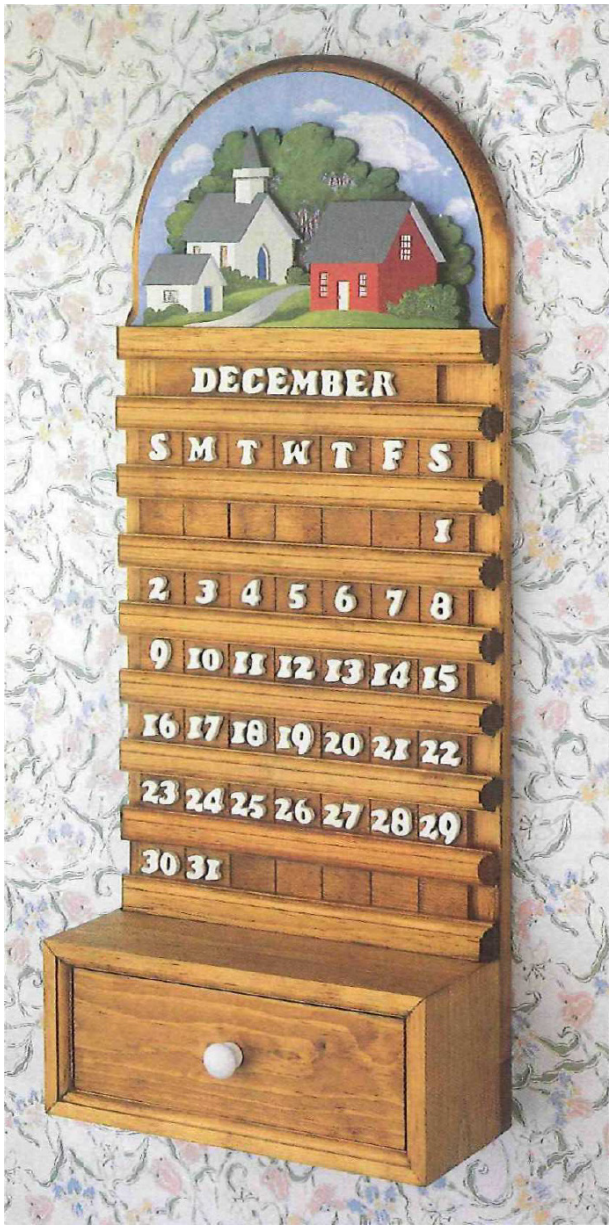


Perpetual Calendar

Our Perpetual Calendar is a welcome relief from the annual ritual of changing calendars. And it's a bit more elegant than the paper calendars that boast a pretty picture but also trumpet the local bank or insurance agency. In the kitchen or family room it's a unique and attractive way to keep count of the days.

The calendar may look complicated, but it's easy to make. Our plans include a grid pattern for the village scene. Don't be put off by the scroll saw work and painting you see on the village scene. If it's a bit much, you could decorate the top with a simple chip carving, or paint on or cut out a heart, or just leave the top plain. You could even mount a battery operated clock behind a dial face, and use the calendar to keep track of not only the days, weeks and months, but also the hours and minutes.

Whatever your choice for decoration, the woodworking required for the calendar is fairly basic. The base of the project is just a back board (A). Rabbeted cleats (B, C) hold the letters and numbers (F), which are mounted on sections of 1/4 in. thick plywood (D, E). You'll note that our photo shows a few extra mounts filling out the spaces on the first and last weeks of the month. The extra mounts aren't mandatory, but they make the calendar look a little more complete. A drawer box and drawer are added at the bottom to hold the extra numbers and mounts, and the other eleven months.

Start with the back. You'll probably need to edge-glue several boards to get the needed 12 in. width. Once dry, cut the back to length and width, and lay out the 1/4 in. deep dadoes that position the cleats. Note that the top and bottom dadoes are 3/4 in. wide, while the remaining dadoes are 1/2 in. wide. These dadoes serve to locate the cleats during glue-up and aren't necessary for strength. If you include the dadoes, you'll need 1 in. thick stock for the cleats. To build the project using only 3/4 in. thick pine, just eliminate the dadoes.

Next, lay out the 6 in. radius on the top. Cut the radius with a jigsaw or band saw and smooth any roughness. Then use a 1/2 in. radius ball-bearing guided roundover bit, stepped down 1/16 in., to cut the roundover. Note that the bearing rides on the edge, so the bit will reproduce any irregularities. It's especially important that your shaping and sanding produce a perfectly smooth surface for the bearing to gauge against.

To make the cleats, first run off enough stock for all the cleats, then crosscut to separate stock for the top and bottom cleats. Make the rabbet and beading cuts, crosscut the cleats to length, chamfer the ends, and glue in place. Note that if you eliminate the dadoes and make the cleats from 3/4 in. thick stock, your rabbets will measure 1/4 in. deep by 1/4 in. wide,

instead of the l/4 in. deep by 1/2 in. width shown. If you use the 3/4 in. thick stock, reinforce the cleats with countersunk screws inserted through the back.

Now make the drawer box. Start with a 3 ft. length of pine, 3/4 in. thick by 4-1/2 in. wide. Using either the router or the router table with a l/4 in. radius beading bit (the same bit that you used to establish the bead on the cleats), cut a bead on one edge. Then make the miter cuts that establish the length of the top and bottom (G) and sides (H). Size the surfaces of the miter joints before gluing and clamping. Sizing the joint just means that an extra layer of glue is applied to seal the end-grain before the final glue up. This extra layer of glue soaks into the 50 percent end grain of the miter, insuring against the condition that's known as a "starved" joint. It's an important step where the joint relies entirely upon glue strength, such as with our drawer box.

Once the drawer box is out of clamps, it can be screwed in place through the back. Be sure to countersink the screws so they don't protrude. You can also use glue, but with the six screws we show, glue is hardly necessary.

Now make the drawer. We used a rabbet and dado construction joining the front (I), back (J) and sides (K), but any simple drawer construction will be fine. A few minutes with a sharp hand plane will quickly reduce 3/4 in. thick pine to the 1/2 in. thickness needed for the drawer back and sides. The plywood bottom (L) slides into place from the back, fitting neatly into a 1/4 in. deep by 1/4 in. wide groove cut into the front and sides. A brad or small screw inserted through the bottom and into the lower edge of the drawer back will fix the bottom in place. The 1 in. diameter porcelain knob (M) is a standard item at most hardware stores.

The numbers and letters are spray painted with a white enamel. One easy way to spray paint them is to stick them on long pins inserted through a sheet of cardboard. In addition to anchoring the pins, the cardboard serves as a surface to catch overspray. To allow for a good glue surface, the backs of the letters and numbers are not painted.

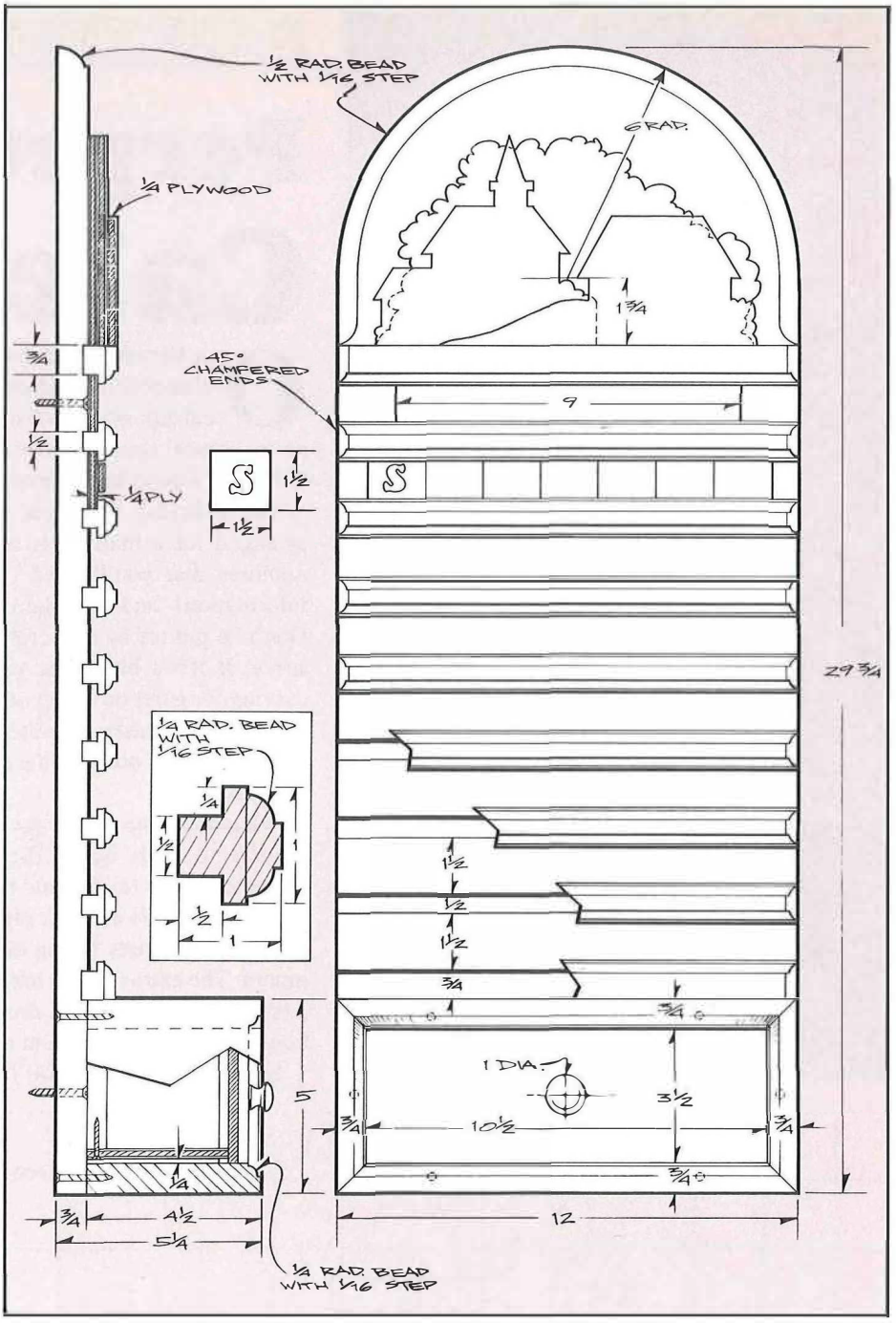
Once the paint has dried, the letters and numbers can be glued to their respective mounts. Note that although we show the mounts as 1-1/2 in. wide, in practice you'll need to sand a little off the edges so the mounts slide easily into place. Since the 1/4 in. thick plywood that we use for the mounts actually measures a little under 1/4 in. thick, the mounts should have no problem slipping into the rabbet formed on the cleats.

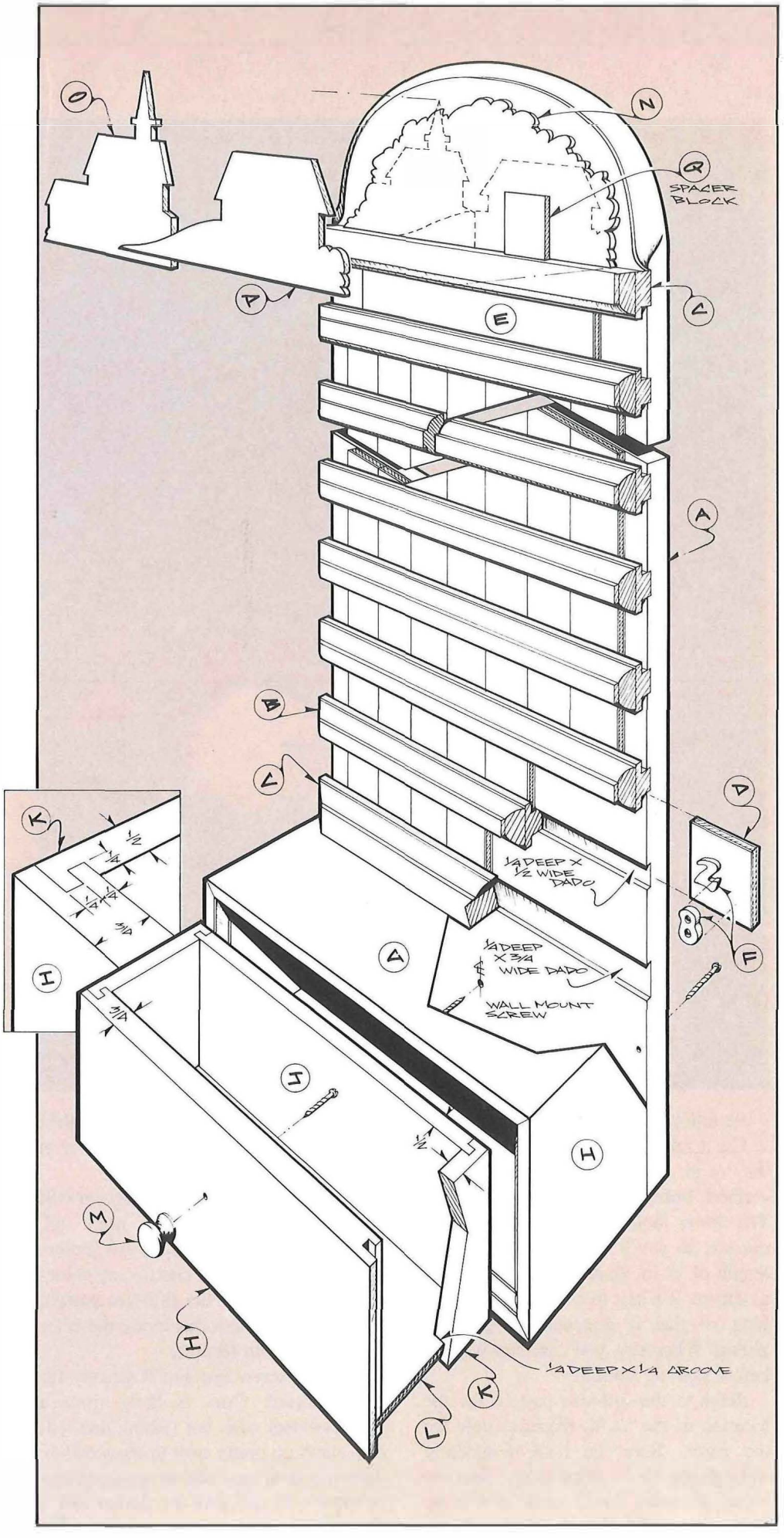
To make our village scene, first lay out the patterns on 1/4 in. thick plywood and cut the shapes with a scroll saw. Next, using artist's acrylics (available at hobby and art supply stores), prime the surfaces to be painted, then paint the sky on the back and the village scene on the various sections, before gluing the sections in place. You can use our color photo as a guide for your coloring scheme, or better yet, create your own original color scheme. Just be careful not to apply paint to the areas of the back and scene sections that overlap and will be glued. The tree section (N) is glued directly to the back, the church section (O) is added next, and the house section (P) last. A spacer block (Q) glued between the tree section and house section adds stability and brings the house section out to the proper plane. The remaining wood surfaces are all stained to taste. Our choice of stain was Minwax Puritan Pine. A light coat of spray shellac over everything adds a final protective layer.


1 SQ. = 1/2 INCH

Bill of Materials
(all dimensions actual)

Part	Description	Size	No. Req'd.
A	Back	3/4 x 12 x 29 3/4	1
B	Cleat	1 x 1 x 12	7
C	Top/Bottom Cleat	1 x 1 x 12	2
D	Number/Day Mount	1/4 x 1 1/2 x 1 1/2	50
E	Month Mount	1/4 x 1 1/2 x 9	12
F	Letters/Numbers	As Shown	134
G	Box Top/Bottom	3/4 x 4 1/2 x 12	2
H	Box Side	3/4 x 4 1/2 x 5	2
I	Drawer Front	3/4 x 3 1/2 x 10 1/2	1
J	Drawer Back	1/2 x 3 x 10	1
K	Drawer Side	1/2 x 3 1/2 x 3 15/16	2
L	Drawer Bottom	1/4 x 3 11/16 x 10	1
M	Porcelain Knob	1 dia.	1
N	Trees	As Shown	1
O	Church	As Shown	1
P	House	As Shown	1
Q	Spacer Block	1/4 x 2 1/2 x 2 1/2	1




O
N
Q
SPACER BLOCK
P
C
E
A
B
C
D
K
1/2
1/4
1/4
1/4
3/4
I
1/4 DEEP X 1/2 WIDE DADO
1/4 DEEP X 3/4 WIDE DADO
WALL MOUNT SCREW
F
A
3/4
J
1/2
H
M
I
1/4 DEEP X 1/4 GROOVE
K
L