17

HEPPLEWHITE-STYLE END TABLE

Cherry, Birch, White Pine

MAKING THE HEPPLEWHITE" STYLE END TABLE

Select plane, joint and edge-glue material for the top.

Set aside the top panel, and prepare the legs. First, dimension the leg stock to 15/16″ *X 15/16".* Then mark and cut the mortises for the apron parts and the drawer rails, and draw the taper on the leg stock with a pencil.

On the face of the leg that will be seen from the side of the table, the legs taper from ^{15}/i6" at the lower limit of the apron to 1/2″ at the floor. On the face of the legs that will be seen from the ends of the table, the legs taper from *5/16" to 3/8"*

Cut the tapers on the band saw; clamp the leg in a vise so that saw marks can be removed with a hand plane.

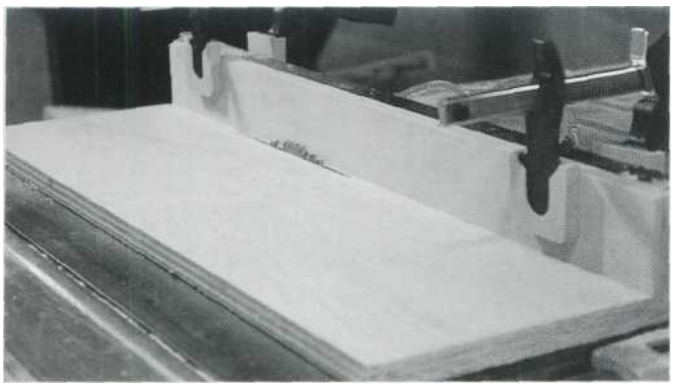
Cut out and tenon apron parts and drawer rails. Fit these tenons into the leg mortises which are placed so that the outside faces of the apron parts are recessed 1/8″ from the outside faces of the legs. Set the drawer rails, on the other hand, so that their outside faces are flush with the outside faces of the legs. Then, glue-up the frame—consisting of the apron parts, the drawer rails and the legs.

Remove the tabletop from the clamps, and surface' it with hand planes and sandpaper, a process discussed in chapter five.

Next, cut the grooves for the inlay. You could make these with a router, but I cut the grooves on this top on a table saw fit with a hollow-ground planer blade. This blade is made without set and with a thin-ground rim. As a result, it leaves a 3/32" saw kerf with sharp, clean edges.

Rip out the birch inlay itself using the same planer blade passing through a combination wood fence and throat that is clamped to the saw's steel fence. Glue the inlay into its grooves; plane and sand flat.

Because the top will expand and contract across its width in response to seasonal changes in humidity, fasten it to the table frame with wood screws passing through oversized holes in the kicker strips. (The kicker strips are the two cleats above the drawer sides that keep the front of the drawer from dropping as the drawer is opened.) The over-sized holes in the kicker strips will allow wood movement without splitting the top.



Shown here is the combination fence and throat I use for ripping inlay and cock bead.

This close-up of the drawer side shows the cock bead inlay around the drawer.

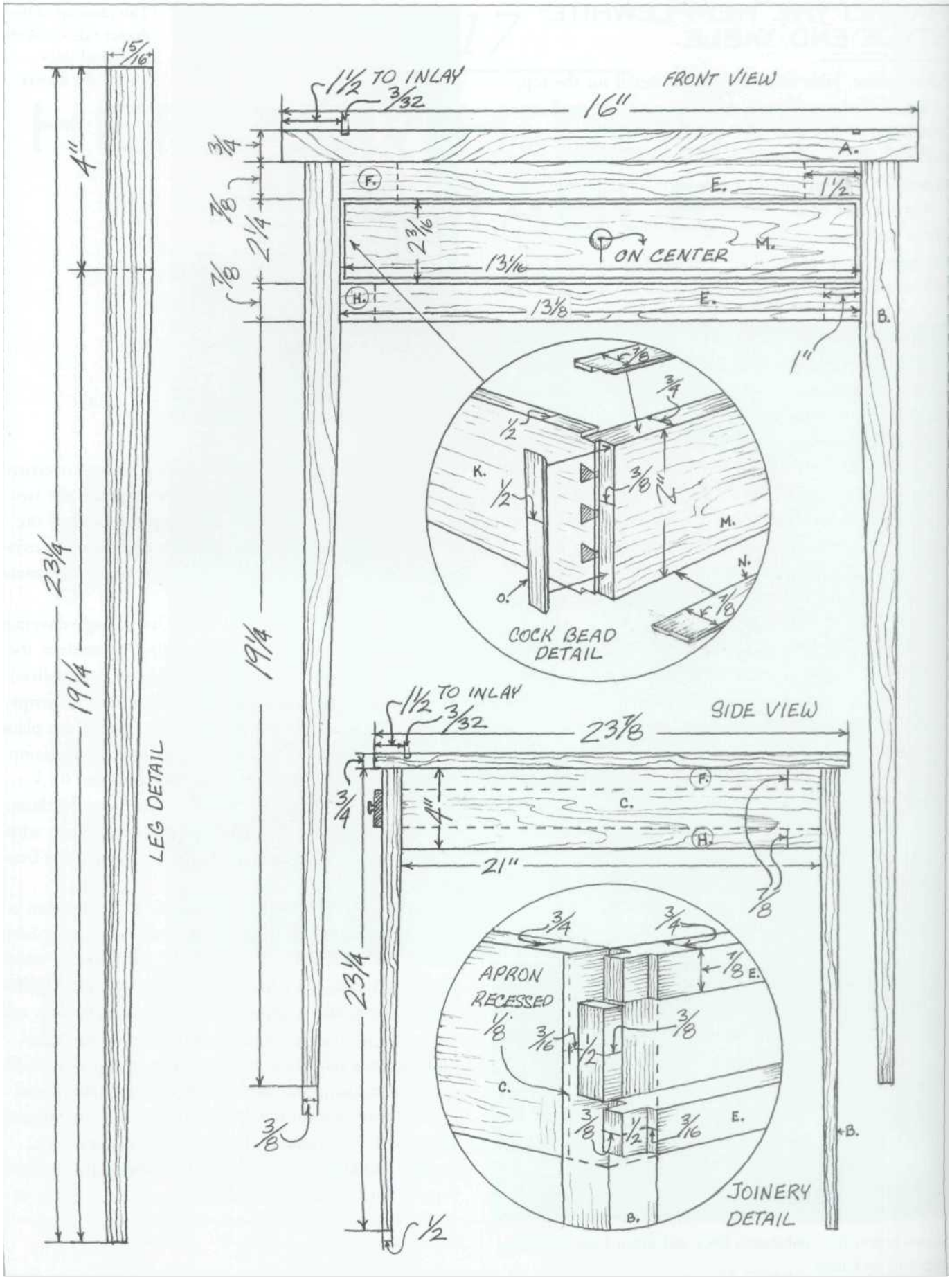
Drawer construction is standard. Use through dovetails at the back of the drawer and half-blind dovetails at the front. (Both joints are discussed in chapter twenty-five.)

Rip strips for the ^{3}/32" cock bead (thin, mitered strips framing the drawer front) from $^{7/8}$" birch stock. Next, plane them. To round the front edge of the cock bead, clamp the strips of *3/32"* planed stock in a vise between thicker, wider boards so that approximately 1/4" sits above the clamping boards along the full length of the strips. Then with a block plane, remove enough material to round the front edges of the strips.

Next cut rabbets for the cock bead. This operation is done on the table saw, again using a hollow-ground planer blade. The blade is set to a height 1/8″ less than the width of the cock bead (5/8")• Then, with the blade crowded against a wood fence, take a single pass from the top, bottom and both ends of the drawer which stands on its front end.

This cuts a rabbet 3/32" wide which is equal to the thickness of the cock bead. With brads and glue, fasten the mitered cock bead to the drawer front so that its rounded edge stands 1/8" proud of the face of the drawer front.

After installing the drawer runners and stops, the table is ready for finishing and hardware.


15/16"
4"
19¼
23¼
LEG DETAIL
1½ TO INLAY
3/32
FRONT VIEW
16"
3/4
1/8
2¼
1/8
2 3/16
ON CENTER
M.
13 1/16
13⅛
E.
1½
A.
B.
F.
H.
1"
19¼
3/8
3/4
1/2
K.
1/2
3/8
M.
N.
O.
1/8
COCK BEAD DETAIL
1½ TO INLAY
3/32
SIDE VIEW
23⅞
3/4
4"
C.
F.
H.
21"
1/8
23¼
1/2
3/4
3/4
APRON RECESSED
1/8
E.
1/8
3/16
1/2
3/8
C.
3/8
1/2
3/16
E.
B.
B.
JOINERY DETAIL

Almost 150 pages of Thomas Sheraton's *The Cabinet-Maker and Upholsterer's Drawing Book*, a collection of some of the most influential furniture designs ever published, is focused on geometry, including almost thirty pages on the five classical orders of proportion taken from the five types of Roman columns: Tuscan, Doric, Ionic, Composite and Corinthian.

This lengthy exposition on the subjects of geometry and proportion highlights the importance of formal design education to the makers of period originals. This is an education that many modern designers/craftsmen lack. Some contemporary woodworkers, guided by enormous natural talent, seem unhindered by this absence. Others, however, lacking both the talent and the education, are creating furniture which, while well-crafted, is often clumsy in appearance.

Although not guided by either an enormous natural talent or by a classical design education, I've found that, in order to do business, it has been necessary for me to design work to suit my customer's needs. What follows is a list of commonsense principles I've found useful:

1. *Steal from the past.* Wood furniture has a history that stretches back at least five thousand years, and throughout that span designers and craftsmen have struggled with the same question confronting wood workers today: How can chairs, beds, tables and chests be designed so that they are both beautiful and useful?

Clearly, no single answer to this question is perfect. If it were, we would have only one style of bed, chair or table. But many of the hard-won solutions created by our predecessors are worthy of study and emulation.

2. ***Take chances.*** Particularly at the pencil and paper stage, the most bizarre ideas deserve consideration be cause, although they may never be translated whole into actual pieces of furniture, a careful examination may reveal things that can be incorporated into more tradi tional forms.

3. ***Consider aesthetics and joinery simultaneously.*** Often, designs that look spectacular on paper simply can't be created from wood, a natural material with a whole range of characteristics that must be considered each time one wood part is joined to another.

4. ***Develop graceful lines.*** When I designed the two-drawer sewing stand (after several Shaker originals), I worked to create a curve in the legs that would move smoothly into the curves of the pedestal. I hoped this would lift the eye to the tabletop and drawers, as well as produce a line that was inherently satisfying to contemplate.

5. ***Repeat motifs.*** Repetition of a shape, pattern or color can give a piece both rhythm and unity. On the six-drawer chest, for example, the cone shape of the pulls is repeated six times across the front of the drawers, adding visual rhythm in much the same way that a repeated drumbeat can add auditory rhythm to a piece of music. Also, that tapered cone shape is repeated in the four legs that support the chest, assuring the viewer that all these parts belong to the same piece.

6. *Incorporate exposed joinery.* *A* set of dovetails marching across the corner of a piece not only adds rhythm (see photo on page 26), it also adds an appealing

MATERIALS LIST

Table		
A Top	1 pc.	¾ × 16 × 23⅞
B Leg	4 pcs.	1⅝ × 1⅝ × 23¼
C Apron side	2 pcs.	¾ × 4 × 22[1]
D Apron end	1 pc.	¾ × 4 × 14⅛[1]
E Drawer rail	2 pcs.	⅞ × ¾ × 14⅛[1]
F Kicker strip	2 pcs.	⅞ × 1½ × 21
G Cleat	1 pc.	⅞ × 1½ × 10
H Drawer runner	2 pcs.	⅞ × 1 × 21
I Inlay		3/32 × 3/32 × 7 linear feet
Drawer		
J Bottom	1 pc.	½ × 12⅝ × 15¾
K Side	2 pcs.	½ × 2 3/16 × 16⅛
L End	1 pc.	½ × 1⅝ × 13 1/16
M Front	1 pc.	¾ × 2 3/16 × 13 1/16
N Horizontal cock bead	2 pcs.	3/32 × ⅞ × 13 1/16
O Vertical cock bead	2 pcs.	3/32 × ½ × 2 3/16
P Pull	1 pc.	½ × ½

[1] *Includes ½" tenon on each end.*

**Net measurements are given. A surplus should be added to the lengths of dovetailed parts to allow them to be sanded flush.*

**Drawer height and width are 1/16" less than the height and width of drawer opening. This allows 1/32" of clearance on all four sides.*

**The pull was ordered from Constantine's Hardware.*

visual detail, which arrests the eye, satisfying its hunger for interesting shapes and patterns.

7. *Adapt stock thickness to the scale of the piece.* Smaller, more delicate pieces require stock dimensioned to a greater thinness. A plate rack that is elegant when built from 3/8″ material is brutish and clumsy when built from $^{7}/8$" stock.

8. ***Use beautiful materials.*** Yes, hardwood—particu larly figured hardwood—is expensive, but the simplest pieces (the Shaker document chest, for example) are enormously appealing when built with beautiful material.

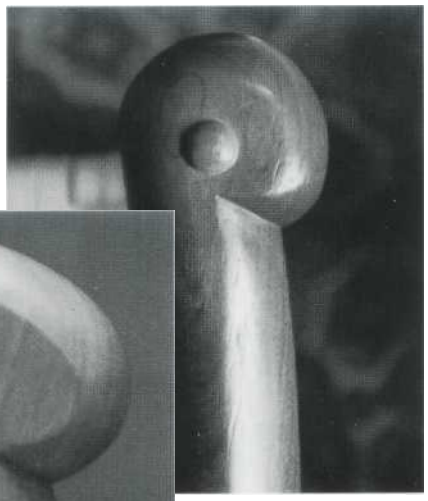
9. ***Use contrasting materials.*** A desk made entirely of walnut heartwood can be very attractive. But imagine that same desk with curly maple drawer fronts or with streaks of walnut sapwood showing like jagged lightning across the top.

10. *Recognize that design is as much an evolution ary process as a revolutionary process.* Rather than focusing on sweeping changes that might be made to the form of a chair, bed or chest, a designer might be better served by focusing on small, incremental changes which, over time, might add up to something significant.

DESIGN EVOLUTION

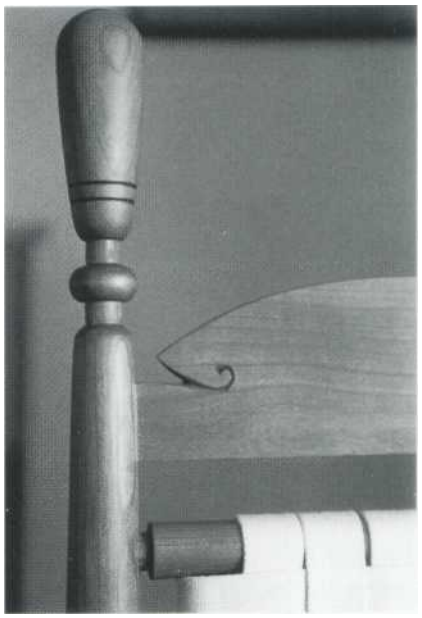
These photos illustrate the evolutionary development of an arm shape I've used on many Shaker-style chairs.

1 The first photo shows one of my earliest attempts to elaborate on the cookie-cutter shapes of the Shaker original.



3 The last two photos show details of a more recent chair.

2 The second shows an arm that's been widened and given a more distinct form.



4 The incised curve on the top of the arm now reaches to the wedged through tenon at the top of the chair's front post, a shape that recurs on the chair's slat.