A chisel is a simply remarkable tool. Basically just a piece of steel with one sharpened end and a handle, it can perform the coarsest work to the most refined. You can use it to rough out shaped parts, fine-tune joints, pare plugs, and chop out mortises, among myriad other things. It’s all in how you wield the tool. 

Mastering the chisel is all about learning a handful of basic maneuvers, but learning them well. Here, we’ll show you how to grip, power, and guide this invaluable tool to ensure the kind of clean, accurate paring and chopping that leads to tight joinery and precise detailing. To wrap things up, we’ll show how these techniques can be best employed, using as examples typical operations you’re likely to encounter in your own workshop.

Note: For the sake of brevity and clarity, throughout this article we’ll regard the right hand as the dominant hand. Apologies to our lefty friends, who will have to reverse the instructions.

About Our Authors
Senior editor Paul Anthony and furnituremaker Geoff Noden drew on their combined 72 years of woodworking experience to produce this article. Surprisingly, they had very few arguments about proper technique—a good thing, considering they were both armed with keenly honed weapons. Contact Paul at Paul_Anthony@woodcraftmagazine.com. For more on Geoff, visit geoffreynoden.com.
Basic maneuvers

Press the chisel face flat against the surface to be trimmed.

Powering and guiding
When maneuvering a chisel, use your right hand to power it, either by grasping the tool handle or by tapping it with a mallet. Use your left hand to register the blade against the work and to provide fine control. The left hand generally leads the dance. That is, you use it to locate the chisel tip on target before driving the blade into the work using your right hand.

Your left hand serves as an anchor, as it contacts both the chisel and the work or adjacent workbench surface. It also provides a fulcrum for fine directional control and braking at the business end of the chisel while your right hand provides general steering.

When possible, establish the direction of travel by using the surface to be cut as a reference, as shown in Photos A through C. Learn to guide a chisel as much by feel as by sight. For example, practice orienting the tool vertically (or horizontally), just as you practice keeping a handsaw properly oriented during sawing. And pay attention to the nuance of a particular cut. For instance, if the wood starts to tear, or the tip of the chisel digs into the surface, you may need to try a different angle of attack.

Tip Alert
Although it may seem counterintuitive, the back of the chisel is actually called the face.

Establishing cut direction
When chopping with a mallet, rest your left hand on the workpiece while pinching the blade between your fingers (Photo D). A short chisel works best for this, as a longer tool tends to sway due to its top-heaviness.

When your angle of attack needs to be absolutely precise, there’s no shame in using a guide block. This is particularly helpful when paring miters, as shown in Photo E. To clean up squared notches, use a guide block with a squared end.

A mitered guide block for the chisel ensures precise paring on the ends of mitered moldings or other parts.

Pinching the blade as shown affords much better chopping control than holding the chisel by its handle.
Working to scribed lines
A neatly scribed line—whether made with a knife or marking gauge—creates one of the best guides for a chisel. The scribed line severs the wood fibers at the surface, eliminating tear-out at the joint edge while creating a tiny trough for registering the chisel tip. In a sense, this is the first cut in making the joint.

After scribing the joint layout, the next step is to chop or saw away the bulk of the waste. Ideally, you want to leave just enough waste so that it can be pared away in a single slice afterward. If there’s more than that, pare back to the scribe line taking a series of slices. (Avoid taking too big a bite at once, or the chisel bevel will act like a wedge, forcing the tool backwards and possibly past the scribed line.)

To make the final cut, place the edge of the chisel in the scribed line (Photo F), and then drive it with a series of light mallet taps.

Instead of tapping, you can pare by hand, as shown in the photo on page 42. Keep the blade firmly pinched in your left hand, pressing the hand against the workpiece to serve as a brake to keep the chisel from lurching forward. Again, when making the final slice, locate the chisel tip in the scribed line.

When hand-paring to a scribe line, don’t just push the chisel straight forward. Instead, wiggle the tool side to side as you apply pressure. At first, wiggle it only slightly to prevent pulling it out of the scribe line. As the depth of cut increases, apply more side-to-side motion while increasing forward pressure, the whole time pinching the blade firmly with your left hand pressed against the work to prevent the chisel from lurching forward.

In addition to locating the chisel tip, scribe lines can also provide a visual bead for aiming your chisel. For example, when paring the shoulder on the edge of a tailboard, mount the work in a vise, and sight down the side of the blade to align it with the scribe line made at the base of the tails (Photo G).

Safety Tips
- To prevent slicing the hand that grasps the blade, ease the sides of a chisel with 400-grit sandpaper, beginning about an inch from the cutting edge.
- Always secure work in a bench vise or with clamps to prevent it from slipping during cutting.
- Don’t work with a dull chisel, which requires more force and tends to slip in use.
- Never place your hand or other body part in the path of a chisel, in case it lurches forward.

Bevel Up Or Bevel Down?
A chisel can be used bevel up or bevel down. It’s usually best to work with the bevel up because the back, or face, is self-referencing. That is, when the face is contacting the work, it helps guide the blade parallel to the work surface, somewhat like the sole of a plane. Conversely, when the bevel is oriented downward, it has minimal contact with the surface, requiring a steady guiding hand to hold the tool at a consistent cutting angle while preventing the tip from digging in too far.
Cutting cleanly
As mentioned, scribing a layout minimizes tear-out at the wood surface. There are also a few other techniques you can use to ensure that you’re cutting as cleanly as possible.

First of all, when paring, cut with the slope of the grain whenever possible, as shown in Photo H. If the grain rises in your favor on one tenon cheek, it won’t on the opposite cheek, where you’ll have to cut across the grain, as shown in Photos A-C.

Using a slicing motion can also prevent grain tear-out. For example, when chamfering the end of a tenon for easier insertion in its mortise, don’t just push the chisel straight forward, which will tend to lift the wood fibers. Instead, slice forward and outward toward the end of the tenon (Photo I). This will shear the fibers clean because they’re supported in the direction of the cut.

There are times when slicing with just the corner of the chisel is the way to go. For instance, you may need to remove a ridge caused by a cut made a hair too shy, like that shown in Photo J. By pushing and dragging one corner of the chisel tip through the ridge, you meet less cutting resistance and tear-out than by simply forcing the entire edge forward.

Sharp and Flat
Of course it’s important that a chisel be sharp to work properly, and the sharper the better. But it’s also crucial that the face is flat. If it’s rounded over at the cutting edge, you’ve lost your reference surface. No matter how you sharpen your chisels, make sure the cutting edge is finely honed and that the bevel meets a flat face.
Fine-tuning a hand-cut tenon

Having sawn proud of your scribed shoulder lines, first pare away the waste on the narrow edge of the workpiece. To stay square, sight down the edge of the chisel, aligning it with the shoulder scribe line that runs across the wide workpiece face. Remove any initial heavy waste in a series of paring cuts, then register the chisel tip in the scribe line to make the final cut.

Hold the chisel blade with your left hand resting solidly on the work. Begin the cut by resting the face of the chisel against the previously pared shoulder surface and rocking it into the wide shoulder scribe line. With each subsequent cut, register the face of the chisel against the previously pared surface. Finish up by paring the tenon cheeks as previously described.

Cutting a hinge mortise

After scribing the perimeter and depth of the mortise, chop up the waste for easy removal. Work shy of the scribe lines, leaving a bit to pare afterward for a perfect fit.

Working inward from the open end of the mortise, pare away the chopped waste. Start the final cuts by registering the tip of the chisel in the depth scribe line.

Registering the chisel tip in the scribe lines, pare the ends. Then pare the long edge using delicate cuts to prevent breaking away the thin wall at the rear of the mortise.
Chopping a tenon mortise

After scribing the mortise perimeter and drilling out the majority of the waste, use a wide chisel to pare away the protrusions, staying a bit inside your scribe lines. Anchor your left hand against the bench, grasping the chisel blade to keep it perpendicular as you push downward.

Chop the ends of the mortise, working toward your scribe line in a series of shallow cuts with your left hand anchored on the bench. Make the final cut on each end a light one, beginning with the chisel tip resting in the scribe line.

Finish up by paring the long edges back to their scribe lines. Again, anchor your left hand on the bench with a finger wrapped around the chisel blade to help keep the chisel perpendicular to the surface as you push it downward.

Squaring a routed frame rabbet

After scribing or drawing your layout lines, pare toward the corner in a series of adjacent cuts made at 90° to each other, beginning with the cross-grain cut. Depending on the density of the wood and the depth of cut, you can push or chop, with the latter generally being the faster approach.

For your final cuts into the corner, begin with the cross-grain cut, extending it no further than the layout line. Follow up with an adjacent long-grain cut that perfectly intersects the end of the cross-grain cut.

With its bevel down, slide the chisel into the corner to flatten the surface and remove any residual wood fibers. With your left hand anchored against the benchtop, hold the chisel firmly at the cutting angle while pushing it with your right hand.
Paring projections

To pare splines flush, take a series of slices in the direction of the grain, holding the chisel level with your left hand anchored against the workpiece and your right hand providing the power. Pinching the chisel with your left hand controls forward motion to prevent lurching.

Whenever possible, pare plugs flush with the chisel bevel up so that its face can register against the adjacent work surface. Pare in small slices, as taking too big a bite at once risks tearing out grain or lifting the plug.

When forced to pare bevel down, as near the center of a board, use your left hand to anchor the chisel and to maintain an effective cutting angle. Cut in the direction of the plug grain to prevent tear-out.

Fine-tuning dovetails

After sawing or chopping out the majority of the waste, pare to the baseline. Place the chisel tip in the scribe line and push forward while wiggling the tool slightly side to side. Pinch the blade with your left hand anchored against the workpiece to control the speed and amount of forward motion.

When necessary to fine-tune a pin cheek, use the same basic hand position as when paring to the baseline, but in a perpendicular orientation. To aim the chisel, register its face across the cheek, and then draw it back in the same manner as shown in photos A-C on page 43.

Prepare to pare the shoulders on a tailboard by inserting the chisel tip in the scribe line and sighting down the length of the chisel to align it with the baseline at the foot of the tails. Then press the chisel downward while maintaining that angle.
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