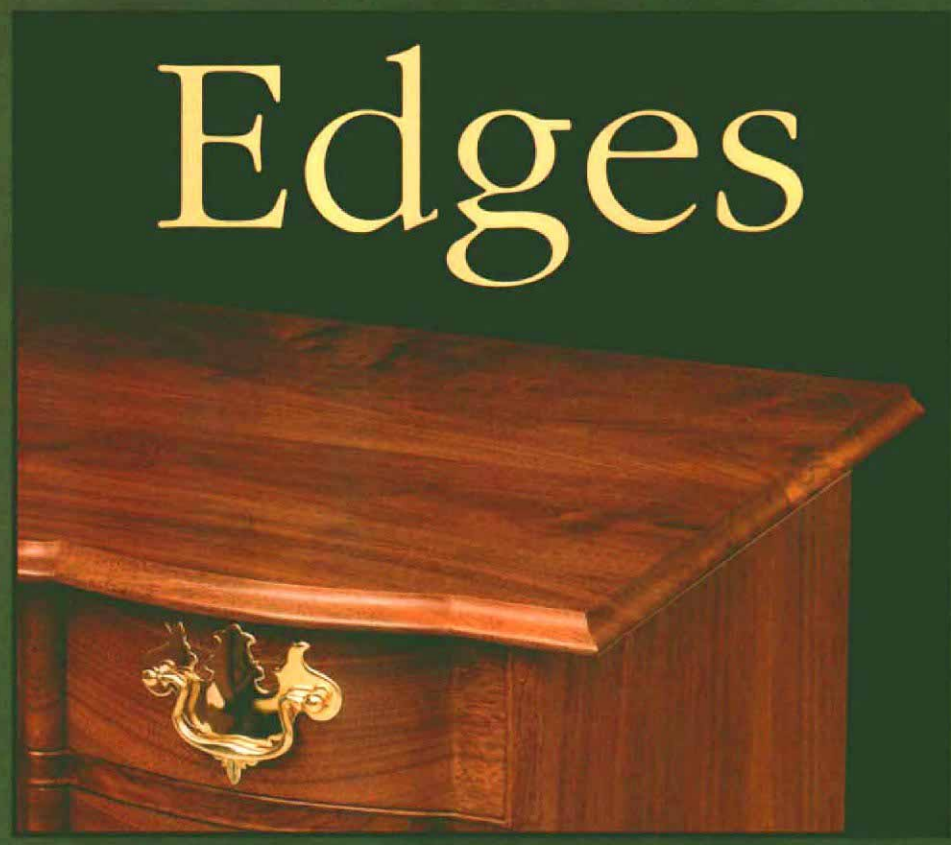
Going Over Edges



Understanding the design implications of edge treatments will improve the look and feel of your work

BY WILL NEPTUNE

Top edges are an opportunity, a chance for a furniture maker to reinforce and enhance the overall design of a piece: to emphasize the horizontal or vertical aspect, to draw attention away from the base and toward the top or vice versa, to repeat an element or quality of the base, or to take the piece in a new direction. But a top edge, whether on a table, a desk or a case piece, is not experienced in isolation. Rather, the edge affects you in concert with the rest of the piece.

An edge is a kind of hot spot, a place where the top and the base come together. An edge is also just one part of the top. When you design an edge, you must consider the size and the shape of the top, as well as the edge profile itself.

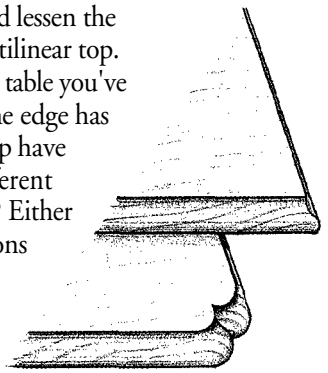
I'm going to look at 18th-century edges because they're the ones I'm most familiar with and because the 18th-century furniture makers worked out most of the moldings and edge profiles we're still working with today. If edges themselves are an opportunity, so too is the study of edges. Whether you build 18th-century reproductions or your own contemporary creations, a close look at edge treatments offers you a chance to add another set of options to your designer's tool kit.

The game of edge design is one in which little moves often have big consequences. Imagine two Queen Anne lowboys,

Photos: Lance Patterson

Edge ignores base. *The shaped top of this Connecticut lowboy is a bold design (imagine the lowboy with a rectangular top), but there is little relationship between the top and the base.*

similar in size and overall design. Both have rectangular tops with simple ogee moldings, but one has dimpled corners (see the drawing at right). In the latter, the small, curved creases in the molding soften the edge and lessen the severity of the otherwise rectilinear top. Or imagine that the top of a table you've made looks too thin once the edge has been molded. Should the top have been thicker or would a different molding have looked better? Either way, the slightest of alterations might have made all the difference.

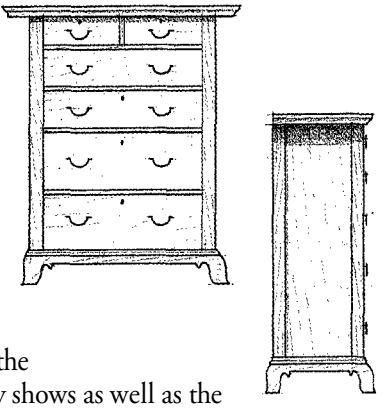


Sizing the top

When designing a tabletop, you should consider the size of the top before the shape of the top or the treatment of its edge. This is because you first take in the overall stance of a piece. You register the thickness of the top and the degree of its overhang long before you take in small-scale details such as the profile of the edge. From a distance, the elevation (front) view dominates the plan (top) view. A thin top tends to make the entire piece seem more delicate; a thick top tends to have the opposite effect. Large overhangs emphasize the horizontal; small overhangs allow you to grasp the relationship between the top and the base.

But the interaction of overhang and base is rarely so simple. As you come closer, a large overhang will block the view of the base. This limits opportunities for small edge details to tie the base and top together. So large overhangs tend to put a premium on plan-view design ideas. It may be enough for a large rectangular top to be made of beautiful wood: a single wide board or well-matched, figured wood. On such a table, a simple edge treatment will hold the viewer's gaze to the center of the top, emphasizing the wood itself.

Now consider a table or case piece for which you want to emphasize one elevation over the others, say a chest of drawers that will be viewed mostly from the front. The side overhang can be large, creating a strong horizontal effect from the front, and the front overhang can be small. The benefit of the small front overhang is that, as you come closer, your view of the base isn't cut off. Lowboys (see the photo at left) and block-front bureaus (see the photo at left on p. 53) are both good examples of this design idea. Even up close, the scrolled apron of the lowboy shows as well as the top. With the bureau, the focus on the stack of shaped drawers is reinforced by having a shallow front overhang shaped to match the curving pattern of the drawers.



If the overhang is kept small on all sides, a curious thing happens. The horizontal quality of the top is suppressed, and the overall visual effect is one of compactness, which can be seen in the Newport block-front desk (see the photo on p. 52). A small overhang on the desk contributes to a compact stance and places the emphasis on the elevation.

Shaping the top

In addition to the size of a top, the shape of a top in plan view provides another level of information to read along with the edge treatment. A top with a visually active shape leads the eye around its edge. If the edge itself has an interesting profile, the shape of the top can intensify the effect of the profile. Tripod pie-crust tables (see the photo below) are a perfect example of this phenomenon.

Historically, shaping the tops of tables and case pieces was an expensive and desirable alternative to the more common rectangular top: embellishment equaled sophistication. However, I believe shaped tops proliferated due, as much as anything, to their dramatic visual effect. In many instances, a simple four-legged rectangular base would receive a shaped top to dress it up. Another approach was to have the base and top share a common form. The top becomes an extension of the base: The shaped

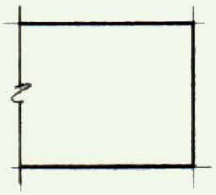
Edge amplifies top. *In this pie-crust table, the top is intricately shaped in both plan view and in elevation. The concentric curves of the concave and convex edge carvings produce a pattern of inside and outside corners, enhancing the effect of the top's shape.*

Drawings: Vince Babak

A glossary of edge profiles

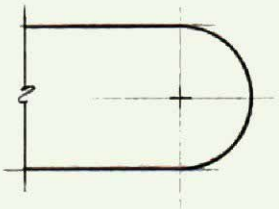
SQUARE

This most basic edge shape is bold and simple. The single vertical surface will light up as a uniform plane or be uniformly in shadow.



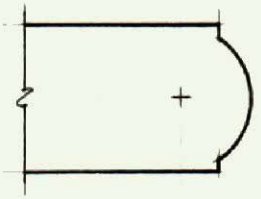
HALF-ROUND

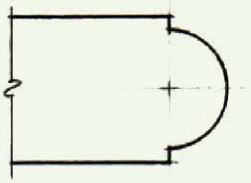
The curve of the half-round (or bullnose) flows smoothly into the flat surfaces, softening the appearance of the edge. There are no hard surfaces or corners to interrupt the flow, but the price is the lack of clear boundaries. Though still a simple shape, the half-round seems more complex than the square edge because as you move around it, bars of light travel across its curved surface.



ASTRAGAL

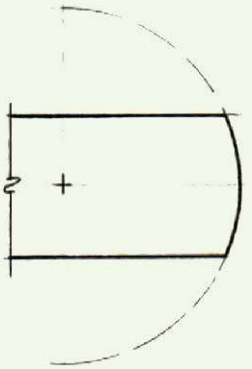
The astragal begins as a soft half-round, but adds fillets to both sides. The combination of flats and a curve creates a bolder and more severe border than that of the segmental (at right). The added complexity of the flats makes the top appear thinner.





SEGMENTAL

The segmental produces the same softness and sense of movement in light as the half-round, but the corners formed where the curve breaks at the flat win back some hardness and provide a definite border. Moving the compass point inward makes the edge a smaller piece of a larger circle; if the circle gets too large, the segmental appears as a square edge. But if the circle gets too small, the edge becomes, in effect, a half-round because the corners are less distinct.



edge functions as one more layer of concentric information.

By itself, a shaped top shows only in plan view; it essentially disappears in true elevation. But when moldings are introduced to the edge, a new effect develops. Patterns of shaped miters occur at every break from flat to flat, curve to curve or curve to flat. Often a shaped top develops a rhythm of inside and outside corners. This rhythm has a powerful visual effect on the edge. The more complex the molding, the more complex the intersections, and the more powerful the effect. If either the top or the molding was square, the effect would be lost.

Edge emphasizes elevation. *The molded top edge and submolding on this Newport knee-hole desk read as one wide molding. The vertical quality of the wide molding emphasizes front elevation over plan view, directing the eye to the shells, which terminate the blocked design.*

Molding the edge

Once you've looked at the way the size and shape of the top interact with both the top edge and the overall piece, you are ready to consider the edge itself. The design of an edge profile is all about curves or the lack of them. When it comes to designing curves (whether they're an aspect of an edge or of some other furniture element), there are those who prefer freehand curves and those who prefer compass-based constructions.

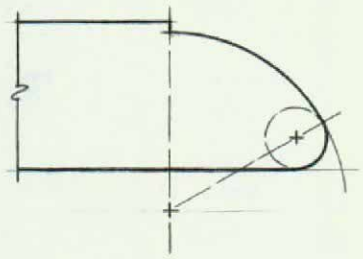
I certainly work with freehand curves, but I find myself reaching for a compass more often than not. I typically begin with either a tracing of an edge profile from a period piece or a rough freehand sketch of an edge profile I like. Then by careful observation and some guesswork, I try to find compass settings that will pass a line along the original. Many times two or three compass points will get me very close.

A curve that is pleasing to the eye is said to be fair. I've found that experimenting with a compass gives me a good sense of the character of fair curves. You can't kid yourself with a compass: either the radius lines of the two arcs share a common line or

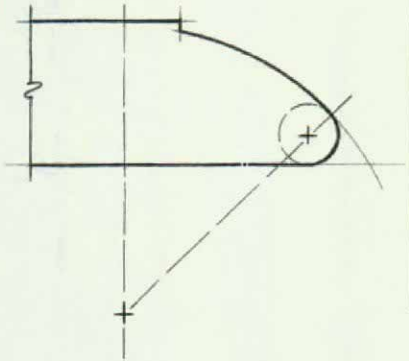
Furniture makers: lowboy: Peter Tischler; pie-crust table: Robert Richards; knee-hole desk: William Locke; block-front bureau: John Bueti; tripod table: Kate Hawes

THUMBNAIL

In a thumbnail edge, the curved surface is tipped, blurring the distinction between vertical and horizontal, yet the small top fillet provides a crisp border.



Moving the compass point down and to the left, as in the thumbnail below, generates a larger curve, flattening the edge profile.



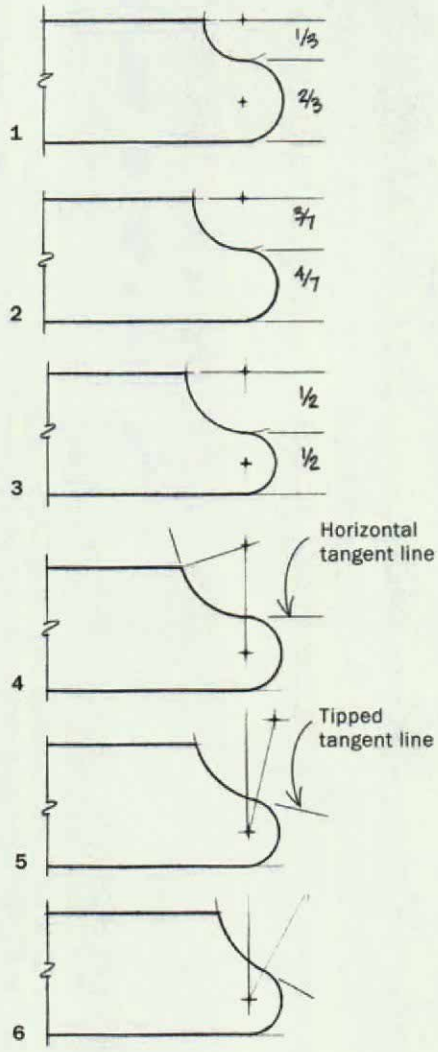
OGEE

The reverse curve of the ogee breaks the thickness of a top into several horizontal bands. This layered effect makes the top look thinner and more delicate. The concave and convex parts of the curve are perceived as separate elements, but because the transition is fair, there is no hard line to interfere with the feeling of softness. And yet, the crisp top corner provides a distinct border.

Ogees 1 to 3 have similar curves but different proportions. Increasing the radius of the upper, concave curve changes the overall proportions of the profile, making the half-circle nose appear pointier.

In ogees 4 to 6, the compass point for the concave curve moves upward. As the compass point moves up, the arc becomes less than *a* quarter-circle, and the top corner becomes more obtuse, making it softer and less defined.

A more subtle effect occurs where the concave and convex curves meet. If the convex curve completes a half-round, as in ogees 1 to 4, you sense the horizontal tangent line at the top of the curve. This comes across as a shelf, and gives the edge a harder, even harsh, look. Moving the compass point both upward and to the right, as in ogees 5 and 6, allows you to begin the upper, concave curve before completing the half-circle of the nose curve. This tips the tangent line away from horizontal and gives the resulting S-curve a more gentle feel. —*W.N.*



they don't. Flats or dead spots on a curve show up quickly with a compass because you can't get the curves to meet.

As a practical matter, designing edge profiles by using sections of circles enables you to use common, in-stock cutters to mold the edge. For short runs, I often find it quicker to cut an ogee with two router bits rather than to grind a large cutter. Using part of the curve of a core-box bit and shortening the wings of a quarter-round bit will allow you to mold ogees with little cleanup.

Over the years, I've observed a few fundamental principles for designing edge profiles: Round surfaces are softer-looking than flat surfaces; vertical lines and horizontal lines have a more severe effect than angled lines; 90° corners have a harder look than obtuse corners; the viewer of an edge reacts to shadow and light as much as to volume and shape.

Edge reinforces base. *The blocking in this Boston block-front bureau is worked out through the entire elevation. The top edge is molded following a pattern of curves concentric to the drawer-front plan. The blocking design is reinforced by the top-to-base relationship.*

Edge repeats base. *The carefully matched veneer pattern on this Biedermeier tripod table leads the eye around the edge, making a direct visual connection between top and apron.*

In the glossary shown above, I look at six basic edge profiles. The trick for the designer is to manage all the variables of the edge treatment while keeping an eye on the rest of the piece as well. A hands-on approach is the only way, ultimately, to discover the edge treatments that make sense for your work.

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