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TABLETOP DESK

Cherry, Poplar



MAKING THE TABLETOP DESK

After the material has been dimensioned, edge-joint and glue the boards that will make up the desk top.

Plough a 1/8" X 1/4" groove on the inside faces of the desk sides, front, and back. This groove will later receive the bottom of the materials compartment. Then, cut openings in the sides for the inkwell and stationery drawers.

Next, cut the angles on the desk sides on the band saw, after which the four sides of the case are dovetailed. The case is dry-assembled, and the bevels on the top edge of the front and back are marked from the angles on the sides. Form these bevels with a hand plane, and glue-up the four walls of the case around the bottom of the materials compartment.

Before installing the bottom, glue and brad into place the cock bead that frames the stationery drawer. Also at this time, glue the two fill strips that will guide the stationery drawer in position. Then, tack the bottom into place using small finishing nails. Nails are perhaps better than screws for this particular application because they are flexible enough to allow for seasonal expansion and contraction of the bottom across its width. Screws—unless they pass through oversized holes which would be very difficult to

achieve in such thin stock—could lock the material so that cracking would occur in connection with this expansion and contraction.

The inkwell drawer is next. The unusually shaped long drawer side does two things. First, it is a drawer guide, and second, it prevents the drawer (with its bottle of ink) from being completely withdrawn from the case, a circumstance that could easily have had messy results.

After forming the drawer parts, glue and tack them together. Then, fit the drawer to its opening and screw the wooden bracket that acts as its guide and keeper to the inside face of the desk back.

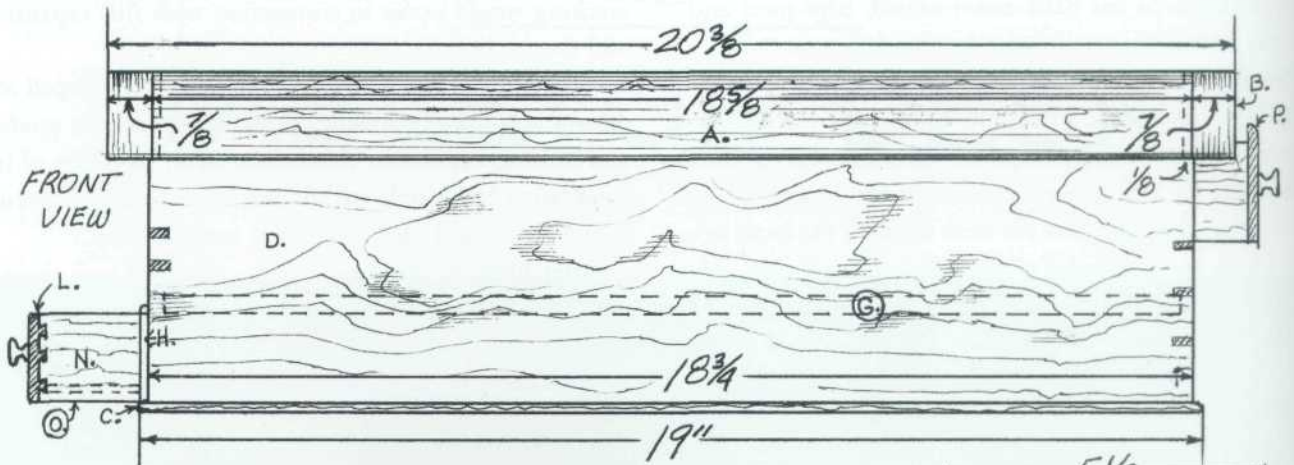
Assemble the stationery drawer with through dovetails at the front and half-blind dovetails at the back.

The till rests on a pair of 1/8"-thick supports which are glued to the inside faces of the desk front and back. After installing these supports, glue the till—with its side already glued to the bottom—into place atop the supports. Fasten it also to the desk side with a thin line of glue.

The top panel is removed from the clamps and planed to a thickness of 5/16". Then, cut 1/8" X 1/8" grooves in both ends of the top panel to receive the tongues on the bread-board ends. Form and fit the tongues to the grooves. Hold

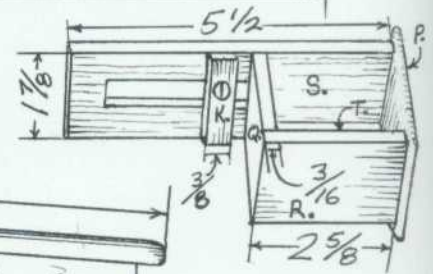
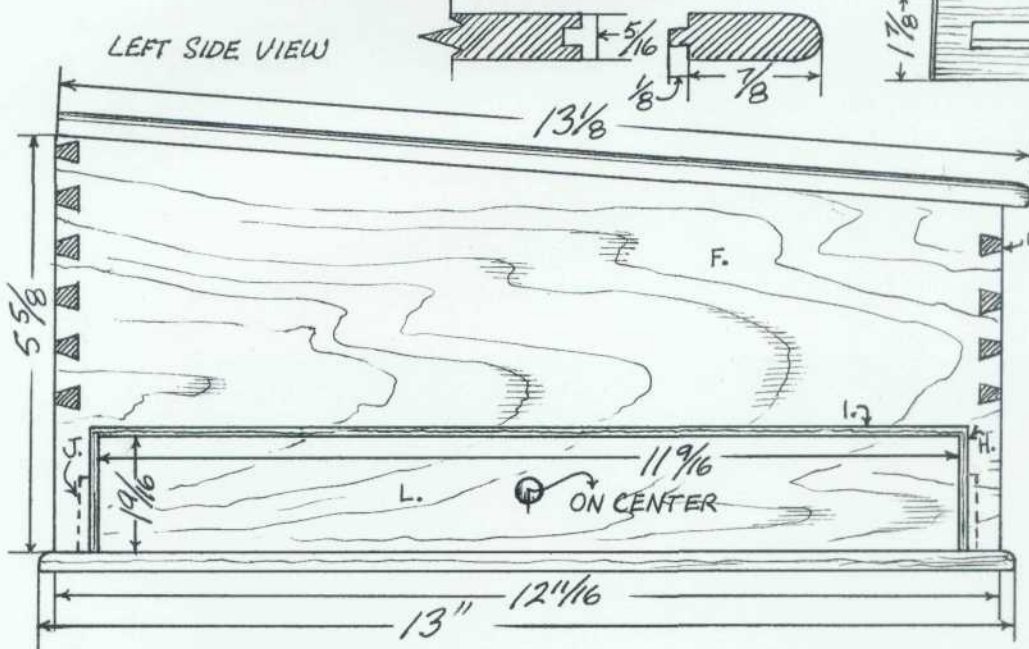


The opened tabletop desk reveals the ink well drawer and the paper drawer in the bottom.

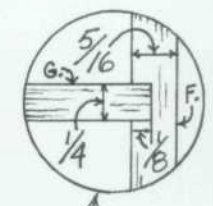


BREADBOARD DETAIL

LEFT SIDE VIEW

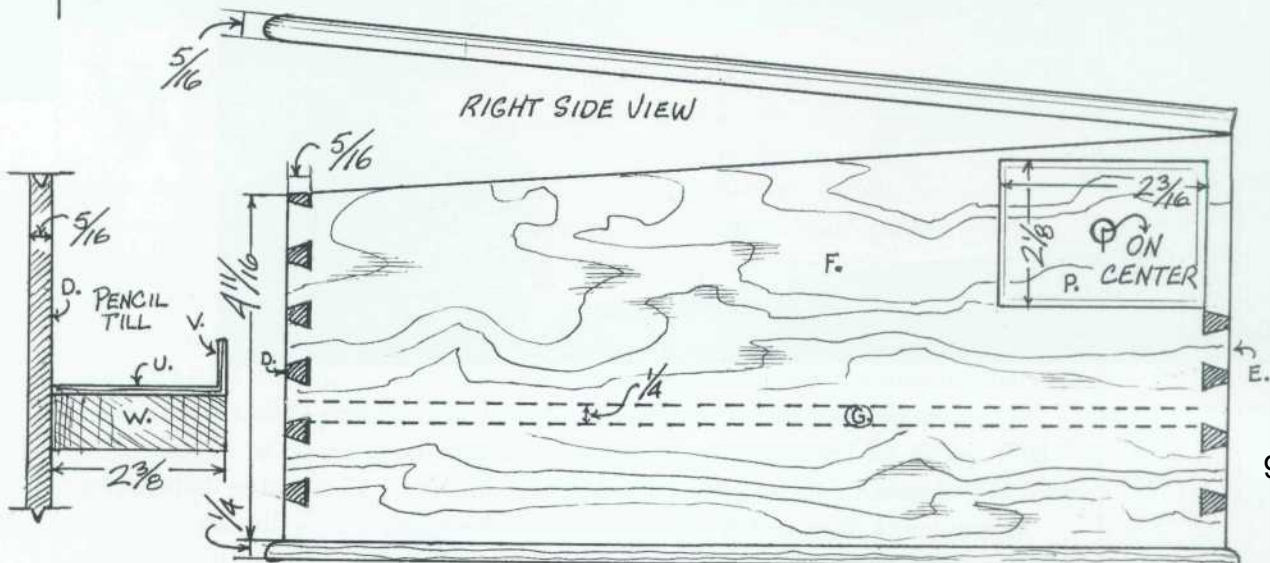


INK DRAWER



DADO FOR COMPARTMENT BOTTOM

RIGHT SIDE VIEW



each breadboard end in place with a dab of glue on the tongue at the middle of the tongue's length. The remainder of the tongue floats on the groove, allowing for seasonal expansion and contraction of the top.

Hinges are problems because of the top's extreme thinness. My dad, who built this particular piece, struggled to find screws that could get a good enough bite in the top to hold it in place. After trying and discarding several brass screws, he settled on deep-threaded 3/8" no. 6 steel screws from which he'd ground away the tips so that they wouldn't penetrate the upper surface of the top.

After fitting the hinges, remove the hardware, and give the desk a final sanding.

KILN-DRIED OR AIR-DRIED

Reference books inevitably cite the necessity of using kiln-dried material for furniture construction. I think that's misleading.

Of the thousands of board feet of lumber I've turned into chairs and into casework, less than a quarter was kiln-dried. The remainder was air-dried outdoors and finish-dried in my shop. Nevertheless, I can remember only two occasions when pieces I built experienced wood failure.

Once, I built a Hepplewhite huntboard from air-dried cherry. The top (which didn't fail) was fastened to cleats fixed with slotted screw holes. But one of the end panels, which I had triple-tenoned into the posts, split after sitting in our living room through a couple of cold, dry Ohio winters. In looking back on the construction of the huntboard, I remember hurrying to finish it before Christmas since it was a present for my wife.

When I glued up the end panels, I remember noticing, as I slathered glue on the middle tenon, that I hadn't cut the top and bottom tenons back to allow the end panel to shrink. Each tenon completely filled its mortise. But the glue was already on the middle tenon and in its mortise. To cut the other tenons back, I would have to wash away the glue, find my paring chisel, pare the tenons, and reglue. Or risk having the aliphatic resin glue set before the joint was assembled. I remember thinking it wasn't worth the effort. I remember thinking I could get away with it. The end panel failed because I built it to fail. I think that if allowances are made during design for the inevitable movement of wood, carefully air-dried material is every bit as good as kiln-dried. In fact, I think that careful air-drying is preferable to the kind of rushed kiln-drying practiced by some commercial driers. At least in humid Ohio, air-drying is a gradual process during which

wood surrenders its moisture so slowly that surface checking is almost unheard of. And it's worth mentioning that, just like air-dried stock, kiln-dried stock, when exposed to humid, July conditions, quickly takes on enough moisture to reach 11, 12 or even 13 percent.

The answer to the problem of wood movement isn't laboring to make wood inert; it is, I think, to accept movement as an inevitable component of solid-wood construction and to design to accommodate that inevitability.

MATERIALS LIST

Desk

A	Top	1 pc.	$\frac{5}{16} \times 13\frac{1}{8} \times 18\frac{3}{8}$
B	Breadboard end	2 pcs.	$\frac{5}{16} \times 1 \times 13\frac{1}{8}$
C	Bottom	1 pc.	$\frac{1}{4} \times 13 \times 1$
D	Front	1 pc.	$\frac{5}{16} \times 4\frac{1}{16} \times 18\frac{3}{4}$
E	Back	1 pc.	$\frac{5}{16} \times 5\frac{1}{8} \times 18\frac{3}{4}$
F	Side	2 pcs.	$\frac{5}{16} \times 5\frac{1}{8} \times 12\frac{1}{16}$
G	Compartment bottom	1 pc.	$\frac{1}{4} \times 12\frac{5}{16} \times 18\frac{3}{8}$
H	Short cock bead	2 pcs.	$\frac{1}{8} \times \frac{1}{2} \times 1\frac{1}{8}$
I	Long cock bead	1 pc.	$\frac{1}{8} \times \frac{1}{2} \times 11\frac{1}{8}$
J	Drawer fill strip	2 pcs.	$\frac{1}{8} \times 1 \times 16\frac{1}{4}$
K	Ink-drawer stop	1 pc.	$\frac{3}{8} \times \frac{3}{8} \times 1\frac{1}{8}$

Stationery drawer

L	Front	1 pc.	$\frac{5}{16} \times 1\frac{1}{16} \times 11\frac{1}{16}$
M	Back	1 pc.	$\frac{1}{4} \times 1\frac{1}{16} \times 11\frac{1}{16}$
N	Side	2 pcs.	$\frac{1}{4} \times 1\frac{1}{16} \times 18$
O	Bottom	1 pc.	$\frac{1}{4} \times 11\frac{1}{16} \times 18\frac{1}{4}$

Ink drawer

P	Front	1 pc.	$\frac{5}{16} \times 2\frac{1}{8} \times 2\frac{13}{16}$
Q	Back	1 pc.	$\frac{3}{16} \times 1\frac{1}{8} \times 2\frac{3}{32}$
R	Short side	1 pc.	$\frac{3}{16} \times 1\frac{1}{8} \times 2\frac{3}{8}$
S	Long side	1 pc.	$\frac{3}{16} \times 1\frac{1}{8} \times 5\frac{1}{2}$
T	Bottom	1 pc.	$\frac{3}{16} \times 2\frac{13}{32} \times 2\frac{1}{2}$

Pencil till

U	Bottom	1 pc.	$\frac{1}{8} \times 2\frac{1}{4} \times 12\frac{1}{16}$
V	Side	1 pc.	$\frac{1}{8} \times \frac{3}{4} \times 12\frac{1}{16}$
W	Support	2 pcs.	$\frac{1}{8} \times \frac{3}{4} \times 2\frac{3}{8}$

Hardware

X	Hinge	2 pcs.	$1\frac{1}{2} \times \frac{7}{8}$
Y	Pull	2 pcs.	$\frac{1}{2} \times \frac{1}{2}$
Z	Screws and nails	various	

**These are net measurements. A surplus should be added to dovetailed parts to allow them to be sanded flush.*

**Pulls were ordered from Constantine's Hardware.*