

Putting Your Stamp on Furniture



A hammer and a few steel stamps are all you need to create striking embellishment on woodwork

BY TIMOTHY COLEMAN

I live in a Massachusetts town that has deep roots in manufacturing, especially in the toolmaking industry. Several years ago I moved my shop to an 1820s brick mill building on the banks of the Green River. Most recently the building was occupied by the Greenfield

Steel Stamp Co., a manufacturer of number and letter stamps. The day after the company moved out, I moved in.

While renovating the space, I found steel stamps everywhere: in the cracks of the floor, on window ledges, in abandoned storage shelves. Some were im-

perfect castoffs; others were in fine condition. Soon I had collected a large box of them. My 3-year-old daughter used the stamps as toys, stacking them like blocks and rattling them in a plastic bucket. I showed her how to hit the stamps with a hammer to make a mark in

wood. One day I joined her in playing with them, and it was not long before I was making patterns with the letters and numbers. The patterns were abstract, hieroglyphic, spontaneous and, above all, fun to make. Stamping on wood scraps became part of the daily

routine for my daughter and me, and the more we stamped, the more possibilities I saw for stamping on furniture.

There is a rich tradition in furniture making of creating decorative surfaces with marquetry, inlay, carving and patterned veneer. I use them all. But I have learned that each of these techniques demands a great deal of planning and precise work to achieve the desired effect.



Windfall mill. The author stumbled upon a cache of steel stamps and a new way of decorating furniture when he rented space in this mill previously occupied by a stamp-making company.

While I enjoy working this way, I also crave a more spontaneous way of embellishing a surface—one where the planning can happen right on the work. My windfall of steel stamps gave me this freedom. With a few stamps, a small steel hammer and a V-parting tool, I found that I had all I needed to create my own vast catalog of patterns.

A world of patterns

Hit the stamp with a hammer. That's about all you need to know about how to use steel stamps on wood. There is a learning curve with this technique, but it has more to do with creating patterns, selecting wood and designing and making the stamps.

As I began to create my own patterns with stamps and carving tools, I noticed patterns everywhere—on wallpaper, textiles and ceramics, on the pages of children's books, on

coffee mugs and on billboards. Once turned on, this awareness could not be turned off. I would record patterns on scraps of paper. I bought books on patterns, and I worked out my own with crayons and markers when I colored with my kids.

What most captivated me was the way a few simple shapes could be combined to create a striking overall effect. A crescent shape, a dot and a letter O, for example, could be arranged in dozens of combinations. Lately I have been working with patterns that resemble lacework. I have found these three shapes to be remarkably versatile in this kind of pattern work.

I develop most of my patterns on sample boards. The samples have become my sketchbook, and I have filled boxes with them. I begin with a few stamps and combine them in different arrangements until an interesting pattern emerges. I experiment with both random and ordered effects. I arrange the marks loosely, and I cluster them tightly. I put them in rows. I invert the rows. I add a V-groove to break up a row or to separate a stamped section from an open field. I border a random arrangement of shapes with an ordered arrangement of the same shapes. I create a grid or add a few strategically placed lines with a V-parting tool or a veiner to add definition. I work quickly and by eye with very little marking out. I am spontaneous and playful and often surprised by what emerges.

I try to carry this spontaneity onto my finished pieces, working with as few layout lines as possible. It's not difficult to fill a space with reasonably regular marks. If I'm stamping along a line, for instance, I simply estimate the center point and make a stamp there. Then I estimate the center points of the two halves and stamp them and continue this way until the

BUILDING THE PATTERN



Begin with a V-groove. The author follows a pencil line with a V-parting tool to cut grooves that establish the radius of the pattern.



Crescent lays the groundwork. Referring occasionally to his sample pattern, the author begins a pattern by stamping the large crescent, judging the spaces between marks by eye.



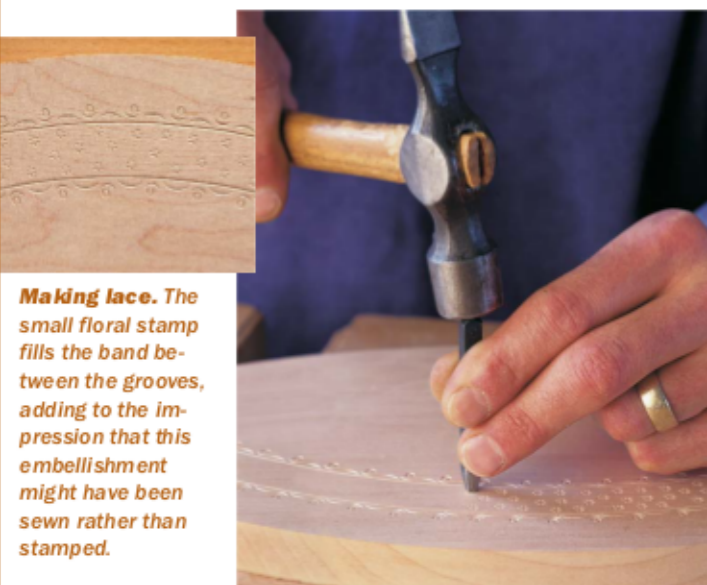
Filling in. With the grooves and the first stamp having established a framework, building the rest of the pattern is a matter of filling in.

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BUILDING THE PATTERN (continued)



Circle stamp. A letter O stamp on the waves of crescent stamps provides definition on the outside edge of the pattern.



Making lace. The small floral stamp fills the band between the grooves, adding to the impression that this embellishment might have been sewn rather than stamped.



Black makes it jump. Applied after a coat of sealer, black lacquer amplifies the stamped pattern. A scraper makes quick work of removing the black lacquer from the unstamped surfaces.

space is filled. The slight irregularities that come from working by eye give the patterns a lively, handworked feeling.

Woods and colors

The woods I prefer are light colored, have a firm texture and have closed pores. Maple, pear, English sycamore, beech and cherry all work well. I have had limited success on open-pored woods such as mahogany and walnut. I must choose stamps carefully for these woods because small, delicate shapes stamped in them tend to lose their definition.

Sometimes I add color to the patterns. While color is not necessary to make stamping an interesting addition to a piece of furniture, it can make certain patterns jump. I have used colored lacquer and gesso, as well as tinted varnish and shellac. After I have done the carving and stamping, I apply a sanding sealer to the surface to keep the colored finish from migrating into the wood's pores. If I will be spraying lacquer, I use a vinyl sealer; with the other finishes, I simply use a thinned, untinted coat of the main finish as a sealer coat. Then I spray or brush the color medium. When it dries, I scrape or sand off the color from the surface, revealing the color-filled stamped pattern underneath. I have spent many months developing coloring techniques, and I have had as much failure as success. The difficult part is keeping the color from migrating into the surrounding wood.

How to make steel stamps

When I first used my inherited stamps, I covered sample boards with various patterns of letters and numbers. I discovered that some of the stamps worked well as I found them, particularly zeros and Xs. But most of the stamps, designed to make an imprint on metal, did

not make a mark in wood that was as crisp and defined as I wanted. I thought that if I could modify them and create my own stamp figures they would be much more useful to me.

The stamps I found were made of hardened steel. I knew that I should be able to soften, or anneal, the tip of a steel stamp by heating it red hot with a torch and letting it cool. The stamp could then be worked easily with conventional files. Using this method, I made a collection of reworked stamps in a variety of shapes and sizes.

Recently I have been making stamps from new steel. I buy unhardened O-1 steel in 36-in. rods from an industrial supplier (McMaster-Carr: 732-329-3200). I have a machinist cut the rod into 3-in. pieces. On some of the pieces I have him grind facets on one end to create a four-sided or six-sided blank; this gives me some stamps that create round patterns and others that create square or hexagonal ones. Recently I bought a selection of 1/4-in., 5/16-in., 3/8-in. and 1/2-in. rods, and I had them cut to length and faceted. I ended up with some 120 stamp blanks for a total of about \$150. The rods can also be cut with a hacksaw and worked with a flat file to create the facets.

To create the figures on the blanks, I usually begin by drawing the shape on the end of the blank. I then use a variety of half-round, triangular and knife-edged files to create the shapes. I have three sets of needle files in varying degrees of coarseness for roughing out and finishing off the shapes. I use flat mill files to work the outside edges of shapes.

I can make most stamps very quickly—it takes about 20 minutes to make a simple shape such as the one in the photos on the facing page, and up to an hour to make a more complex shape such as a five-pointed

star with a hole in the middle. Along the way I try them out to see what kind of mark they make and refine them as needed. Perhaps the angle on the sides needs to be changed or the size of the figure itself needs to be larger or smaller. In the same way I am always reworking my old stamps. A stamp that works in one circumstance may need to be altered to perform well in another.

If you prefer to buy steel stamps that are ready-made, there are a variety of mail-order sources. MSC machinists' catalog (800-645-7270) carries number, letter and a few symbol stamps. The Highland Hardware catalog (800-241-6748) has a selection of decorative stamps in hardened steel made expressly for use on wood.

Which shapes are best?

I have learned that some stamp shapes work better than others and that stamps behave differently in different woods. I try to keep the amount of steel that enters the wood to a minimum. Sometimes I drill a hole in the center of the blank. This reduces the bulk of the stamp, and it also allows me to create a circle stamp or to use the hole as the nucleus for a figure.

I file fairly steep angles on the edges. This creates a slight wedge effect and makes a mark that is larger than the tip as the stamp goes deeper into the wood. The idea is to make a clean impression in the wood. A stamp with a rounded tip or ragged edges will tend to crush the wood fibers and distort the intended shape. Often I bring the tip of a sharp, chisel-edged shape (such as a crescent) to a polish with sharpening stones and a buffing wheel so that it enters the wood more cleanly. On shapes with a blunt tip

STAMP MAKING

Worked with an assortment of small files, a raw blank of tool steel becomes a finished stamp in a matter of minutes.



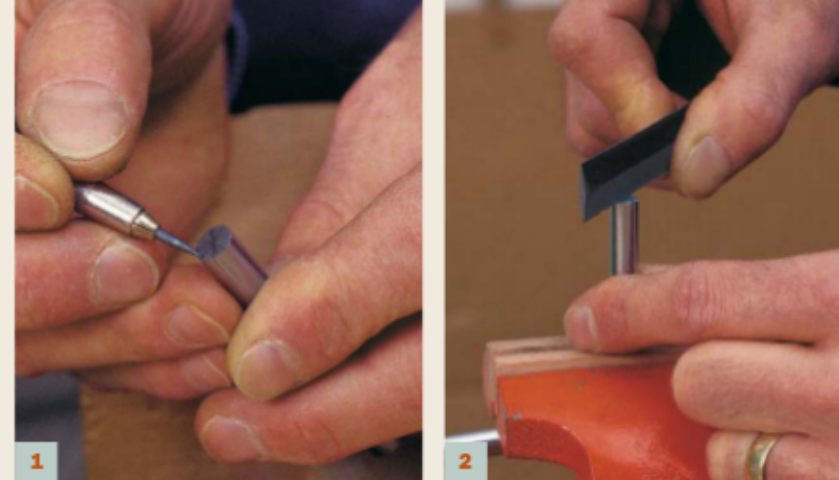
1. Blank layout. Pencil lines guide the initial file cuts.

2. Thin goes in. The author uses a Japanese saw file to score the end of the blank in a star pattern.

3. File me deep. A variety of wider files create the V-grooves that take the blank to its final shape.

4-5. A quick jig. A right-angle jig and a flat file make quick work of flattening the end of the finished stamp. The same jig is used on the sharpening stones to bring the end of the stamp to a polish.

6. I got the opposite impression. As with other kinds of printing, designing stamps requires you to envision the reverse of the shape you want to create in wood.



(stars, parallel lines), I make sure that the stamp face is very smooth and flat. To do so I hold the stamp in a right-angle jig and use a mill file to establish the initial flat. I then use the same jig on a sharpening stone to remove the file marks.

I am drawn to simple shapes rather than to complex ones. I have come to favor arcs and crescents in various sizes, sharp and blunt dots, star shapes, cir-

cles, parallel lines and checkerboards. Simple shapes also make clean marks. I keep several sizes of the same shape so that a pattern can be scaled to different uses—on a border, filling a field or adding texture.

My work with steel stamps has been an adventure. From my first encounter with the stamps through my immersion in the world of patterns, I have been pulled along by the ex-

citement of new discoveries. The technique is fresh and versatile, and as my pattern vocabulary grows, I find more ways to use stamping on my furniture. What began as a very primitive way of playing with tools and wood has become an essential component in my repertoire of decorative techniques. □

Timothy Coleman designs furniture in Greenfield, Mass.