



The invaluable cabinet scraper

BY TIM COLEMAN




The middle sibling. With a cast body and a lateral wooden handle that makes it especially easy to apply downward force, the **No. 12** is well suited for heavy scraping. Used with a lighter touch, however, it also handles finer finishing cuts.



Big sister. The **No. 112**, with its long and beamy sole and bench-plane-style tote and knob, is great at flattening solid and veneered surfaces with difficult grain.

Three styles of scraper



Little brother. Cabinet scrapers, which let you flatten and smooth unruly wood without regard to grain direction, come in three main types, all based on Stanley originals. Above, the author uses a **No. 80**, the most versatile of the three.

I love using figured woods in solid and veneer, and I often create patterned veneer work, which can have grain going in multiple directions. Working these difficult surfaces with hand planes is almost impossible. The tool that has helped me the most to wrangle them is the cabinet scraper. Unlike a hand plane, which requires you to pay close attention to grain direction to avoid tearout, a well-sharpened cabinet scraper cuts equally well with, against, and across the grain. It is a surprisingly simple tool, one that should be in every furniture maker's kit. I own three vintage cabinet scrapers, all made by Stanley—model numbers 80, 12, and 112. They have different strengths, but the function of all three is the same and their blades are prepared the same way.

Sharpening the blade

The cabinet scraper's cutting action, like that of a handheld card scraper, comes from a small burr turned with a burnishing tool on the edge of the blade. Unlike a card scraper, whose cutting edge is 90° to the face of the blade, the edge of a cabinet scraper blade is beveled at 45°.

I begin sharpening by honing the flat face of the blade to a mirror polish just as I would with the back of a plane iron or chisel. The 45° bevel can then be ground (or filed with a mill file), and sometimes this raw edge, without turning a burr, is all I need for rough surfacing on solid wood.

I create a burr on both the top and bottom edges of the blade so that I have two usable cutting edges.

PREPARING THE SCRAPER BLADE



Flatten the back first. Just as he would with a plane blade, Coleman hones the flat side of the scraper blade to obtain a mirror finish behind the bevel.



Then grind the bevel. Unlike a card scraper, whose edges are square to its faces, the cabinet scraper blade gets a 45° bevel along its cutting edge. The bevel can be straight across or slightly cambered. And you can file the bevel instead of grinding it if you choose.



Polish the bevel. Holding the blade so its bevel is flat on the sharpening stone, hone the bevel with a few strokes.



The burr stroke. To create the burr, draw the burnisher across the top of the bevel applying light pressure and holding the tool at a bit less than 90° to the face of the blade.



Reviving the burr. When a burr becomes dull, press the burnishing tool several times along the back of the blade with moderate pressure to draw out the first burr. Then turn a new burr.

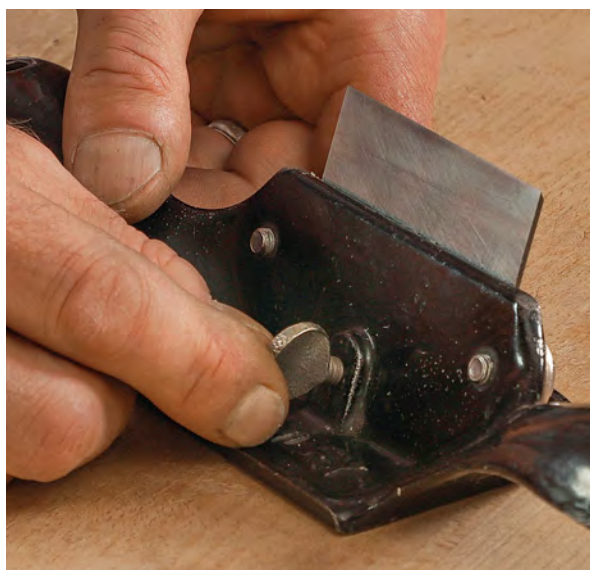
SETUP FOR THE NO. 80

Inserting the blade.

Place the tool on a flat surface with the blade-holder screws and the center thumbscrew loosened. Insert the blade with its bevel toward you and press it to the benchtop. Then gently tighten the blade-holder screws. Coleman's blade holder has replacement bolts for its original thumbscrews.



Tighten the center thumbscrew. Before testing the scraping action, gently tighten the center thumbscrew. Later, as the burr wears, you can tighten the thumbscrew further to flex the blade for a heavier shaving.



Take it out for a test scrape. Coleman takes a few light passes to see that the burr is cutting evenly across the blade's width. If it's not, he repeats the prior step to reset the blade.

The bevel can be ground straight across the edge or with a slight camber. In use the blade wears most in the center and a camber helps mitigate this. To avoid cutting myself on the exposed top edge while using the tool, I slightly round the corners of the blade at the grinder. For fine work, I hone the bevel to a mirror polish before turning a burr.

To create the burr, I hold the blade vertical and the burnisher nearly horizontal. For a freshly sharpened blade, I use very light pressure to turn the initial burr, not much more than the weight of the burnisher. The burr will be almost imperceptible but will produce an extremely fine shaving.

As the blade dulls and requires excessive force to continue cutting, I remove the blade and flatten the burr with the burnisher, then turn a new burr. I can do this three to five times before reconditioning the



Tightened up and making shavings. With the blade adjusted properly, fully tighten the blade-holder screws to lock it in place.



USING THE NO. 80



A friend for fine work. Just like a card scraper can, a cabinet scraper will work delicate and difficult solid and veneered surfaces to a beautiful finish regardless of grain direction. Working this circular veneered tabletop, Coleman scrapes from the center out to the edge; because of the No. 80's short sole, scraping in from the edge isn't advisable.

bevel, but to turn each successive burr I need to apply a little more pressure with the burnisher.

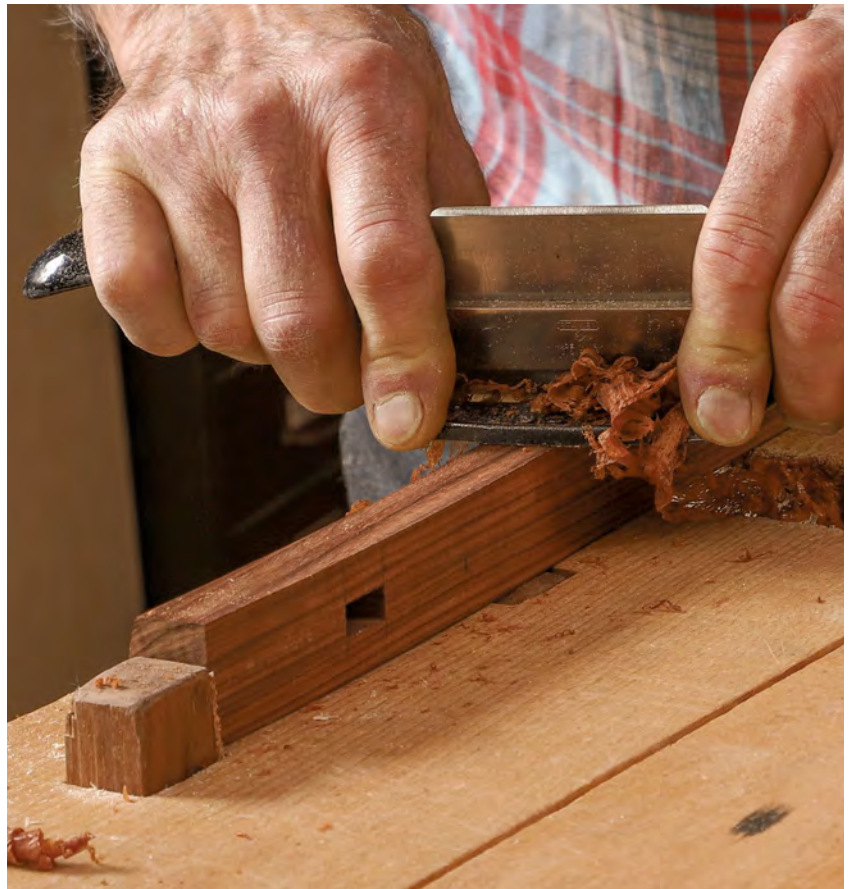
The mighty No. 80

The Stanley No. 80 is the simplest and most versatile of my three cabinet scrapers, and it is always on my bench. Stanley produced several versions of it, and similar scrapers have been made by other manufacturers. The sole of the No. 80 is small and the blade is pitched forward at 70°. A thumbscrew flexes the blade from behind to increase the depth of cut as the burr wears.

The relatively small footprint of the tool makes it ideal for working on small parts, and it is easily maneuvered to change direction on a patterned surface. It excels in the finish stage of surface prep just prior to final sanding. If I have a dining table with a solid top to tackle, I will start with the larger cabinet scrapers for heavier work before finishing with the No. 80. But on veneered surfaces, the No. 80 is often all I need.

Setting up the No. 80

Begin by setting the sole of the tool on the workbench. Insert the blade with the bevel and thumbscrew facing you. Press down lightly so the blade contacts the bench and tighten the blade-holder screws. Turn the thumbscrew so it just touches the blade, and make a test cut. If there's no shaving, tighten the thumbscrew $\frac{1}{8}$ turn. If more



Small parts specialist. With its small sole, the No. 80 is more maneuverable than its larger siblings, making it the cabinet scraper best suited for working narrow parts like this slender table leg.



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SETTING UP THE BIG SCRAPERS

Tilt the blade holder.

Both the No. 12 and the No. 112 have an adjustable blade holder. Coleman sets it to 70°, the same as the fixed blade holder on the No. 80. Twin knobs loosen, adjust, and lock the blade holder.



Insertion.

As with the No. 80, you insert the blade with the bevel facing you and press it firmly to a flat surface. Then tighten the blade with the knurled knob.



Angle of attack.

When flattening large areas with the No. 112 (or with the No. 12), Coleman first works the surface on the diagonals, then finishes up with straight passes.



tightening is needed, or if the cut favors one side, reset the blade. Cutting properly, the tool should make a shaving almost as wide as the blade.

As the burr wears, turn the thumbscrew to flex the blade and continue cutting. When the thumbscrew becomes difficult to turn, it's time for a new burr.

The two big sibs

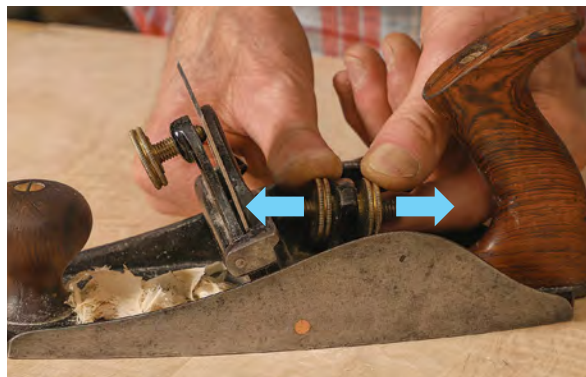
The sole of the No. 12 cabinet scraper is twice as large as that of the No. 80 and the blade is thicker. There is no thumbscrew to adjust the depth of cut. Instead, twin knobs on a threaded rod change the angle of the blade. You tilt the blade forward for a heavier cut, backward for a lighter cut. The outboard handles are set higher than those on the No. 80 so you can really bear down on the tool from above for aggressive work.

The sole of the No. 112 is larger still, and the handles are arranged like a bench plane. The broad sole and substantial weight of the tool make it ideal for flattening large surfaces. It can be unwieldy, however, on smaller parts where the No. 80 excels.

Setup for the No. 12 and No. 112 is the same. Start by tilting the blade holder forward to 70°. The twin knobs that control adjustment only need to be finger tight to do their job and are easy to adjust mid-work. After inserting and tightening the blade, make a test cut. If the tool does not produce a shaving, angle the blade farther forward until it does. If the shaving is too heavy, angle the blade backward.

As the blade wears, continue to tilt the blade forward and work until the tool requires excessive force and is making crumbs instead of shavings. Then remove the blade and turn a new burr. □

Tim Coleman builds furniture in Shelburne Falls, Mass.



Tilt the blade for a heavier shaving. Unlike the No. 80, whose thinner blade can be flexed with the center thumbscrew to take a heavier cut, the No. 112 and No. 12 are adjusted by changing the blade angle. To take a more aggressive shaving, turn the twin knobs to tilt the blade farther forward. For a lighter cut, tilt the blade backward.