Wedges have numerous uses in a wood shop. They act as clamping aids when edge gluing or building furniture. They are a functional part of some tools as well as most kinds of wooden planes. In *The Fine Art of Cabinetmaking*, for instance, James Krenov used wedges to lock the lower jaws of his shop-made F-clamps. They can also be used to hold the door open to let cool air in. In my shop, I use wedges for assembly tasks, shimming drawers or inset doors, clamping and much more.

Many woodworkers make wedges on their bandsaws. I occasionally cut them on the bandsaw or with a handsaw. Most of my wedges, however, are born on the table saw because it is fast and, contrary to what some think, safe. Before sharing some of their uses, let me explain how to make them.

**Making Wedges with the Rip Fence**

Unlike most wedge-ripping jigs, the adjustable cutting jig I came up with makes wedges of different slopes and sizes on the table saw. It consists of a base, a notch with three adjustment screws and a hinged hold-down cover. To make it, cut out a notch on the base and install the hinged hold-down cover and adjustment screws.
After cutting a notch in the base, install the hinged hold-down cover and adjustment screws.

To cut wedges, adjust the screws to form the desired wedge shape and size. Place the stock into the notch, replace the cover and run the jig against the fence to cut a wedge. To cut the next wedge, flip the stock before inserting it into the notch and running the jig again. Continue this sequence of cuts until the stock is too small to handle safely.

With its tip filed flat, the screw on the cover secures the wedge as it passes the blade.
With the Mitre Gauge

While the jig used with the rip fence handles large wedges well, for smaller wedges or wedges tapered on both sides I turn to another jig. It’s used with the mitre gauge and consists of a board with a hinged stop block, a desirable feature for making identical wedges.

Set the mitre gauge to half of the desired angle of the slope, for example at 1.5° for a 3° sloped wedge. Attach the jig to the mitre gauge where the thickness of the wedge is determined by the distance between the stop block and the cutting line of the blade. Place the stock with its long grain parallel to the blade against the stop block. Lift up the stop block and cut the first tapered side. Flip the stock over and place it against the stop block again. Without moving the stock, slide the mitre gauge away and lift the stop block out of the way. Carefully engage the mitre gauge with the stock and cut the second taper to form a wedge. Repeat the same sequence of steps to make more wedges.

By Hand

Large or small wedges can be cut with a handsaw. Lay out the slopes of the wedge with a bevel gauge on the stock and then mark the cut lines on the end grain with a square. Use a rip saw and cut out the wedges. Cutting wedges by hand gives you plenty of practice perfecting your sawing techniques.
A support piece (on right) keeps the bevel gauge level when laying out the slopes on the stock.

**Using Wedges in the Shop**

In the context of traditional woodworking, here are some examples of how I use wedges in my shop.

**Planing stop:** Used with a couple of bench dogs, a wedge can be tapped to lock the workpiece on the bench for hand planing. It is simple, quick, and economical.

A wedge provides the clamping pressure needed to hold the stock between two bench dogs.
Mitre clamping jig: When gluing up picture frames or mitred moulding pieces, I reach for some wedges and the mitre clamping jig. The jig is easy to make from scrap pieces. Simply screw a square block to one corner of a plywood base and add two straight strips to the opposite outer edges of the base.

A sheet of waxed paper protects the base from getting covered with glue squeeze-out.

Vise racking stop: Instead of spacers, I use a wedge with a lid to support the open end of the vise to keep it from racking. The lid keeps the wedge from falling when adjusting the vise.
The lid and replaceable wedges are attached together by the magnets when in use.

**Wedged scratch stock:** My shop-built scratch stock is different from all others you may have seen. It uses wedges rather than metal fasteners to hold the cutters.
Wedges play a critical joinery role in Tage Frid’s signature three-legged stools. While we may not build a project in the craftsmanship class of Frid or Krenov, we can certainly use wedges as freely as they did.

Text and photos by Charles Mak

Charles Mak is a businessperson and enthusiastic hobby woodworker, teacher, writer and tipster. He works part-time at his local Lee Valley Tools store.

Further Reading