

# Make This Handsome Chess

Here's a chess set you can build that is fit for a king, queen, even a pawn. It easily copped first prize at the Michigan Industrial Education State Fair

**T**HOUGH its exact origin is unknown, a generally accepted theory is that chess was imported to Europe from the Orient more than 1500 years ago. The game as we know it today, except for minor changes, is at least 600 years old.

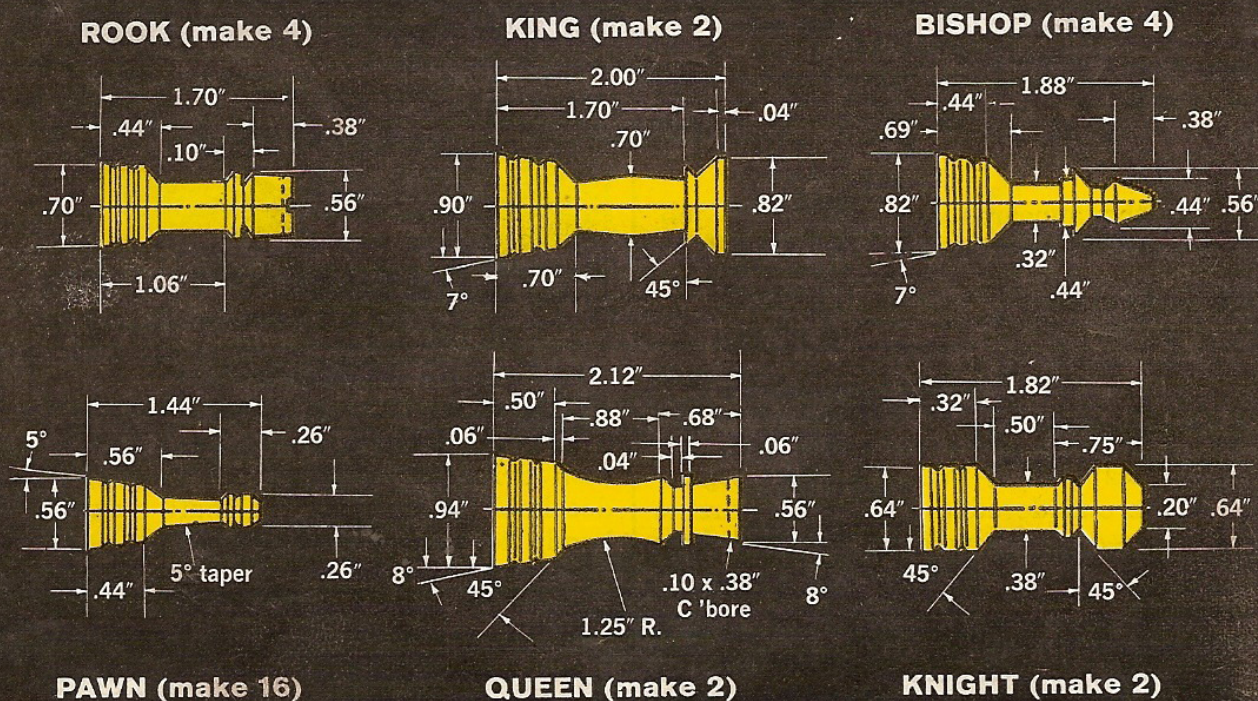
While the shapes and sizes of the chessmen may vary, the checkered playing board is standardized around the world and consists of 64 squares—32 light colored and 32 dark. In our version, the board is of 1/2-in. plywood and the squares are made by tilting the table saw blade to 45° and running shallow V-grooves at right angles.

The contemporary chessman are machined on a metal lathe. One set is of brass while the other is of aluminum. Other combinations of metal could be used or, both sets could be aluminum with one set being anodized. To protect them when not in use, they are snugly stored in rattleproof drawers lined with Styrofoam.

**Making the chessmen:** Start by cutting the stock to length—allowing two chessmen to each length—except for the kings and queens. Cut a chessman out on one end of the stock, then reverse the stock end for end and turn the second chessman. Dimensions for all the chessmen are given below; use standard metal-lathe practice to cut them. The stylized king's crown is made using a jeweler's file. Carefully file the notches about 1/16 in. wide and 1/16 in. deep.

**Finishing the chessmen:** After each piece has been turned, leave it mounted and polish it dry with 240-grit emery cloth, then with oil. Next use 320 grit, also dry and then with oil. Use lacquer thinner and tissue paper to clean the piece while it is still on the lathe. Once each of the pieces has been cleaned make certain that they are not touched with the fingers.

Heat the piece with a torch until just warm—don't overheat. Then apply three

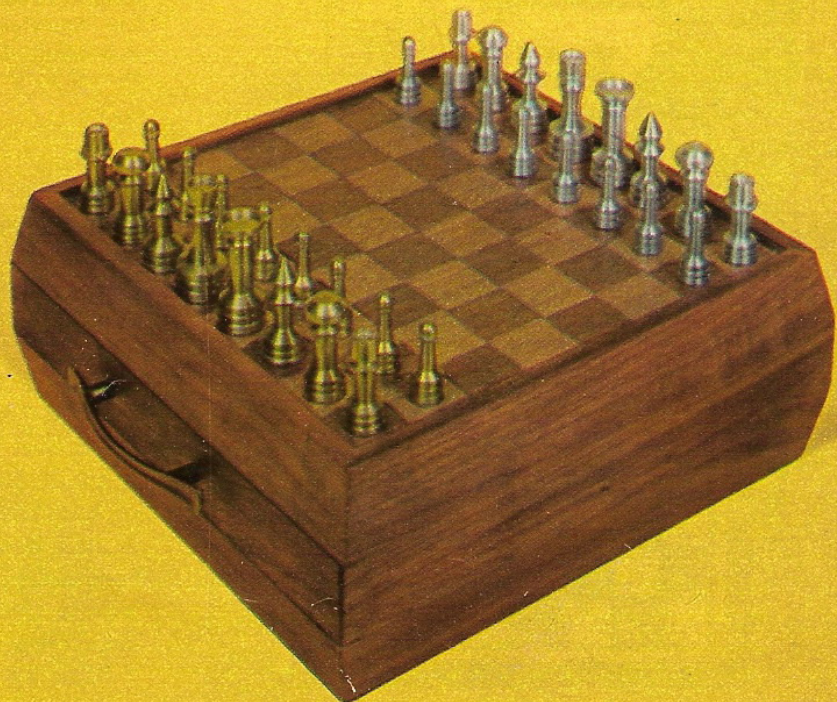


# Set for Christmas

By BILL FIFER  
and WALTER LANGE

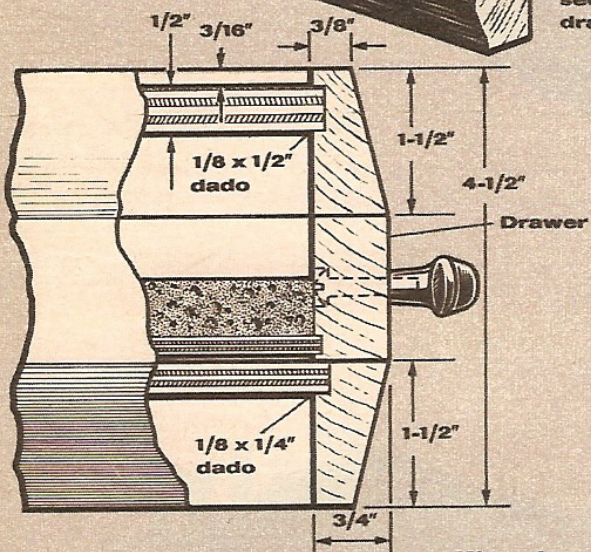
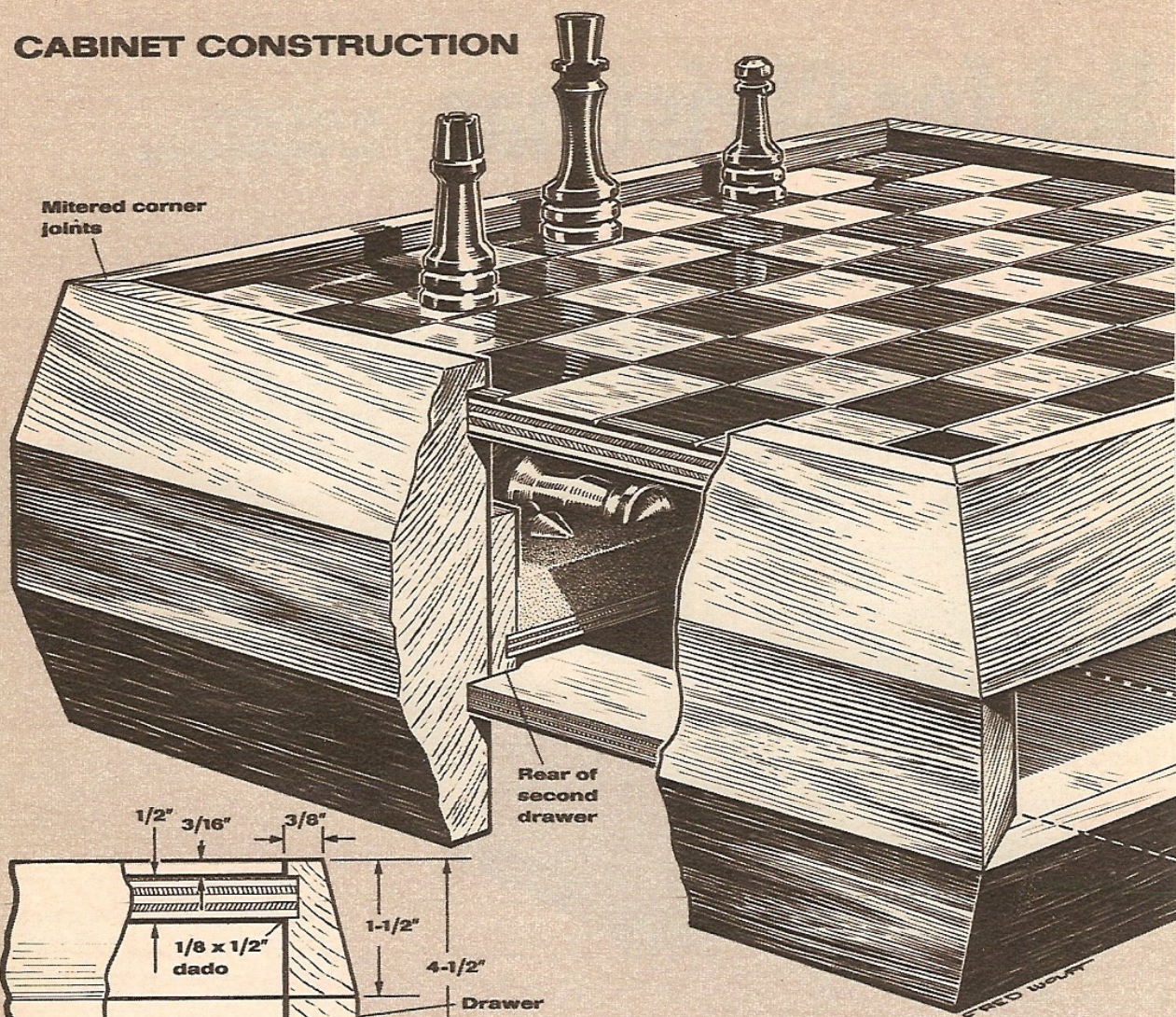


**LATHE-TURNED MEN** in gleaming brass and aluminum, used and stored in a rich walnut case, make this handsome chess set a unique conversation piece that's worthy of your finest craftsmanship. Each set stores in a drawer of its own and is cradled in a bed of Styrofoam. The chess playing surface is scored and squares are stained contrasting light and dark colors

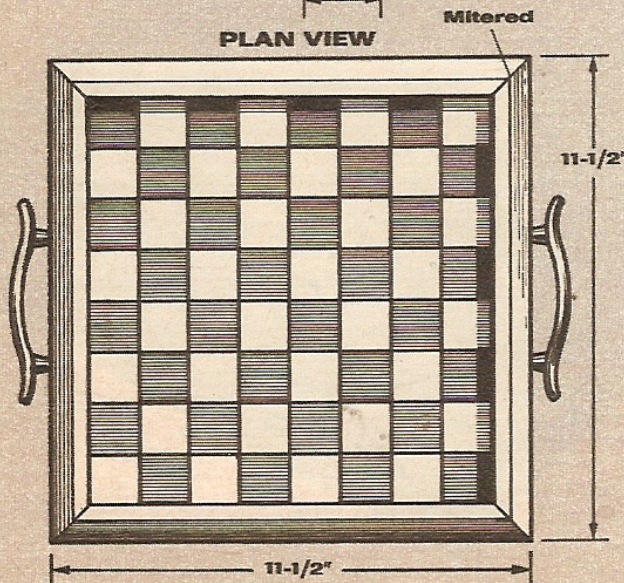


Photos by the Authors

## CABINET CONSTRUCTION



PLAN VIEW



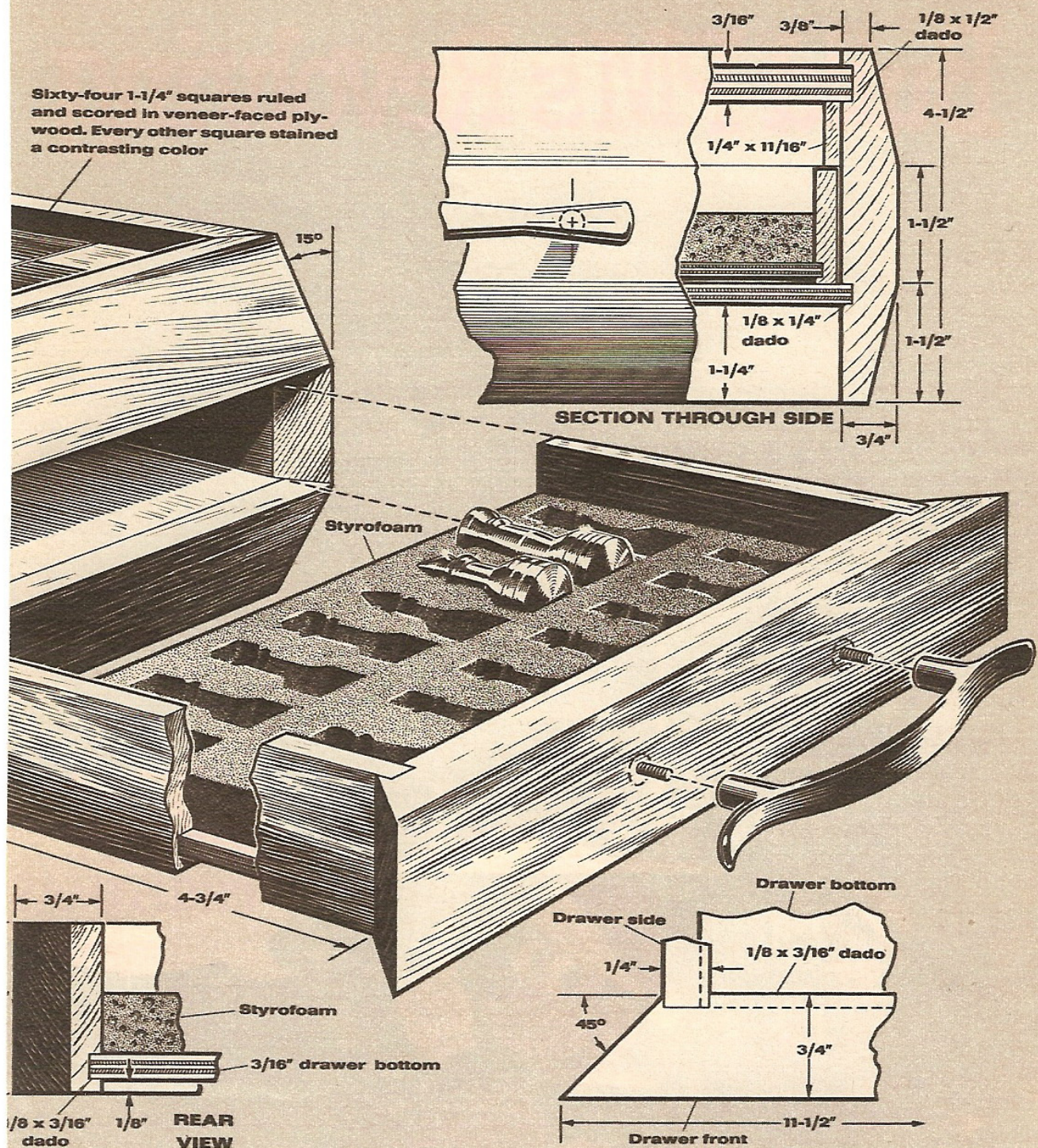
**GLEAMING BRONZE HANDLES** accent walnut used for cabinet and drawer fronts, were purchased at a local hardware store. Drawers do not require backs, but Styrofoam should be cut oversize to insure a press-fit. Drawer bottoms can be of plywood as shown or, if preferred, of 1/4-in. tempered hardboard

*Technical Art by Fred L. Wolff*

coats of spray-can lacquer. Finally, cut the piece off with a parting tool, making sure the bottom is flat. If there are any burrs, knock them off with a single-cut file.

Notice that the aluminum pieces were flocked (on the bottoms) with a royal blue flock and that the brass pieces received a light green flock. (Flocking is the process of applying powdered felt to paint while it is still wet. Here, of course, it is applied to lacquer.) The felt on the bases is optional but it does save the playing board from scratches.

**Making the cabinet:** Start by cutting



the playing board to size. Be sure you allow an extra 1/8 in. on all four sides for inserting the plywood into dados in the cabinet sides. After grooving the squares, sand the board thoroughly, and stain alternate squares, using an artist brush and walnut stain.

Next make the box. There are no tricky or unusual cabinetmaking techniques called for, but work carefully so that the finished product will have the look of elegance it deserves. The sides are cut to shape on the table saw. Notice that the corners are mitered as are the mating ends of the drawer fronts. To insure a

minimum of saw marks on the bevels on the cabinet sides, use a hollow-ground cabinet blade to make the cuts.

With box and drawers assembled, cut both Styrofoam drawer liners to size. Next, arrange the chessmen in two rows as they appear on the board. Then, gently press each piece down into the Styrofoam so that it will clear the drawer opening. Remove the pieces, paint the Styrofoam top and front and then flock with the color of your choice. Allow ample time for the setup to dry before going on to the next step. *Caution:* Since certain paints will

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