The Scroll Saw

Many modern power tools are motorised versions of their hand powered forerunners. The scroll saw, simply put, is a motorised **fretsaw**, that is, a very fine saw blade held in tension in an elongated D shaped steel frame with a handle below the front of the D used for cutting designs in thin wood or metal.

Consisting of a motor below an adjustable table through which the saw blade is vertically oscillated while held in tension from an arm above, a scroll saw is a versatile woodcraft machine. Variable speed control, distance from blade to the back of the supporting frame, the ability to tilt the worktable at various angles to the blade, and a wide variety of blades all contribute to enable the production of a great variety of intricate light woodcraft items.

Blades vary in the number of teeth per inch, the width of the cut (thickness of the blade) and depth of the blade allow for various types of work. For example a *skip-tooth blade*, that is with a gap between each tooth, or several teeth, will clear sawdust more efficiently and is important in thicker timber to prevent clogging and overheating. *Reverse teeth* at the base of a blade cut on the upward stroke and clean the splintering on the underside, resulting in a very smooth finish.

Tilting the table is important in marquetry and inlay woodcraft. The angle of cut, varying with the thickness of the timber and the width of the blade, enables the adjoining different pieces to fit together in an overlap that eliminates any gap. Angled blade cutting can also produce interesting items that involve drop down or pop up wedging.

Scroll saws are sometimes called "jigsaws", hence the name for interlocking wooden piece picture puzzles made using the scroll saw. These puzzles are widely used as teaching aids in kindergartens. Interestingly, by association, the mass produced cardboard pressed out picture puzzles bare the same name, though the number and small size of the pieces would be very difficult to replicate in wood with a "jigsaw".

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