



## Tansu Chest

The grain pattern of hard maple reminds me of the ink landscapes drawn by Chinese and Japanese artists beginning in A.D. 700. Each painting, with its jagged mountains and forbidding peaks, was supposed to represent a little story. The viewer followed the people in the painting as they journeyed on a path through the painting. So when I decided to build a step tansu, the obvious choice was maple, despite the fact that these chests were traditionally built from Japanese cypress, cedar or elm.

"Tansu" means chest, and the high period of this type of furniture was between 1657 to 1923. The traditional Japanese household would store clothing, valuables and household items in its tansu.

Construction of this chest is simple. You'll need a sheet and a half of 3/4" maple plywood, one board of 1"-thick maple that's about 8' long and 8" wide and some 1/2" and 1/4" plywood scraps for the drawers. The carcasses of the upper and lower cabinets are built the same way. First cut all your pieces to size and iron on veneer edge tape to cover all the exposed plywood edges.

Now cut the grooves and rabbets on the cabinet stiles. The side panels are glued into 1/2"-deep x 3/4"-wide grooves milled 1/4" in from the edge of the cabinet stiles. The back panel is nailed and glued into a 1/2"-deep x 3/4"-wide rabbet on the inside of the stiles. Screw each assembly to its bottom board. Glue and nail the partitions in place.

### Lower Cabinet Doors

Build the two sliding doors using stub tenons that rest in 1/4"-wide

by 1/2"-deep grooves. The only exception to this is the grooves in the thin rails, which should be 1/4" wide and 1/4" deep. Also, the interior stiles are merely applied to the doors after construction; they are not structural. After dry-assembling your doors, glue up and clamp them up.

When dry, glue the interior stiles in place and cut a 1/4"-wide by 1/2"-deep groove on the top and bottom of each door that will allow the door to slide on the runners. Then cut the four runners; make sure they slide smoothly in the doors' grooves. Attach the runners to the top and bottom of the lower cabinet using brads and glue.

I spaced my runners so that the front door is flush to the front edge of the cabinet stiles. Then I left a 1/16" gap between the two doors. Fit the doors to the opening in the chest. Now screw the top to the carcass through cleats that are screwed to the sides and partition of the case.

### **Upper Cabinet Drawers**

Here's how I built my drawers. Cut 1/2" x 3/8" rabbets on the ends of the drawer fronts. Then cut 1/2" x 1/4" rabbets on the back edge of the sides to hold the back piece. Then cut a 1/4" x 1/4" groove to hold the drawer bottom on the sides, back and front that's 1/4" up from the bottom edge. Glue and nail the sides to the drawer front. Slip the bottom in place. Glue and nail the back to the sides.

How you hang the drawers is up to you. I cut 1/4"-deep x 5/8"-wide stopped dados that were centered on each side of the drawer. Then I nailed drawer runners to the carcass's partitions and drawer runners with plywood build-up strips to the sides. When the drawers move smoothly, nail the top to the case. Putty any nail holes. Apply three coats of a clear finish

You might have noticed from the photo that I made the grain direction of the drawers run vertically instead of horizontally. This is OK for such small drawers, and I did this because each bank of drawers now reminds me of one of those Japanese landscape paintings. **PW**

Schedule of Materials Step Tansu

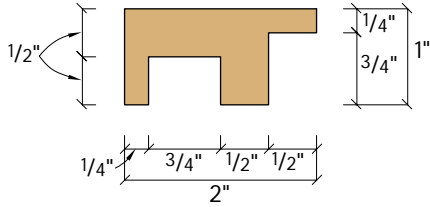
**Lower Cabinet**

| No. | Item            | Dimensions T W L                               | Material |
|-----|-----------------|--|----------|
| 2   | Top & bot.      | 3/4" x 17" x 51"                               | Ply      |
| 4   | Cabinet stiles  | 1" x 2" x 16"                                  | M        |
| 2   | Side panels     | 3/4" x 15" x 16"                               | Ply      |
| 1   | Back panel      | 3/4" x 16" x 47"                               | Ply      |
| 4   | Dr stiles       | 3/4" x 2" x 16"                                | M        |
| 4   | Dr rails        | 3/4" x 2" x 21"                                | M        |
| 2   | Thin rails      | 3/4" x 1" x 21"                                | M        |
| 2   | Top panel       | 1/4" x 7 <sup>1</sup> / <sub>16</sub> " x 21"  | Ply      |
| 2   | Lower panel     | 1/4" x 4 <sup>11</sup> / <sub>16</sub> " x 21" | Ply      |
| 4   | Interior stiles | 1/4" x 1" x 7"                                 | M        |
| 4   | Runners         | 1/4" x 1/4" x 46"                              | M        |
| 1   | Partition       | 3/4" x 13" x 16"                               | Ply      |
| 3   | Cleats          | 3/4" x 3/4" x 13"                              | M        |

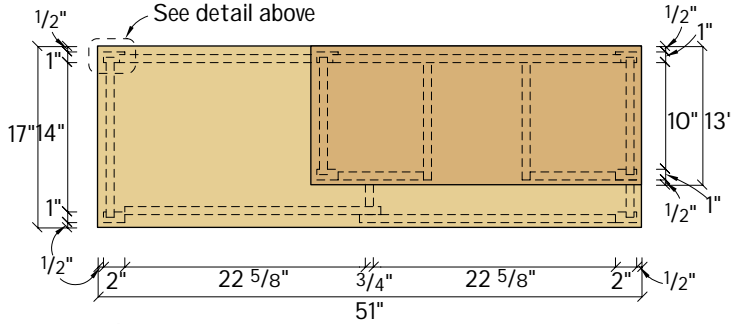
**Upper Cabinet**

| No. | Item           | Dimensions T W L   | Material |
|-----|----------------|--|----------|
| 2   | Top & bot.     | 3/4" x 13" x 31"   | Ply      |
| 4   | Cabinet stiles | 1" x 2" x 11"  | M        |
| 2   | Side panels    | 3/4" x 11" x 11"   | Ply      |
| 1   | Back panel     | 3/4" x 11" x 27"   | Ply      |
| 2   | Vert dividers  | 3/4" x 10 <sup>1</sup> / <sub>2</sub> " x 11"                            | Ply      |
| 4   | Lg drw frts    | 3/4" x 4" x 8"   | M        |
| 8   | Drw sides      | 1/2" x 4" x 10 <sup>1</sup> / <sub>8</sub> "                             | Ply      |
| 4   | Drw backs      | 1/2" x 4" x 7 <sup>1</sup> / <sub>2</sub> "                              | Ply      |
| 6   | Drw bot        | 1/4" x 7 <sup>1</sup> / <sub>2</sub> " x 9 <sup>3</sup> / <sub>4</sub> " | Ply      |
| 2   | Sm drw frts    | 3/4" x 3" x 8"   | M        |
| 2   | Drw sides      | 1/2" x 3" x 10 <sup>1</sup> / <sub>8</sub> "                             | Ply      |
| 4   | Drw backs      | 1/2" x 3" x 7 <sup>1</sup> / <sub>2</sub> "                              | Ply      |

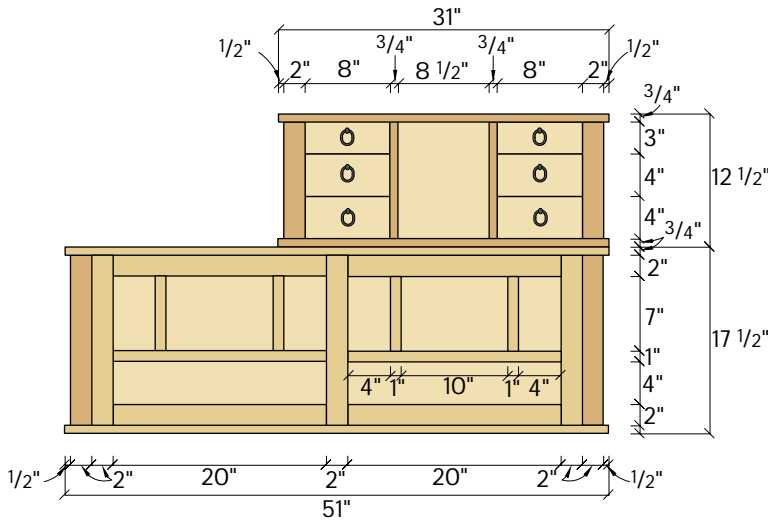
M= Hard maple, Ply= Maple plywood



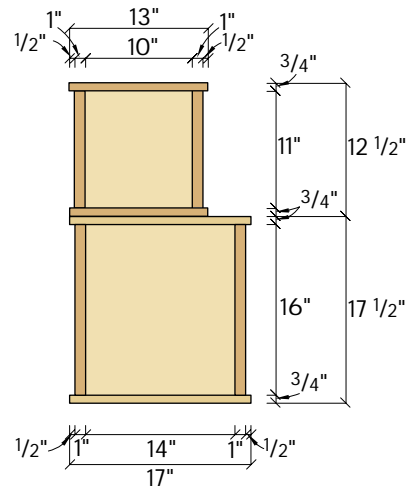
Detail of back cabinet stiles



Plan



Elevation



Profile