"More Often Used Than to Good Purpose: Empire Period Card Table

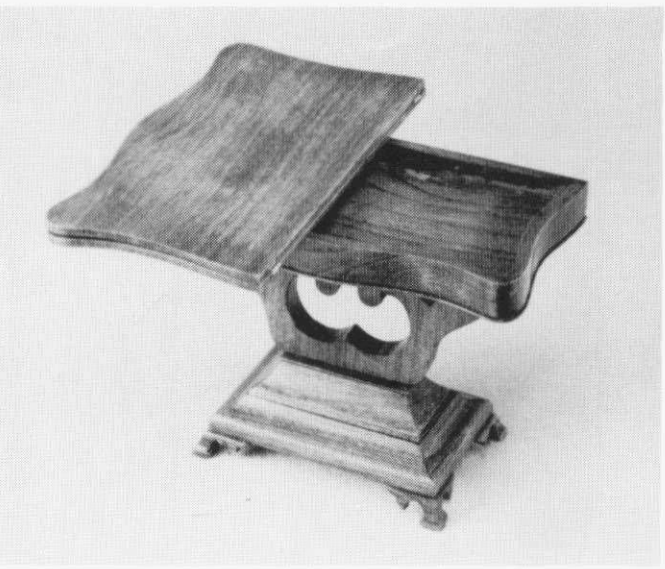
A Sample Article From the Pages of *The Scale Cabinetmaker* (Volume 16:2)

Each issue of *The Scale Cabinetmaker* included materials for beginning, intermediate, and advanced modelers. All of the projects were designed to improve modeler skill sets by introducing readers to new techniques they could then use on projects of their own. Indeed, the measure of TSC success was when readers began designing their own plans from prototypes, when they visited their local antique shop or a friend's house and asked "would you mind if turned this chair over to see how it was made?" Each article provided modelers with the complete plans and patterns, as well as ample instructions.

The Empire Period card table is a reasonably good representative project for the intermediate modeler, although it does introduce some more advanced techniques, encouraging the modeler to expand their use and knowledge of the tools on their workbench and their skills, including gluing irregular assemblies, using drum sander bits on a drill press to shape contours, and using a table saw to plane a cove profile.

As the number of issues of *The Scale Cabinetmaker* on ebay attests, no one ever threw out an issue of *The Scale Cabinetmaker*. They hung on to them and returned to earlier issues to try the slightly harder projects as their skills and confidence grew. The last year *TSC* was published, just after the first issue of Volume 20 went to the printer, we received a letter from a long-term subscriber who announced that after 20 years, he had finally built the Whitman House, a four-part project published in the first volume of *TSC*. Such was the nature of the journal and of the folks who spent years collecting and using the issues. It was, and now is, a journal that wasn't a journal at all, but one long, continues reference work.

By the time *TSC* ceased publication in 1996, we had produced more than 4,420 pages of material in eighty issues over 20 years. On average, each issue was 56 pages+ cover in length (60 pages). There was no single beginner's issue or advanced issue, because the premise of *TSC* was that the mix of articles would encourage new modelers to reach higher and would encourage advanced modelers to reach beyond the bounds of the journal to projects of their own design and making. As Jim Dorsett wrote in the final issue of *TSC*, "the success of the magazine would be measured by the eventual graduation of its readers.



"....More often used than to good purpose."

Empire Period Card Table

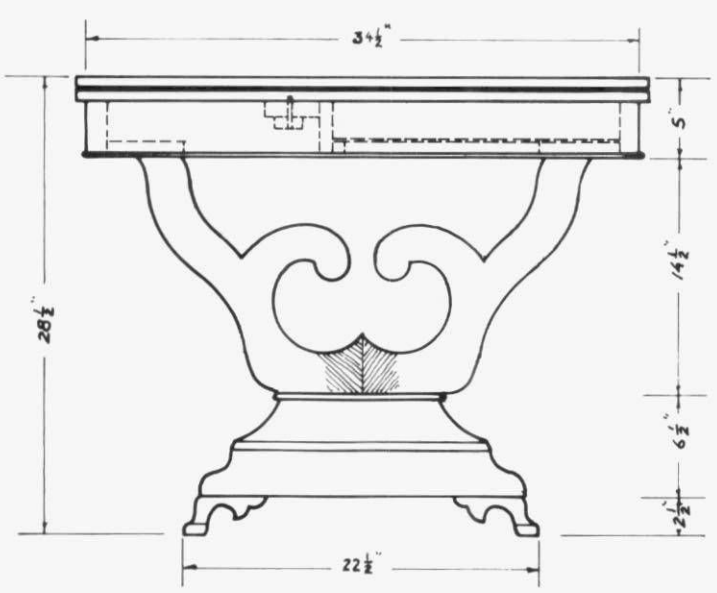
Jim Dorsett

At least from the promulgation of Charles the First's 'Twelve Good Rules' in mid-seventeenth century Britain down to the present, it seems clear by the index of our furniture that we have agreed with *The Jester's Plea* (Frederick Locker-Lampson) that "The world's as ugly, aye, as Sin, And almost as delightful." Among those twelve aphorisms (including "reveal no secrets," "keep no bad company," "profane no divine ordinances," and "encourage no vice"), honored as often by his British subjects in the breach as in the keeping of them, was "lay no wagers." Yet, the proliferation of card and gaming tables from Charles' Jacobean period on to the present (the earliest example I could find is a 1660 Court Cupboard style with its bulbous turnings, applied buttons and knobs, and half-split surface turnings) is evidence on the face of it that his subjects and their descendants found delight in a world that was clearly as ugly, and as delightful, as sin. The genre has survived through successive periods and centuries of furniture style (William & Mary, Queen Anne, Chippendale, Federal, Empire, and so on to include the folding metal framed model in todays broom closet). Despite Thomas Sheraton's comment in his *Cabinet Dictionary* (1803) that a card table is "a piece of furniture more often used than to good purpose," he offered designs for them nonetheless, proving once again that "it takes man a weary while to see the righteousness of a cause in which his pocketbook is involved."

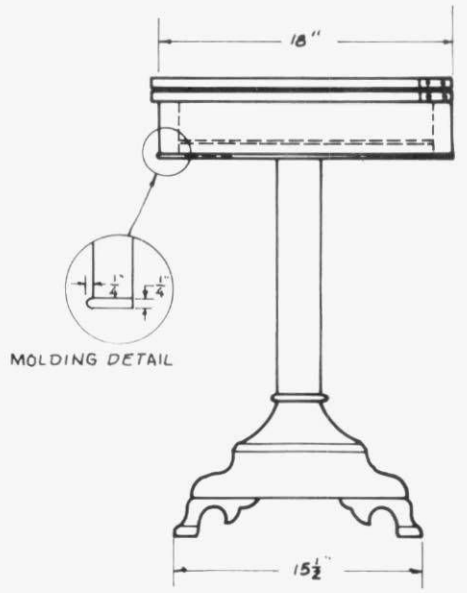
The playing of card games, often for wagers---loo, faro, quadrille, whist, and many others---was popular in England and in the American colonies all through the eighteenth century. During the American Revolutionary War, the widespread affect of gambling at cards was recognized to the extent that a voluntary law was generally accepted (if not strictly adhered to) prohibiting playing for money during the war. According to the Marquis de Chastelleux, following an evening's outing in Boston in 1782, "The inhabitants of Boston are fond of high play, and it is fortunate, perhaps, that the war happened when it did to moderate this passion which began to be attended with dangerous consequences."

Just as card playing existed as a growing practice, so the array of card table designs proliferated. Even that most stilted and Puritanic, if prolific, cataloger of American furniture styles through the early Empire period, Wallace Nutting, was forced to admit that a couple of examples of card tables had been found in America (though not during the Puritan period), but concluded "we may charitably hope they were used as breakfast tables." (Of course, neither could Nutting bring himself to admit that commode chairs existed, calling them, rather, chairs with lovely, deeply scrolled skirts.) But the game table did exist in greater variety than is suggested by the sixteen pages devoted to them in *Furniture Treasury*.

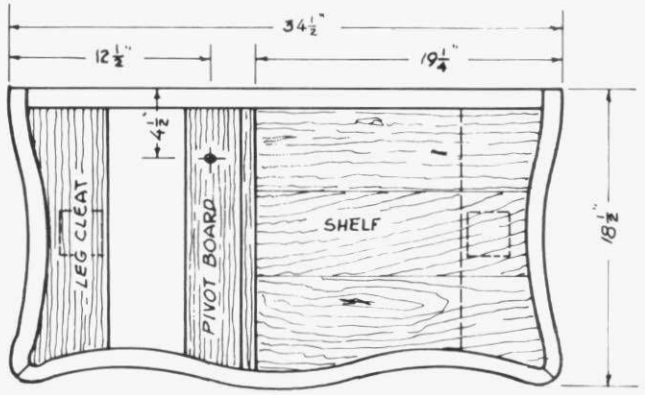
Whatever the differences in their style and design, they share certain essential characteristics. The usual characteristic is a top, hinged to fold over upon itself, half over half. There are four variants: square, circular, tripod, and pedestal. During the Queen Anne and Chippendale periods, the card table typically had a square top over a rectangular frame. On some of the smaller tables, the unfolded top was supported by slides drawn from within the table frame (an inherently unstable design). More often, the unfolded leaf was supported by a gate leg, either one of the four legs of the



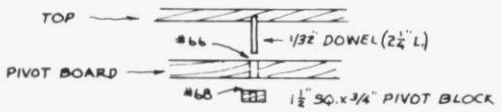
FRONT



SIDE



FRAME - TOP VIEW



PIVOT DETAIL

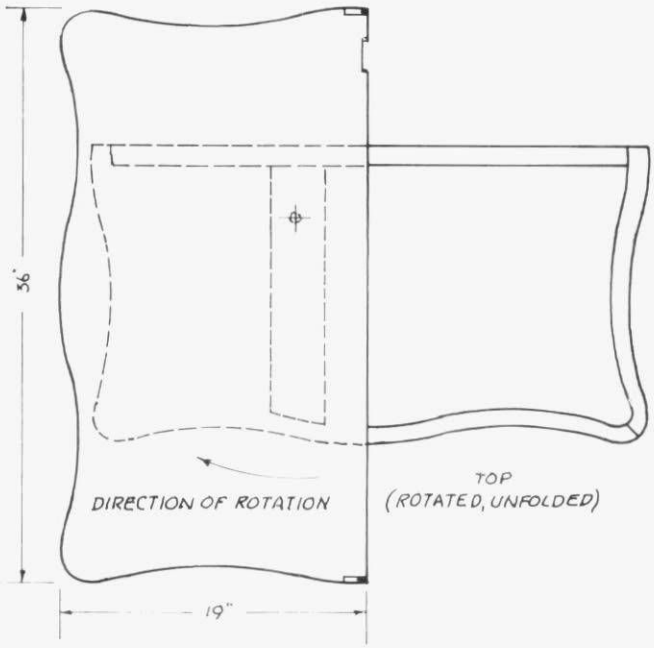


FIGURE 1. EMPIRE CARD TABLE ELEVATIONS (Scale 1":1')

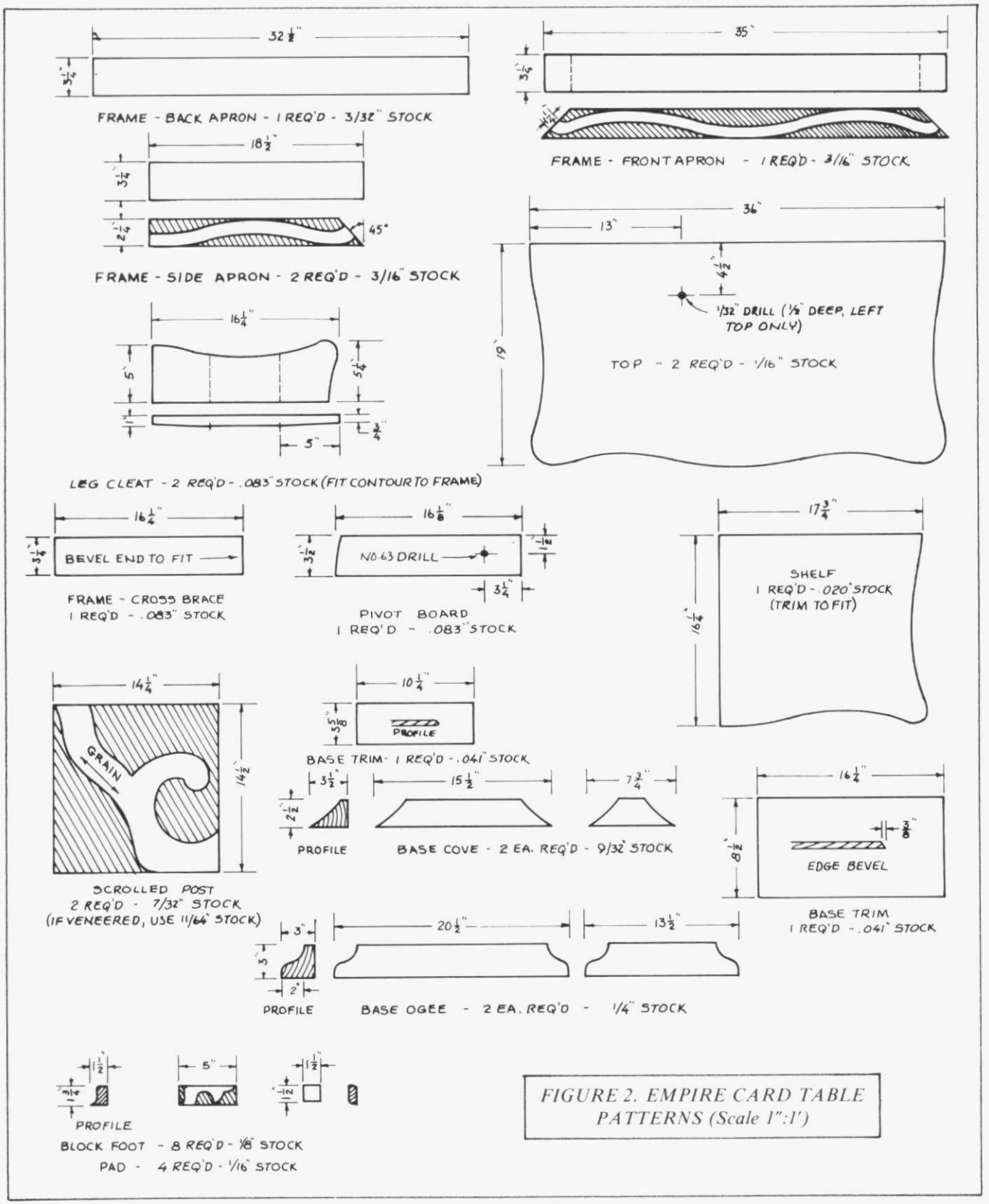


FIGURE 2. EMPIRE CARD TABLE PATTERNS (Scale 1":1')

standard frame, or a smaller fifth leg. The legs, aprons and tops were embellished with all of the decorative elements characteristic of each period. Often, a small drawer was hidden in the table frame, behind the gateleg rail, visible and accessible only when the table had been opened.

Early in the Federal period the circular and elliptical card table appeared for the first time; however, its basic structure was essentially identical to those of the earlier periods, with a fourth (or fifth) leg serving as a swing-out gate to support the unfolded top.

The appearance of the tripod, or pillar and claw,

table by Duncan Phyfe early in the nineteenth century, demanded an alternative to the gate leg (which was clearly impossible on a pedestal table). In order to offset the imbalance introduced by the unfolded top, Phyfe's solution was to hinge two of the three feet at the center post, allowing them to be swung back under the unfolded leaf. However, late in the Empire period, the appearance of the pedestal table on a footed base (typical of the scrolled designs by John Hall, Joseph Meeks, and others) required yet a different solution to the problem of the hinged top. And that solution, the unfolding, pivoted top, is illustrated by the Empire pedestal game table that is the subject of this article. The prototype for the model is a late nineteenth reproduction of a table originally produced about 1840.

Several changes have been in the model (Figure 1). The base, pedestal, and apron of the prototype were mahogany veneered. Not having any material on hand that would provide a believable substitute, I chose a solid cherry with a medium stain. Initially, I had planned on replicating the edge-mounted, double-pivoted offset hinges that were typically used on card tables for over two hundred years. Their use would have eliminated the appearance of any hinge barrels projecting above the surface between the leaves of the unfolded table top. However, I decided that, while the hinges were possible and do-able, most modelers might not have the equipment to produce them. So, small butt hinges were used instead.

Because of the large number of specially shaped and molded components in the table, an appallingly varied array of wood stock sizes is called for in the plans (Figures 1 and 2): (from heaviest to thinnest) ¼", 7/32", 3/16", ⅛", 3/32", .083" (a scale inch), 1/16", .041" (scale half inch), and .020" (scale quarter inch). However, most of these can be ripped down from thicker stock; while the thinner materials (e.g., 1/16" for the top) are widely available in commercial model lumber.

Begin by cutting out, forming and joining the serpentine apron frame. The assembled contours of this frame, inside and out, will determine the final contours of many other parts: the leg cleats, the pivot shelf, cross brace, shelf, edge trim, and top.

Lay out and cut the four apron members to length, the back apron from 3/32" stock, and the front and side aprons from 3/16" material. Before starting to shape the pieces to the serpentine contours required, cut the 45° miters on the ends of the front apron and the front end of the side aprons. Lay out the profile of the apron on the top edge of each piece. These may be cut to contour with a scroll saw and smoothed up with files and sand paper. However, most hobby scroll saws struggle unsuccessfully with a good grade hardwood of much more than ⅛" thickness. If you choose to scroll cut the pieces, cut a piece of the required stock to length and miter the ends, but use material much wider than is required for the finished apron. Lay out the pattern along the edge of the piece. Then, first cut and shape the outside contour of the apron. With that formed, part off the apron from the wider stock by scroll cutting the inside contour. (The use of the wider stock will give you better control of the workpiece.)

I chose, instead, to form the contours, using a drum sander in the drill press (Figure 3) in a set up illustrated and explained in TSC 15:4 (p.8ff). The general contour is first worked along the outside face of the apron, first with a heavy grit paper on the drum, than a finer grit, and finally jeweler's files and sandpaper. At the mitered corners, leave additional material on the outside; this will be removed as the assembled corner of the frame is sanded down to its finished contour.

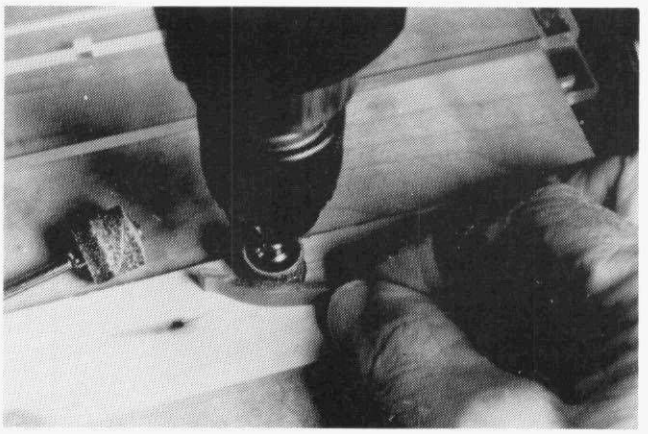


FIGURE 3. A drum sander, mounted through an auxiliary table on the drill press (allowing the bottom edge of the drum to be set below the surface of the table) is used to shape the aprons to contour. A heavy grit paper is used to rough out the contour, stopping well short of the marked pattern line to avoid scoring the finished surface of the apron. Then a finer grit drum takes the piece down to the final contour. Sandpaper finishes up the piece.

Trial-fit the frame in a square gluing jig (Figure 4), paying particular attention to the match of the inside surfaces at the front corners. If the inside planes of adjoining aprons do not flow into each other, they will introduce unsightly gaps when the leg cleats and shelves are cut and fit. Adjust these with a half-round file until a smooth transition is achieved. Then, glue the frame together, checking the assembly for squarness before it is finally clamped and left to dry.

Next, lay out and cut the two leg cleats on .083" stock (Fig. 2). As noted before, the pattern in Figure 2 is now only approximate; what will determine the shape of the two cleats is the completed contour of your frame. This shape can be transferred to a piece of paper and thence to the wood. Or you can transfer the pattern line directly to the work by clamping a board (slightly wider than required) to the bottom face of the frame and squared to the back rail, and tracing the pattern with a knife tip (Figure 5). Then scroll cut and file (or drum sand) the piece down to its final shape (trial-fitting it to the frame

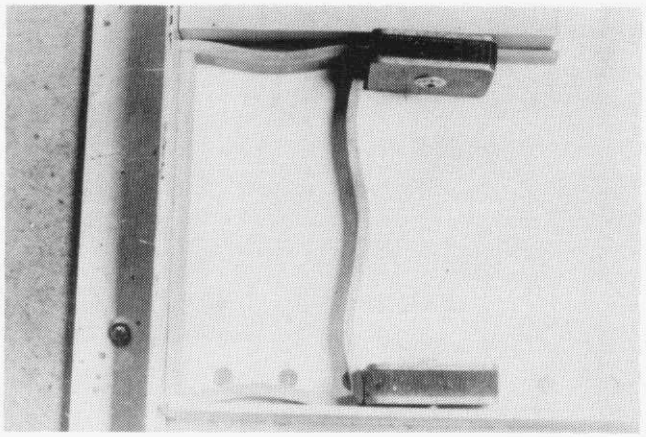


FIGURE 4. Gluing up an irregular assembly can be a problem. To aid in maintaining squareness in the apron frame during assembly, a third squared surface has been added to the magnetic clamping jig, i.e., a heavy aluminum try square, clamped to the fence, provides a surface parallel to the fence at the bottom of the jig. The frame is clamped at the back between the two parallel fences. Then the front apron is joined to the ends of the side aprons, and held in place by two magnetic clamps. Any side-way displacement of the mitered joints is offset by evenly inserting two tapered shims between the side fences and the face of the side aprons.

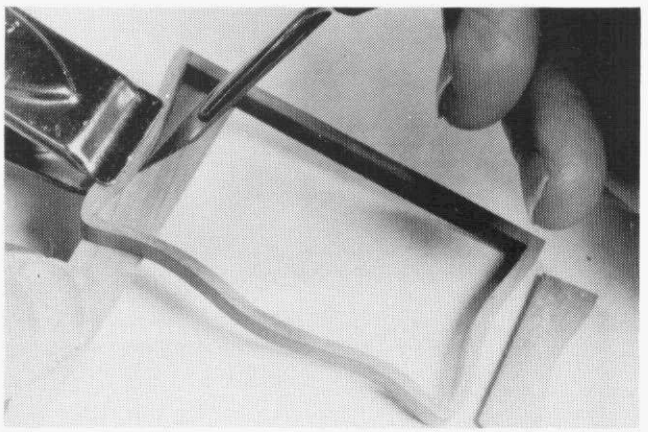


FIGURE 5. The exact pattern of the leg cleats (and other inset components) is taken directly from the assembled apron frame by clamping the workpiece to the underside of the frame and tracing the outline with a knife tip. (The knife tip will give you a much more precise pattern line than will the finest of pencil tips.)

frequently until a snug joint line is achieved). After the two cleats have been cut to shape, sand down the bottom surface to the required tapers.

Before gluing the cleats into the frame, mark and cut all remaining interior pieces to fit in the same manner as was used with the cleats. When satisfied with the fit of all other parts (pivot board, cross brace, and, especially, the .020 inch shelf), then glue the cleats into the frame with the untapered center section of each cleat flush with the bottom surface of the apron.

Before drilling the pivot hole in the pivot board, dry-fit the pivot board, cross brace and shelf into the frame. If the symmetry of the pivoted, unfolded top is to be achieved, the location of the pivot hole, relative to the back and the corner of the frame is critical (Fig. 1, Frame-Top View). When satisfied with the location and fit of the pivot board, assemble the pivot board, brace and shelf in the frame with glue.

Mark the location of the pivot hole, measuring from the corner of the frame and the back, drill through the pivot hole as indicated in Figures 1 and 2. Use a No. 63 (.038″) drill to "clear" the pivot pin (i.e., provide a hole as large as or slightly larger in diameter than the 1/32″, or .031″, dowel that will be used as a pivot pin. If I were going to drill to "tap", I would drill a hole slightly undersized to leave material in the hole in which to cut, or tap, threads for a screw or bolt.).

The fine bead around the bottom edge of the front and sides of the frame (Fig. 1, Molding Detail) is a strip of .020″ material, cut to contour (inside and out) and glued to overlap the face by ¼″ (Figure 6).

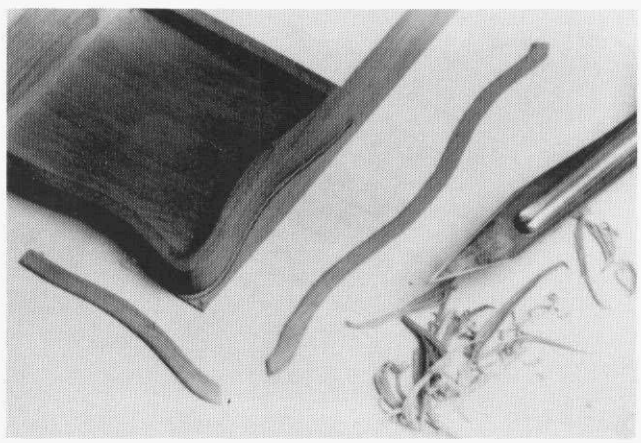


FIGURE 6. The pattern for the bead is taken directly from the assembled frame as well. Lay the quarter inch stock sheet under the table frame and trace along the serpentine edge with a .05mm mechanical pencil. The gauge of the pencil lead will provide the scale ¼″ projection of the bead beyond the surface of the apron. Trace and part off the excess material with a sharp knife. After the outside contour of the molding has been cut, the inside contour can be cut. Shape the outside edge with sandpaper to a half-round profile.

The two halves of the scroll-cut pedestal post (Fig. 1, Front Elevation, Figure 2) are cut from 7/32″ stock. (If you choose to veneer the face of the posts, use 11/64″ material.) Temporarily tack two pieces of material together with glue, lay out the pattern on the top piece, and cut both pieces at once on the scroll saw. Before separating the pieces, use files and sandpaper to clean up and smooth the profiles. Glue the two halves together at

the joint, and, when dry, sand the faces of the joint smooth.

The base consists of two molded frames, separated by a beveled shelf and capped by the overlapping shelf on which the posts are mounted (Figures 1, 2, 7). A heavy ogee molding forms the bottom base frame (Fig. 2). This molding (Figure 8) is formed from ¼" stock on the drill press, using a combination of square and round burrs, or the Dremel 3/16" piloted cove bit (No. 613). After the basic profile has been formed, it is finished up with files and sandpaper, rounding off the convex section of the profile. A piece of sandpaper, wrapped around a 3/16" dowel will help smooth up the concave section. Part off from the strip the four sections of the frame, mitering the ends (45°), and glue up the bottom frame.

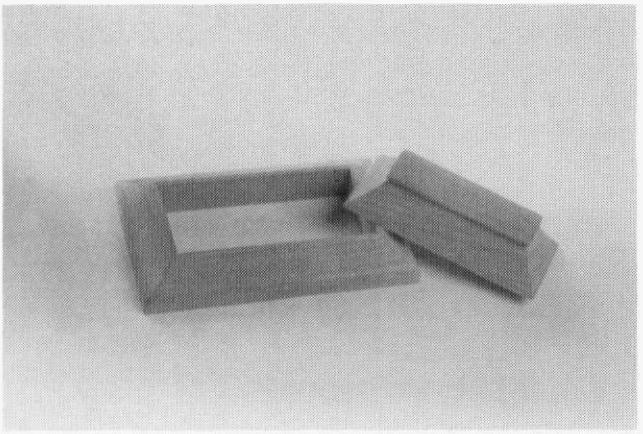


FIGURE 7. The pedestal base consists of two heavy molded frames and two dividing shelves. The edges of the middle shelf are beveled to provide a smooth, angled transition line between the curved faces of the upper and lower moldings.

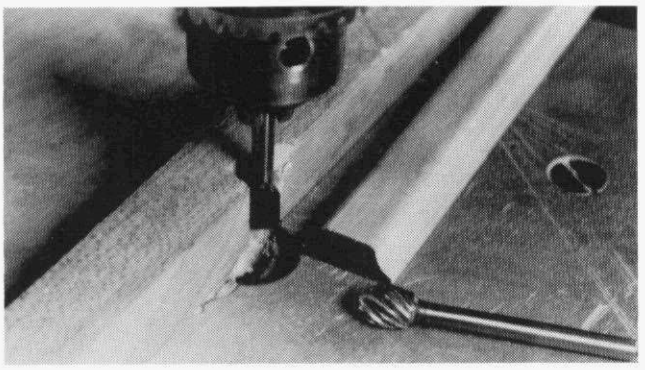


FIGURE 8. Two shaping bits are used to form the heavy ogee molding. A square routing bit is first used to notch the edge of the material, removing the heaviest amount of material. Then the concave contour is finished down to profile with a shallower cut with a round or oval cutter. The convex section of the profile is rounded with files and sandpaper. Notice that the same profile has been worked on two edges of the board. When finished, the molding strip is ripped from the stock material on a table saw.

Check the dimensions of the frame top before laying out and cutting the beveled shelf. Cut the shelf to fit exactly to the edges of the frame. Glue the shelf to the frame top, but do not bevel the edges until after the upper frame has been added. (Then the bevel will be determined by the outside surfaces of the two adjoining frames, and can be worked down with a flat file.)

I didn't have a commercial stock molding in the lumber pile that fit the contour of the cove molding required for the upper base frame (Fig. 2). A piece of ¼" cove could have been modified to approximate the required material, but would have been much deeper than the shallow profile called for by the prototype. So I chose to form the molding, employing a technique often employed by full-scale woodworkers, i.e., by planing the edge of a scale 2¼" thick plank with the table saw blade (Figure 9). With a .057" x 2¼" blade (the heaviest available for the Preac saw) set ¼" above the table, and a temporary wood fence clamped at 30° to the blade, the workpiece is fed diagonally across the blade, planing it off to the required convex contour.

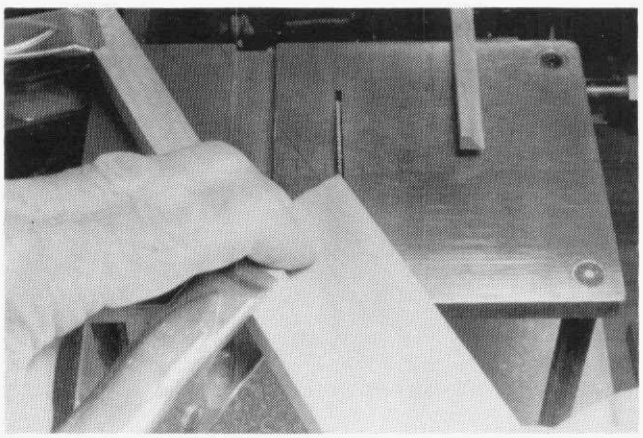


FIGURE 9. Safety is an important concern when using a table saw to plane the edge of a board to a cove profile. The workpiece is moved along an angled fence across the teeth of the saw. Two fingers of the left hand(unmoved) steady the workpiece against the fence. However, the right hand, grasping the workpiece, is moving in the direction of and across the plane of the blade (a potentially dangerous practice, if the workpiece should bind or slip!). To minimize that danger, two safety factors are observed. First, the molding is being cut on the widest piece of stock that can be accommodated on the small saw table, removing the right hand as far as possible from direct intersection with the blade plane. Secondly, successive, very shallow cuts are made across the .057" blade. Only the left hand portion of the blade teeth (half the thickness of the saw blade) enters the material on any cut. If you bury the right hand face of the blade in the material on any cut, you have created a potentially dangerous situation. So, as you reset the fence for each successive cut, pay careful attention to the depth of the cut!

Cut and glue the upper base frame from the cove strip. Center and glue this frame to the shelf over the bottom frame. Then use a flat file to bevel the edges of the shelf to provide a smooth transition between the upper and lower base frames.

Finally, cut, fit and glue the top shelf to the base (Fig. 2), allowing for the rounded, overlapping edge all around.

The ogee block feet are formed, following the precedure detailed in TSC 15:4 (p.30, Figure 15). The molded stock strip of ⅛″ material was cut to profile in two steps. First, the edge of the strip was notched on the table saw, making a cut 1″ deep by .015″ wide on the end of the strip. Then a ball burr was used in the drill press to mill out the concave section of the profile. The upper convex section was sanded to the round. When cutting the profile of the foot segments, use a ⅛″ end mill in the drill press to cut out the circular section before shaping the balance of the pattern with a knife (Figure 10). As before (TSC 15:4), the foot segments are parted off from the stock strip with a 45° miter on the table saw.

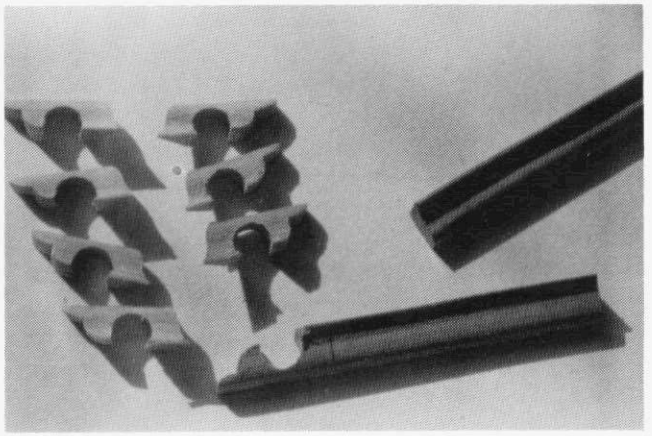


FIGURE 10. The ogee block feet are shaped and formed, following the steps detail in TSC 15:4.

Glue the halves of the feet together and mount them on the bottom of the base frame as shown. Then with the feet in place, cut, glue and edge-shape the pads to the bottom of the feet. (They are easier to handle this way.)

Cross-checking the table top patten with the actual edge profile of the assembled frame (and making adjustments where necessary to provide for the ½″ overhang at the front and sides, lay out and cut the two top pieces. (As with the pedestal halves, a match is assured if you laminate stock and cut both out at once on the scroll saw.)

Carefully locate the center of the pivot hole in one table top piece (Figures 1 & 2). Use a No. 68 (.031″) drill to provide a snug fit for the pivot dowel, drilling to a depth of ½″ (Exercise some care to avoid drilling through the ¾″ top board.)

Temporarily insert a length of 1/32″ dowel in the hole in the top and thread the dowel through the hole in the pivot board. If all measurements were correct, the table top should fit flush at the back and with an even ½″ overhang at the front and sides. Small deviations from this will not be noticeable; however, if there is a major discrepancy, you'll need to plug, relocate, and redrill the hole in the table top. During final assembly, a small pivot block (drilled through 1/32″) will secure the end of the pivot pin (Figure 11).

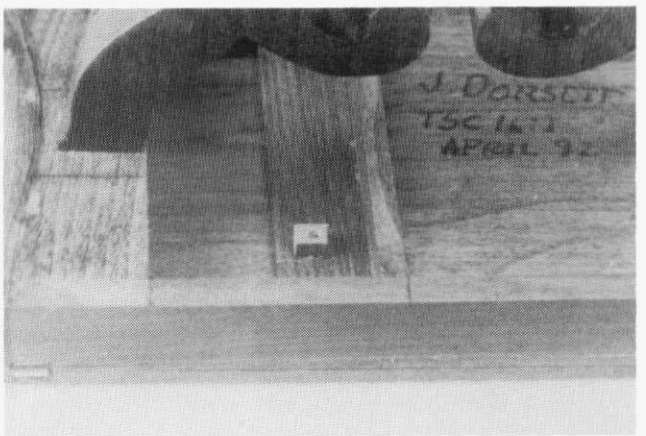


FIGURE 11. When gluing the pivot block to the end of the pivot pin below the shelf, be careful not to allow the glue to migrate into the pivot hole in the board. The pin must rotate freely in the pivot shelf. Trim excess dowel flush with the face of the block.

Center and glue the pedestal post to the base. Before final assembly of the table, stain and seal the two top boards, the apron frame, and the base/pedestal separately. Locate the positions of the two edge-mounted hinges on the facing edges of the two top boards (Fig. 1, Top Elevation). Cut matching mortises at that location to the depth of the hinge plates. Mount the hinges. Then, install the top on the apron frame, securing the pivot pin with the pre-drilled block (Fig. 11). Finally, glue the frame to the top of the pedestal.

At this point, you have a piece of furniture "more often used than to good purpose." (I gave mine to Mary White, TSC's all-around Assistant, in whose livingroom the prototype for the model rests. She has many virtues; bridge is her only vice.)