RUBBER STAMP: THE MINIATURE MATRIX

BY RAND HUEBSCH









(above and left) Brayer-inked with oil-based black etching ink, then hand-printed as rubber stamps. They are among the 18 chapter headings, used actual size (2"h x 4"w), for the young-adult novel The Telling Pool (Harry N. Abrams, 2005).

When I first learned to carve rubber stamps out of soft-polymer blocks, I enjoyed the process so much that it was my sole printing technique for a year. As miniature relief blocks that are inexpensive to make and easy to print, stamps are ideal for introducing to students such printmaking concepts as the multiple image transfer, inking variations, stencil cutting, and color registration.

Materials

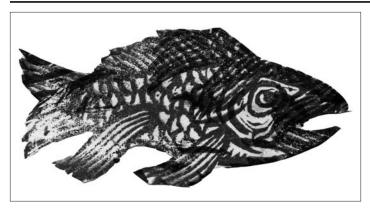
Carving blocks Linoleum-cutter set (one handle and various interchangeable blades) Soft-lead pencils or felttip pens

- Stamp pads
- Smooth paper

Please note: There are a number of blocks that can be used, and, for that matter, so can erasers, such as Artgum, which have the advantage of being easily obtainable at stationers. However, the best carving block is Mastercarve, produced by the Staedtler Mars company from the same soft polymer used for its erasers. The block cuts like butter; unlike some others, it is neither rubbery, impeding the cutter, nor does it crumble along the edges of the carved line. The 4" x 4" size is often the most economical and can be cut into smaller pieces with scissors or an Xacto knife against a ruler held firmly on a carving block. All of its surfaces can be carved. You can also buy the small erasers made by Staedtler Mars and then use several together for a composite image.

Drawing and Carving a Stamp

First, stamp a light color onto the block. Stamp off any excess so that when you start to carve, there will be a helpful contrast between the colored surface and the white of the carved areas.



Paper stencil (actual size and printed from a carved polymer block) used for overlap printing. The print (4"h x 6"w) shows a school of fish and was made using water-based stamp pads, with crayon additions. See inside front cover for color illustration of school of fish.

Next, either draw your design directly on the block or do an image transfer, for which tracing paper works well. Trace the outline of the block onto the paper to provide a framework within which to draw. When the drawing is done, reposition the block within that outline, press it against the drawing, and repeatedly tap or press all over. If the transferred image is faint, you can reinforce it before carving.

For carving, some people grip the cutter's handle as they would a pencil. I prefer to hold it so that my palm is underneath and my fingers curl around it. In either case, hold the cutter so that it is at a diagonal to the block, and the "u" of the blade is right side up. Place the block on a solid surface, like a table top, and steady it with your free hand.

Engage the blade into the block, and then very slightly move it upward in the material when you start to carve. Don't press too deeply. Each width of gouge makes a distinctive mark, like a brush. Try varying the carving pressure, to produce a widening or narrowing line. I use an X-acto-like blade only rarely, for neatening the interiors of corners. Broader blades or gouges are good for clearing large areas. It is important to remember that these blades and gouges are sharp. Always carve

away from youself and keep the steadying hand to the side of the pointed end of the linocutter.

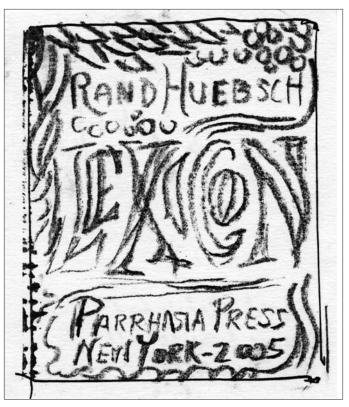
Carving Tips

To increase the width of a line, so that more of the paper shows in the print, use either the same blade in a second stroke along one edge, or a thicker blade. For a curved line, turn the block while carving, as in wood engraving; the slower the carving motion, the greater the control. For a tight curve, turn the block more quickly

While lines and dots, rather than crayon-like gradations, are best suited for relief images, you can create some tonal areas on the block by selective sandpapering. At various stages of carving, test-print the stamp; draw with white pencil onto the proof, then study that to see whether to carve away the corresponding area on the block.

Inking and Printing

To ink the stamp for printing, place it on a stamp pad and, using medium pressure, tap it all over. I prefer the felt pads to the foam ones. Dye-based inks may be less fugitive than other kinds. Some of the inks are water-fast, so that once they dry, watercolor washes can be added and the print will not smear.



Pencil sketch for image transfer to carving block. (The transferred sketch reversed on the block to correct itself for printing.)



Title-page image (4"h x 3"w) from relief-rolled block, printed with oil-based etching ink.

Look at the block to make sure that there is an even coverage of ink then press it onto the printing paper. Holding the block in place, use that same tapping motion, but with more pressure, to transfer the ink. It can help to have the paper on a slightly cushioned surface, such as a blotter. Although smooth-finish papers provide for the most even printing, also try textured ones, especially if the image is bold.

You can instead place the stamp face up, put paper on top, and apply pressure with a disk or baren*, as is done in traditional Japanese woodblock printing.

Before printing in another color, stamp off all the ink to avoid contaminating the next pad. When finished, clean the block with soap and warm water.

Transferring ink from pad to stamp by brayer usually gives a more even coverage. It also allows for a larger-size block than could be fitted onto a stamp pad. You can also put a thin strip of water-based block ink, such as Speedball, onto a sheet of Plexiglas or shatterproof glass, roll up the brayer, and apply to the stamp. Take care not to over-ink and fill in the carved lines. Adding acrylic retarder to the ink on the slab can slightly delay its quick drying time. As oil-based block inks dry more slowly, they are easier to use, and they also provide a more opaque printed image. Clean-up for them is easy with vegetable oil, then soap and water. You can also ink the blocks selectively with water-based crayons, such as Caran d'Ache, that have been dipped in water. Magic markers can be used too, but they dry very quickly on the block.

Anthologies of woodcuts can provide many image ideas. It will help to keep in mind two basic relief-printing concepts: (1) the image on the block reverses on the paper and (2) only the un-carved areas will receive ink and thus create the printed image. For design planning, draw with white pencil on black paper, to approximate carved areas on the block. This white-line carving approach is very direct, as it involves a single stroke of the blade. Prints by Thomas Bewick, originator of wood engraving, are good examples of white-line images.

Albrecht Dürer's woodcuts are remarkable examples of the black-line approach, which requires that material be carved away on both sides of any line that is to print black. (For a black-line image from a white-line carving, use opaque white ink on the block and then print on black paper. Reserve a border of uncut block around the image, so as to have a white border when the block is inked.) Many artists like to use both approaches in an image, as the German Expressionists often did in their woodcuts.

Variations

For traditional multi-color printing, make a block for each color in the image, by means of separations. All the blocks should be of uniform size. Use the outline of one of them as a framework for the prototype color drawing (in designing that prototype, make use of the fact that an overlap of two waterbased inks produces a third color). Then draw the outline of the same block register by eye, or make an Lshaped cardboard jig that is placed on the paper and in the corner of which each inked block is positioned successively.

The jigsaw block, such as Edvard Munch used, is another multi-color approach. Plan the image so that different sections will be of different colors. Carve, then cut the various sections apart (with X-acto knife or scissors), so that each can be inked in a different color. Print one section at a time and don't remove section A from the paper until you have positioned section B next to it. Or assemble all the inked elements, face up, and then place thin paper on top and use the baren to apply pressure and print.

The rubber stamp is well suited for repeat printing within a composition or to augment existing images. When the stamp is used in this way, it is best to carve the surrounding polymer down to a level that will not receive ink. Among the more obvious images for repeats are leaves, birds, plants, and architectural details, as well as abstract elements. With a single stamp, you can also obtain a great variety of multiples, by printing it in different colors, directions, overlaps, and "ghosts" (a second printing without reinking). For me, one of the pleasures of printmaking is the paradoxical option of using the same matrix for printing variations.

For an overlap effect (as in a flock of birds or school of fish), first make a masking stencil by stamping on paper or thin

on tracing paper. Place that sheet over the prototype and trace the outlines of all the areas of the same color. Transfer that information to the block for carving. Repeat the process for each color block. Once all the blocks are made. you can experiment with different color combinations. For printing the blocks, either



Bestiary, composite print (8"h x 11"w), relief-rolled blocks, printed with oil-based etching ink

Mylar, then cut away all the material surrounding the image. Place that stencil on top of a print of the same image; then print, either with the same stamp or a different one, so that only part of the stamp is on the paper and the rest is on the masked-out print. Remove the masking stencil and you will see that the first stamped image appears to overlap the second. A Mylar stencil lasts longer than a paper one and has the advantage of letting the underlying image show through for positioning of the stencil.

Using Stamps in Books

Stamps, in all their variations, are ideal for use in artist's books.

Excellent for unique pieces, they are also very efficient printing elements for editions, often to indicate narratives (such as a tree that has many leaves on the first page of the book and gradually has fewer and fewer). In

my accordion book *Lexicon*, there are three stamp images on each page, to form a composite. Throughout the book, most of the stamps are repeated in various combinations. For example, image A may appear on one page with images B and C, and on another page with images E and F. Entire bodies of text can be created on a block, or image and text can be combined on the same piece of carving material, as was done on wood for printing 15th-century block books in Europe. Stamps can also be used to make book plates.

Tunnel books, also known as peepshows, can benefit from stamp images. The tunnel structure consists of a series of parallel imagebearing panels, all containing cut-out areas, except for the rear solid panel. The panels are attached on two sides to accordion-folded strips, so that they can stand upright when those strips are extended, to form a multi-dimensional scene. Using the same stamp on each accordion-strip interval between panels helps to consolidate a scene. Similarly, printing the same stamped images on more than one panel can serve to unify time and place. In Night Desert, for example, the cactus image appears in several panels. Conversely, the tunnel-book's multi-panel structure can imply a sequence of time or a metamorphosis. To

Making an Inset Book Cover to Display Your Plaque

To display your plaque in an inset book cover, first cut two pieces of board to the same size. One of the pieces can be of museum board, which is easier to cut than book board. Place the *embossed clay piece onto the lighter* board and draw the plaque's outline. Then cut away, with an X-acto knife, the material within the outline. Adhere the two boards to each other and place under weights to prevent bowing. When they are dry, glue paper or cloth onto the side with the recess. Press the paper or cloth into the recess and wrap it around to the inside of the cover as normal. Apply all-surface glue to the underside of the plaque and position it within the covered recessed area. This framing premise can also be used for presenting embossed tiles or relief pieces.

exploit that aspect, print the successive accordion intervals with stamp images that vary slightly

> from each other, in the manner of Eadweard Muybridge's photographic studies of motion.

Plaque Insets for Book Covers

It is also possible to emboss with carved blocks onto air-hardening craft clay, to make light-weight, plaque insets for book covers. Make a ball of the clay, keeping in mind the dimensions of the stamp to be used. Flatten it with a rolling pin, to make a 1/4-inch-thick slab. Press the carved block into the clay and then slowly remove it with a slight rocking motion, so as not to damage the impression. Excess clay around the image can be trimmed away with an X-acto knife. Try both inked and un-inked

embossing. Once the clay has hardened somewhat on the face-up side, turn it over, as the underside tends to stay damp. When the piece has dried thoroughly, you can add color selectively to the raised areas by rubbing them with oil or waterbased crayons held at a horizontal to the surface. Use sand paper as needed to smooth out areas, including the back of the piece.

When carving stamps for embossing, keep in mind that the block's recessed lines will appear as raised areas on the clay. (To easily make a plaque with recessed lines, you can carve a recessed-line stamp, print it on clay, and then use that plaque as the matrix for "embaseing" onto a second

"embossing" onto a second piece of clay.) Use a wider blade and cut more deeply than usual for this technique. Experiment with blades of different widths in the same image, for example, a thicker blade for the outline of a leaf, and a thinner one for its veins. As you are creating a basrelief piece, study the stylization in carvings from various cultures. Look at Egyptian and Aztec friezes, Medieval ivories, and Renaissance commemorative medals, and apply to your work some of their figure/background conventions. If you plan to use glass paints on the dried plaques, to give them a glazed quality, try first applying several layers of shellac to seal the clay, so that it doesn't absorb the paint. &

*A baren is a complex and somewhat obscure tool used in printmaking. Originating in Japan, the traditional baren is made from nothing but scraps of paper and shreds of bamboo skin but is one of the most sophisticated tools available to craftsmen anywhere. When using a finished baren, one can "feel" the woodblock right down through the disk and coil. Look for more details about the printmaker's baren in the next issue of Bound & Lettered!





Composite image (4"h x 3"w) printed with water-based inks.