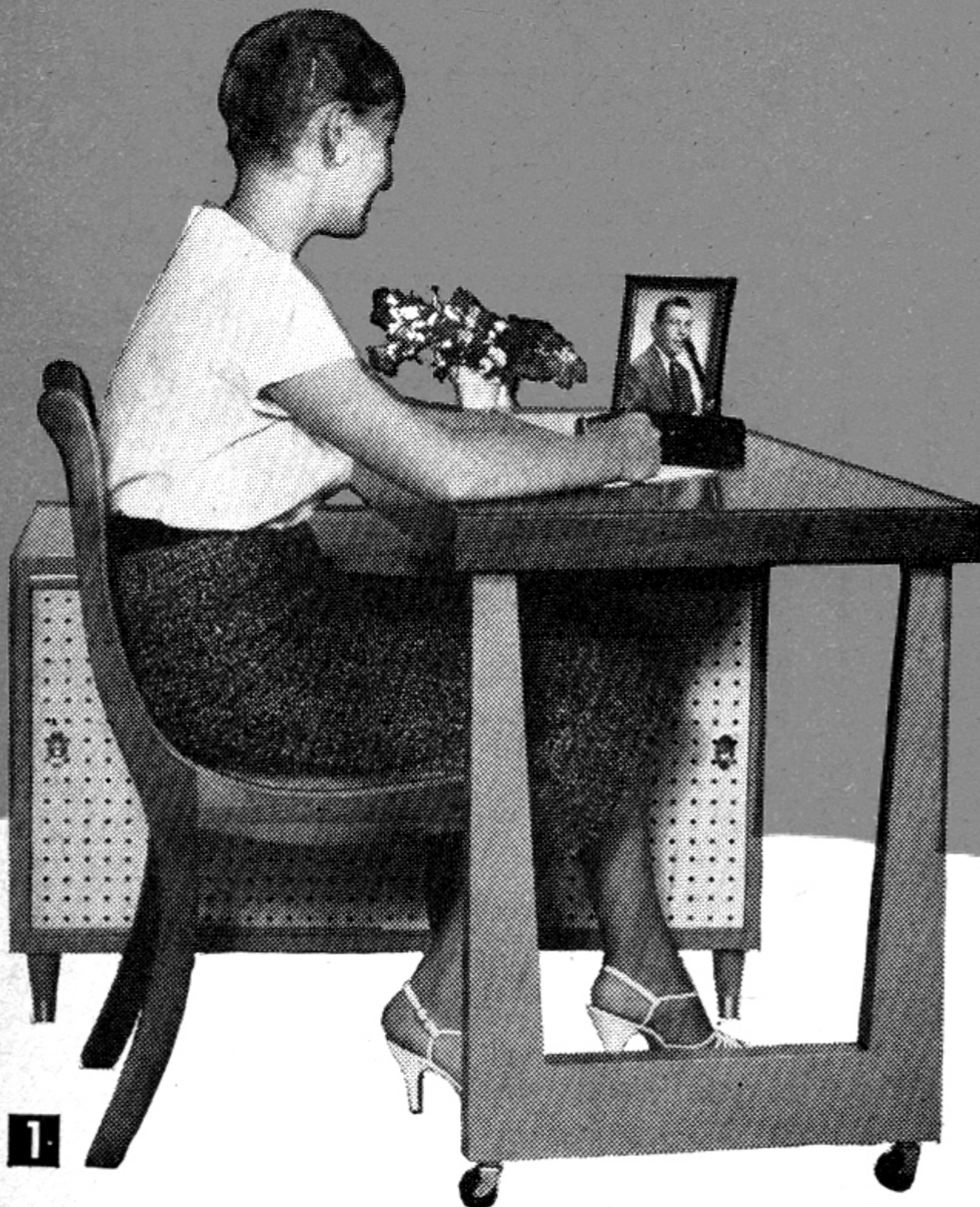


Pivot-Top Desk

a Modern Space Saver



1

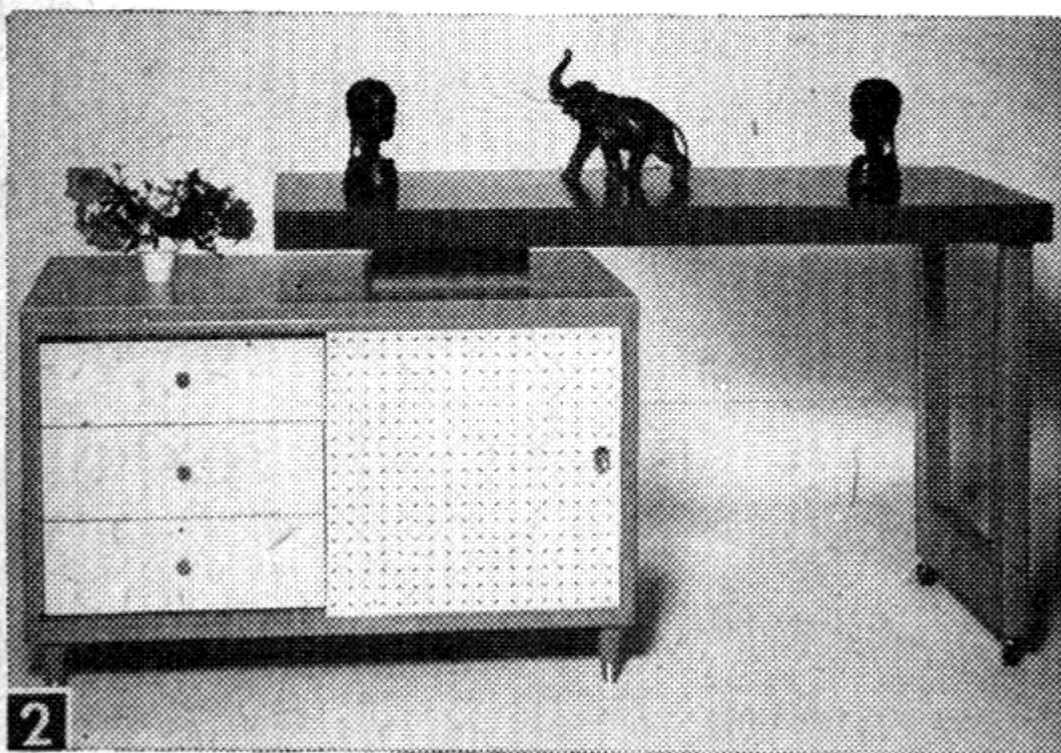
By HAROLD HUDSPETH

THREE forms of hardboard on simple framing combine to make up this attractive and economical pivot-top desk which can extend in any direction from its cabinet base as in Fig. 1, expand its overall length (Fig. 2) or swing around it completely when minimum space is desired as in Fig. 3.

The design makes lavish use of $\frac{1}{4}$ -in. tempered hardboard, yet with economy in mind. You can cut all the pieces from one 4 x 8-ft. sheet if you follow the pattern outlined in Fig. 4. Small stock pieces given in the Materials List are ample for the perforated hardboard sliding doors and storage compartment sidewalls, as well as for the $\frac{3}{16}$ -in. hardboard which is adaptable for a simplified method of drawer construction.

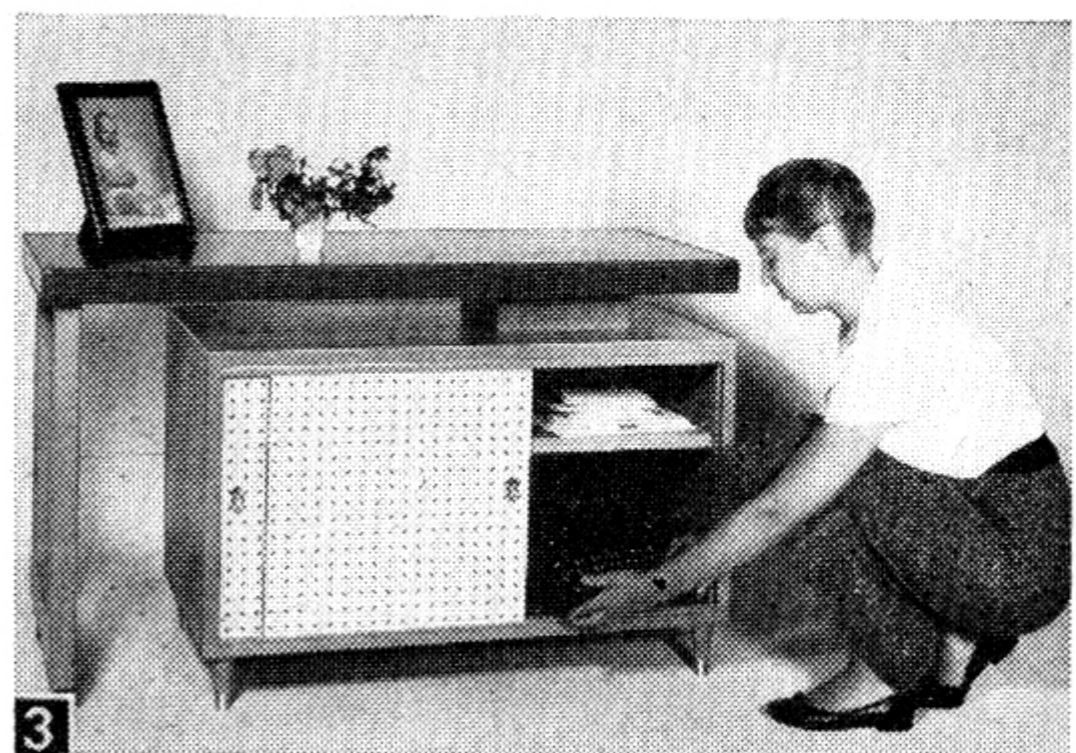
Be sure to order the $2\frac{5}{8}$ and $1\frac{5}{8}$ -in. lumber to length specified in the Materials List—or double it—for more economical cutting. And plan to rip all wider pieces of lumber from a $7\frac{1}{2}$ -ft. length of 1 x 12-in. (nominal size) pine. The little

Desk top offers a 48-in. wide work surface and swings to any position around cabinet. In this setting, slightly more than a right angle, girl can slide left-hand door and pull out either drawer without leaving or moving her chair.



2

Extended to full 62-in. length, the pivot-top desk is an appropriate setting for decorative displays and becomes an effective room divider.



3

When not in use, desk can be swung completely over cabinet to save space, yet still serve as attractive furniture piece. Note adequate storage.

scrap remaining will come in handy if you spoil one of the narrower pieces.

Base Cabinet Assembly. Make frames for the cabinet top, base, center divider and both ends according to dimensions given in Fig. 5A, using 2½-in.-wide stock for bottom front rail, top and bottom center crosspieces and the three front posts, and 1⅝-in. boards for all other pieces. Square each joint, clamp and secure with corrugated fasteners.

Attach end frames to side edges of bottom frame with 8d finishing nails. To fasten center divider in position, turn over assembly and nail through bottom of cross-piece. Right the assembly again, place top frame over divider frame, square with end pieces and nail. Plumb the divider and nail top to it. Locate drawer guides as in Fig. 5B and tack in position temporarily, ends flush with outside edge of rear posts.

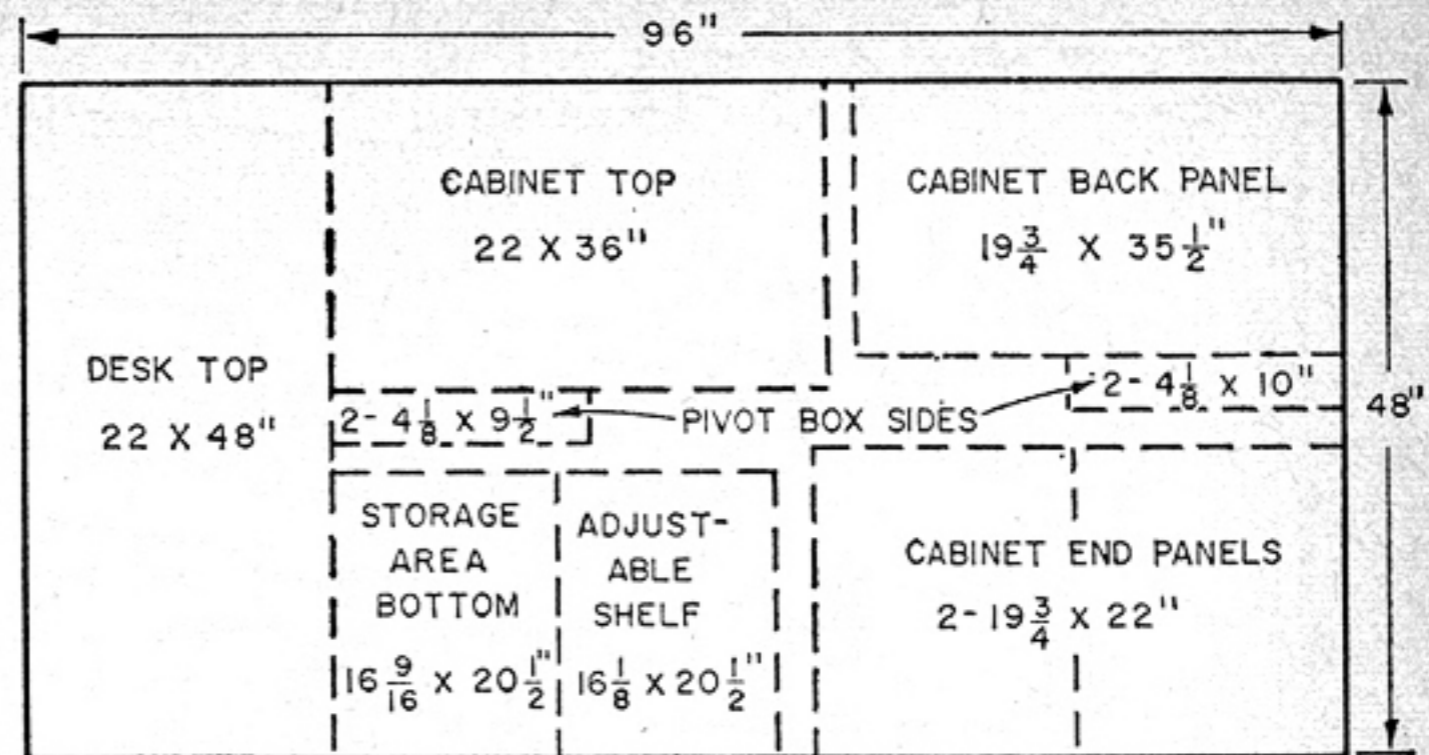
To install legs, drill ¼-in. dia. holes through the base frame 2 in. from each edge at corners, countersink and drive T-nuts in place as in Fig. 5C. Screw legs up tight. If you wish to turn the legs in your lathe, follow dimensions in Fig. 5C. If you buy legs with brackets for undercabinet attachment instead of hanger bolts, be sure that overall length of bracket and leg is 4 in.

Applying the Hardboard. Saw a 22½ x 48-in. piece off an end of the 4 x 8-ft. tempered hardboard for the desk top and put it aside. Now turn back of cabinet up, place one end of the remaining sheet on the back in position shown in Fig. 4, mark off two remaining sides and saw off piece to cover framing. Glue and brad piece in place, smooth side out. Smooth any rough edges flush to frame.

It's best to place hardboard against the work, marking and cutting each piece as you go, in the same position shown for it in Fig. 4. With a different layout, you may need to buy more hardboard to complete your cutouts. Marking from the work instead of trusting to the exact sizes in the plan will give a better fit if there is any deviation in the framing.

Mark pieces to cover end frames plus edge of back panel, cut and install as above. Sand edges flush. Turn cabinet up again, mark off, cut and install top, and smooth edges. Cut panel for storage area bottom, aligning front with outside edge of center post as in Fig. 5A. Glue and fasten with brads.

To make the pivot box (Fig. 5D), cut two 9½ x 9½-in. blocks, clamp together to center-bore a ½-in. hole. Out of the remaining tempered hardboard pieces, cut sides to dimensions given in Fig. 5D, then assemble box with glue and brads. Glue box to cabinet top over storage area, 6 in. from front, side and



4

GUIDE TO MAKE ALL ¼" TEMPERED HARDBOARD CUTS FROM ONE 4 X 8' SHEET

MATERIALS LIST—PIVOT-TOP DESK

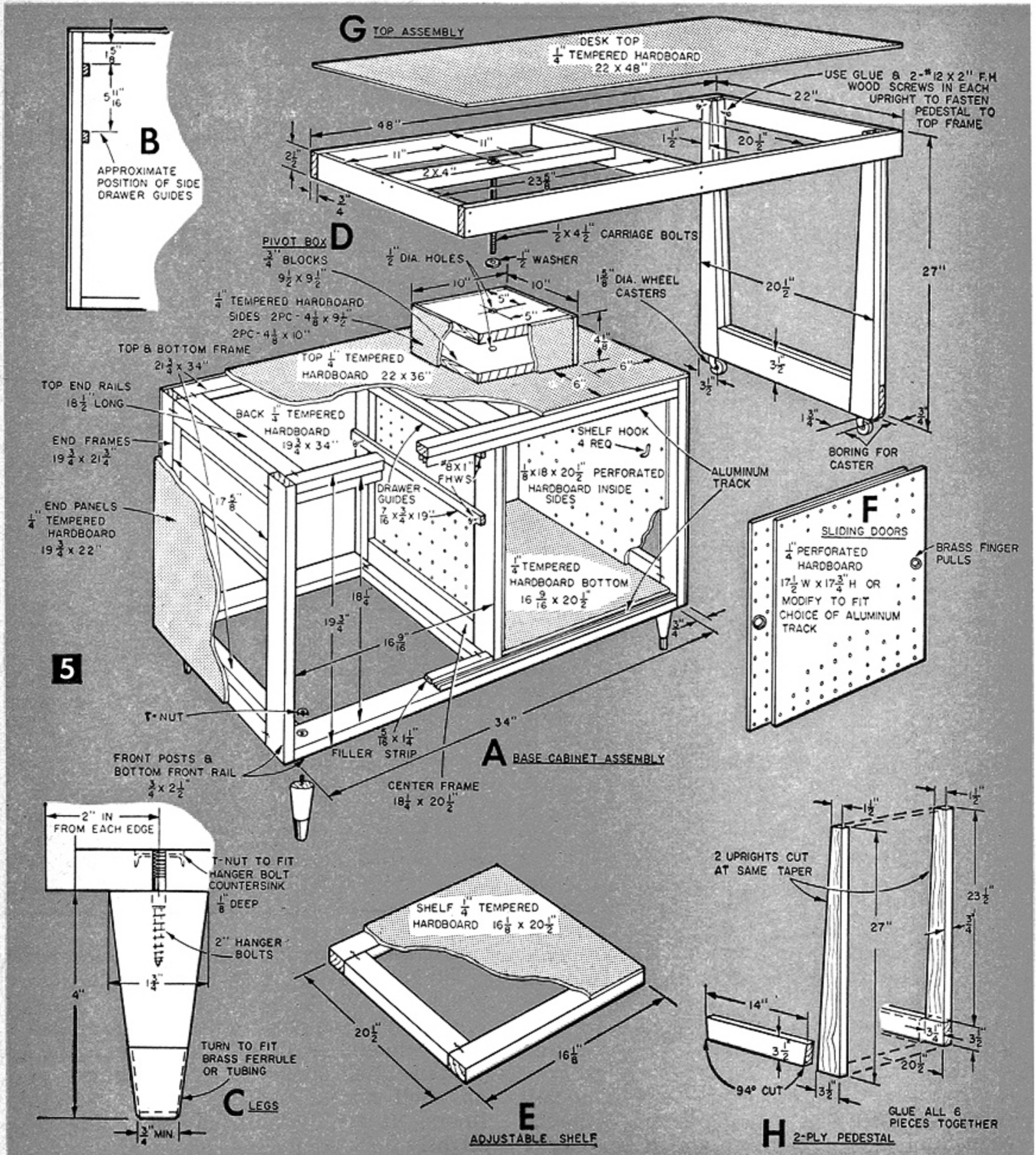
No. Req.	Size and Description
1 pc	¾ x 11½" x 7½" (nominal 1 x 12" stock) pine (rip out drawer fronts, pivot box top and bottom, 6 pedestal pieces)
5 pcs	¾ x 2⅝" x 6" (nominal 1 x 3") pine (cabinet, desk top, shelf framing)
6 pcs	¾ x 1⅝" x 6" (nominal 1 x 2") pine (cabinet desk top framing)
1 pc	2 x 4 x 24" (for desk top frame)
1 pc	7/16 x ¾ x 78" strip (for drawer guides)
1 pc	5/16 x 1¼ x 16⅞" strip (for filler strip)
1 pc	¼" x 4 x 8' tempered hardboard (Masonite) (see Fig. 4)
1 pc	3/16 x 4 x 5' hardboard (Presdwood) (for drawer assembly)
1 pc	¼ x 18 x 36" perforated hardboard (Peg-Board) (for doors)
1 pc	1/8 x 24 x 36" perforated hardboard (for compartment)
1 pc	3', 2-channel shallow aluminum track for ¼" doors (Reynolds)
1 pc	3', 2-channel deep aluminum track for ¼" doors (Reynolds)
4	4" tapered legs with hanger bolts and T-nuts or brackets (about \$3.50 set at many lumber dealers, hardware stores)
2	1⅝"-dia. wheel casters (ball-bearing type)
3	brass knobs (drawers)
2	brass flush finger pulls (doors)
4	shelf hooks (perforated hardboard)
1	½ x 4½" carriage bolt with 2 washers, lock washer, nut
4	#12 x 2" fh screws (pedestal)
8	#8 x 1" fh screws (drawer guides)
misc	corrugated fasteners, 8d finishing nails, ¾" and ⅜" brads, wood glue or contact cement, putty, paint or lacquer

rear edges of the top. Brad from underneath.

Divide the 1/8-in. perforated hardboard sheet into 18 x 20½-in. panels with holes in alignment, then glue and brad to each side of compartment as in Fig. 5A. Make the adjustable shelf as shown in Fig. 5E and place on shelf hooks installed in the perforated liners. If too tight, sand shelf side edges slightly for a snug fit.

Install the deep two-channel aluminum track to underside of top frame and the shallow track on bottom frame, placing both pieces against edge of the center post as in Fig. 5A. Glue and brad filler strip to bottom frame against inside of track in drawer section of cabinet. Cut door panels from ¼-in. perforated hardboard to size given in Fig. 5F so that hole patterns align and edge margins are similar. Install brass door pulls. Insert a panel in each top channel and drop into place in lower track.

Desk Top Assembly. Cut pieces for the top frame out of 2⅝-in. stock to sizes given in Fig. 5G, square ends and secure with two 8d finishing nails at each joint. Nail in a 2 x 4



crosspiece in that part of the frame intended to go over the pivot box, drill a 1/2-in. dia. hole through exact center of crosspiece and countersink for head of a carriage bolt, as in Fig. 5G.

To make the pedestal, rip out of wide stock a pair of 27-in. legs and another pair 23 1/2 in. long, tapering the widths to dimensions given in Fig. 5H. Rip a 3 1/2-in. wide piece 20 1/2 in. long and another 14 in. long, angling the latter cuts 94° as in Fig. 5H. Glue the six pieces as shown in Fig. 5G and H and sand edges flush. Drill holes to fit casters in bottom of the base, centered 1 3/4 in. from each end and

install the casters.

Now you can attach the pedestal to the top frame. Place leg ends against inside corners flush with top as in Fig. 5G, and fasten with #12 x 2-in. fh (flathead) screws, one into each adjoining rail.

Insert a 1/2 x 4 1/2-in. carriage bolt through the frame's 2 x 4 crosspiece and add a 1/8-in. thick washer for a spacer as in Fig. 5D and G. Attach top frame to cabinet by passing bolt through pivot box and cabinet top, slip on a washer and lock-washer, then tighten with a nut. Glue and brad previously cut tempered hardboard panel, smooth side up, to top of