pitchfork** or **hay fork** is an agricultural tool used to pitch loose material, such as hay, straw, manure, or leaves. It has a long handle and usually two to five thin tines designed to efficiently move such materials.

The term is also applied colloquially, but inaccurately, to the garden fork. While similar in appearance, the garden fork is shorter and stockier than the pitchfork, with three or four thicker tines intended for turning or loosening the soil of gardens. Thanks Jack Sanders.

# 6' Two Man Hand Saw and 20" Circular Saw Blade



A **two-man saw** (known colloquially as a "**misery whip**" [1]) is a <u>saw</u> designed for use by two sawyers. While some modern <u>chainsaws</u> are so large that they require two persons to control, two-man <u>crosscut saws</u> were primarily important when human power was used. [2] Such a saw would typically be 1 to 4 m (4 to 12 feet) long, and sometimes up to 5 m (16 feet), with a handle at each end. In some cases, such as when felling <u>Giant Sequoias</u>, sawblades could be <u>brazed</u> together end-to-end in order to create longer saws.

The technique in using a two-man saw involved a sawyer standing at each end. Together the sawyers would alternate pulling the saw through the wood. If the <u>kerf</u>began closing, causing the saw to bind, wedges would be inserted behind the sawblade in order to keep the kerf open. Cutting from underneath a suspended log, called "underbucking", might also have been used if binding became a big problem.

Many variations on the design were used, but they mainly fell into two types. Felling saws were used to fell the trees, and <u>bucking</u> saws were used to cut felled trees into log lengths for the sawmill. [3] The two applications require slightly different designs: a felling saw has a narrower blade, allowing wedges to be more easily inserted, while a bucking saw has a wider blade, giving it more strength.

Two-man saws were designed to cut in both directions. Careful tooth design was necessary to clear the sawdust during the cut.

Two-man saws were known to the ancient Romans, but first became common in Europe in the mid-15th century. In America, crosscut saws were used as early as the mid-17th century, but felling saws only began to replace axes for felling trees in the late 19th century. Thanks Jeff Lundgren.



#### Circular Saw Blade

INVENTING THE CIRCULAR SAW: A BRIFE HISTORY

It's commonly told that Samuel Miller was awarded <u>British Patent #1152 in 1777</u> for what is considered the first circular saw machine. Some assert that the wording in his patent indicates the <u>circular blade</u> itself was in common use by that time — it was the sawing machine itself that Miller had invented.

As with many inventions, accounts of the circular saw's early history are conflicting. Some evidence shows that Gervinus of Germany built something similar in 1780, while others claim it was the Dutch who invented the device some hundred or so years earlier.

A little while later, we hear about a man named Walter Taylor who supplied the Royal Navy with high-quality rigging blocks into the early 19th century. Taylor was responsible for a variety of patents centered on wood processing, although none on the machine itself. But, history has proven he used circular saw blades in his mills.

Like many inventions of the time, the circular saw was a concept developed similarly and independently throughout parts of the developing world. All these stories of the circular saw's rise in Europe seem completely separate from its emergence in America — or, at least, from American legends.

In the U.S. — more specifically in Harvard, Massachusetts — a Shaker woman named Tabitha Babbitt is said to have also invented a circular saw entirely of her own volition and design in 1810. As legend has it, she got the idea while watching two Shaker men struggling with a pit saw. At the time, these saws could only cut in one direction, making ripping logs a horribly tedious task.

The lumbermen would waste half their energy moving their saw back and forth, only cutting on the forward stroke. Babbitt noticed the inefficiency of this method and set out to make a saw that would waste less time and effort. She created a notched tin disk and rigged it to spin with the pedal push of her spinning wheel. With this simple invention, wood could be cut with a fraction of the time and effort it took using the old pit saw.

Her basic idea was used to create a much larger device for use in the sawmill, and the circle saw quickly caught on as the wood processing tool of choice. While Babbitt's design was similar to Miller's or Taylor's, hers appeared to be much larger and more useful on a larger scale — modifications which differentiated her design from the rest. Thanks Dina Brewster

# Harrow



In <u>agriculture</u>, a **harrow** is a farm implement used for surface <u>tillage</u>. It is used after <u>ploughing</u> for breaking up and smoothing out the surface of the <u>soil</u>. The purpose of harrowing is to break up clods and to provide a <u>soil structure</u>, called <u>tilth</u>, that is suitable for <u>planting seeds</u>. Coarser harrowing may also be used to remove <u>weeds</u> and to cover <u>seed</u> after sowing. Thanks Silver Spring Country Club.

# Grain Milling Machine – The Hickories Farm

A **mill** is a device, often a structure, machine or kitchen appliance, that breaks solid materials into smaller pieces by grinding, crushing, or cutting. Such comminution is an important unit operation in many processes. There are many different types of mills and many types of materials processed in them. Historically mills were powered by hand or by animals (e.g., via a hand crank), working animal(e.g., horse mill), wind (windmill) or water (watermill). In modern era, they are usually powered by electricity.



The grinding of solid materials occurs through mechanical forces that break up the structure by overcoming the interior bonding forces. After the grinding the state of the solid is changed: the grain size, the grain size disposition and the grain shape. Thanks Dina Brewster.

# Walk behind Hand Plow



A **plough** or **plow** (US; both /plaʊ/) is a farm tool for loosening or turning the soil before sowing seed or planting.<sup>[1]</sup> Ploughs were traditionally drawn by oxen and horses but in modern farms are drawn by tractors. A plough may have a wooden, iron or steel frame with a blade attached to cut and loosen the soil. It has been fundamental to farming for most of history.<sup>[2]</sup>The earliest ploughs had no wheels; such a plough was known to the Romans as an *aratrum*. Celtic peoples first came to use wheeled ploughs in the Roman era.<sup>[3]</sup>

The prime purpose of ploughing is to turn over the uppermost soil, [4] bringing fresh nutrients to the surface [5] while burying weeds and crop remains to decay. Trenches cut by the plough are called furrows. In modern use, a ploughed field is normally left to dry and then harrowed before planting. Ploughing and cultivating soil evens the content of the upper 12 to 25 centimeters (5 to 10 in) layer of soil, where most plant feeder roots grow.

Ploughs were initially powered by humans, but the use of farm animals is considerably more efficient. The earliest animals worked were oxen. Later, horses and mules were used in many areas. Thanks Carolyn Meyers.

#### Vintage Metal 10-gallon Milk Can

Small dairy farms were everywhere, and each farm needed a way to store and transport milk. Cans were the perfect solution because they could be sealed shut, keeping the milk fresh. Plus, the design at the top tapers up, which kept milk from sloshing out on the bumpy wagon rides to town.

In the 19th century, farmers would not only transport milk to market in these cans, but also directly to customers. Also, they would load them onto milk carts or other forms of transportation in order to send the milk to dairy processing plants, cheese factories, or creameries. Creating food products such as butter and cheese from milk was a common practice in those days, so this particular use of milk cans was quite prevalent.

Older milk cans from the 19th century tend to be larger, often holding up to 25 gallons. If a milk can is this size, it likely dates to before 1920. Smaller milk cans, such as those that can hold five gallons, could be from any time in the 19th or 20th centuries. Thanks Joanne Kurz.



# **Cow Stanchion**

A device that fits loosely around the neck of an animal (such as a cow) and limits forward and backward motion (as in a stall) to allow the farmer to milk the cow. Thanks Dina Brewster.



# 2 Handed Hay Scythe



A two-handed hay scythe, one of the most important of all agricultural hand tools, consisting of a curved blade fitted at an angle to a long, curved handle and used for cutting grain. In modern scythes the handle has a projecting peg that is grasped by one hand, <u>facilitating</u> control of the swinging motion by which grass and grain are cut. The exact origin of the scythe is unknown, but it was little used in the ancient world. It came into wide use only with agricultural developments of the Carolingian era (8th century AD) in <u>Europe</u>, when the harvesting and storing of hay became important to support livestock through winters. Thanks Joanne Kurz.

This video will show you how it is used: <a href="https://scythesupply.com/wheatharvest.html">https://scythesupply.com/wheatharvest.html</a>