

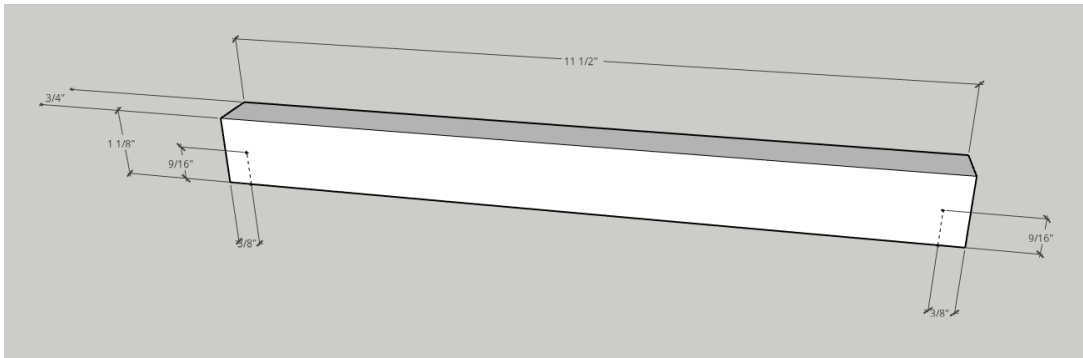
Making the base and hinges of the chess board:

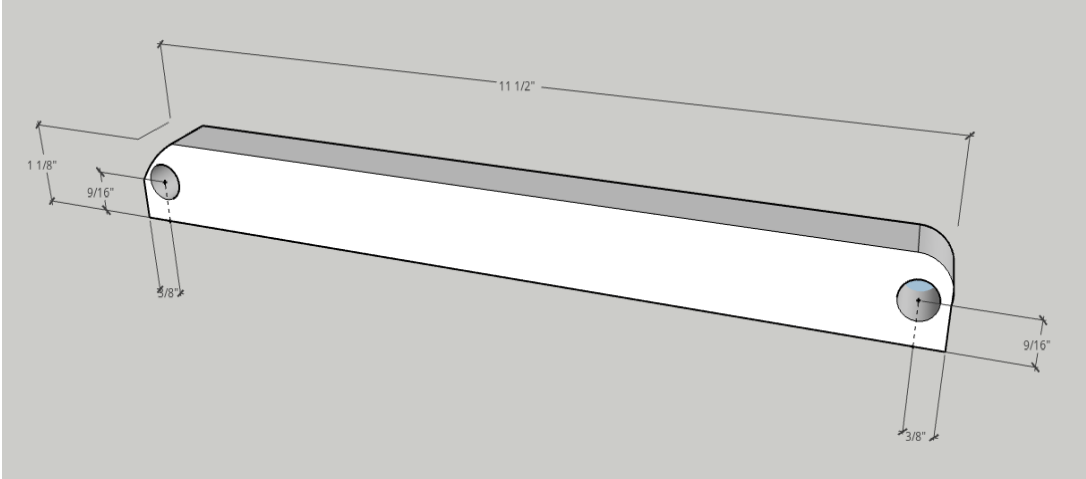
The base is made up of the following pieces (we used poplar and MDF):

- 1 each MDF $\frac{1}{4}$ " x $11 \frac{1}{2}$ " x $11 \frac{1}{2}$ " (bottom)
- 2 each $\frac{3}{4}$ " W x $1 \frac{1}{8}$ " H x $11 \frac{1}{2}$ " L (sides)
- 2 each $\frac{3}{4}$ " W x $1 \frac{1}{8}$ " H x 10" L (centers)
- 2 each $\frac{3}{4}$ " W x 1" H x $9 \frac{7}{8}$ " L (hinges)
- 4 each $\frac{1}{4}$ " x $1 \frac{1}{2}$ " dowels (hinge pins)
- 2 each roller latches

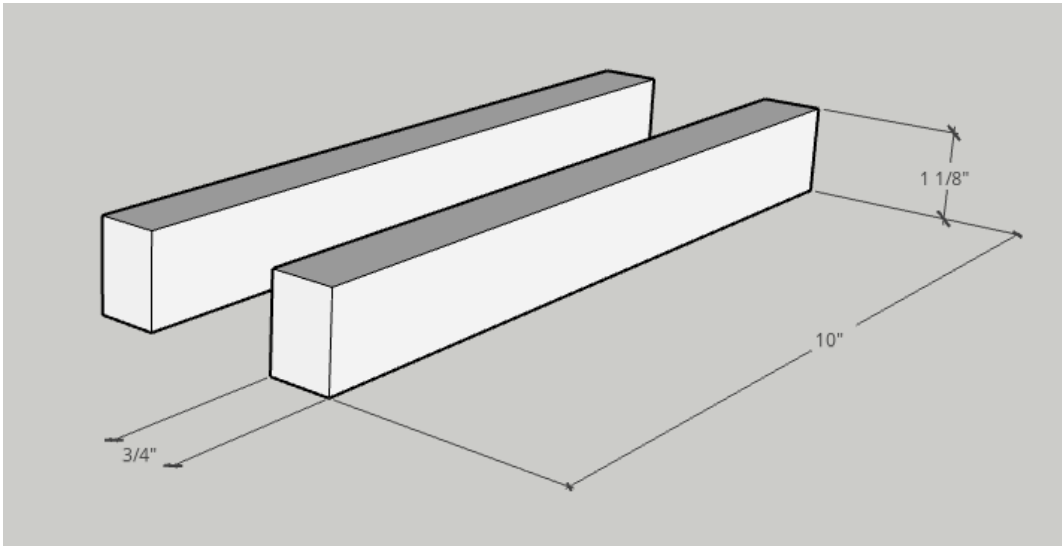
After cutting the pieces to size:

1. Sand everything, except the ends of the center pieces, since they are cut to length, and the ends will not show
2. Drill a $\frac{1}{4}$ " hole through each side of the side pieces, midway from top to bottom, and $\frac{3}{8}$ " in from the ends, and route the ends of the side pieces with a $\frac{1}{2}$ " round over bit

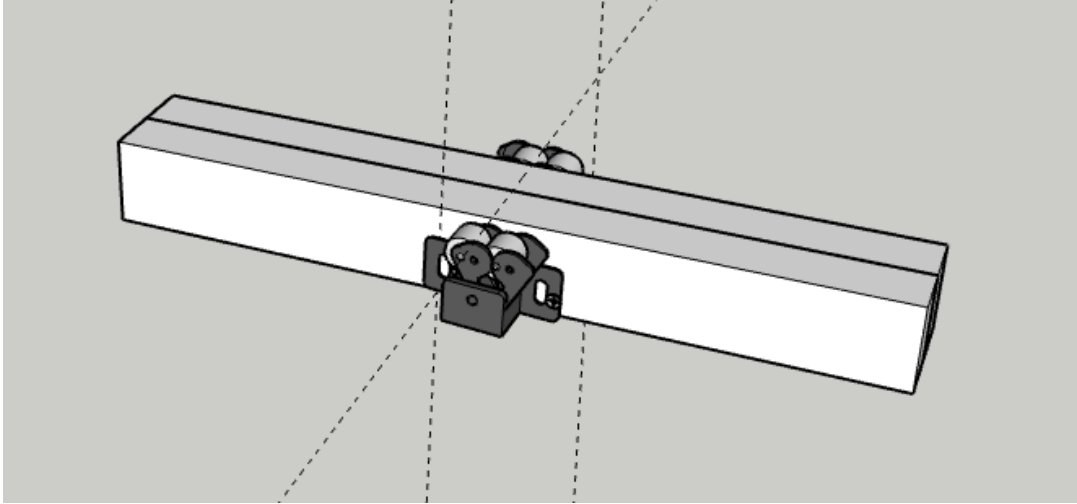




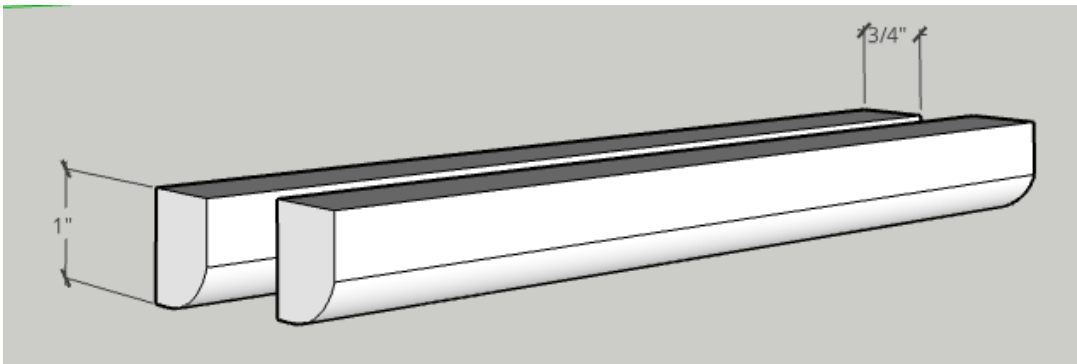
3. The two center pieces are glued and nailed together

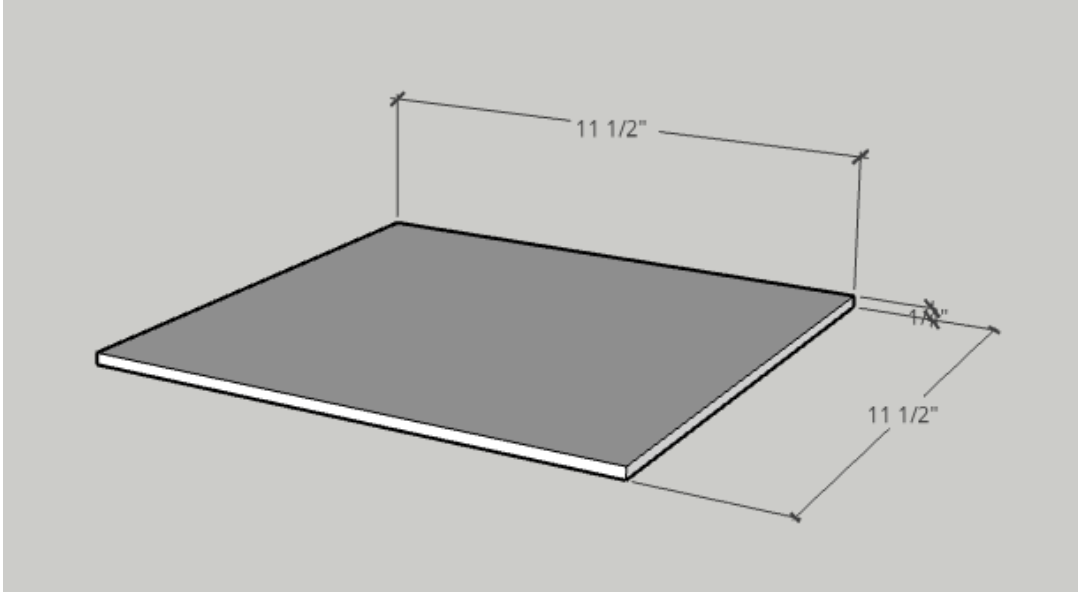


4. Attach the roller latches, one on each side of the center pieces, midway from the ends

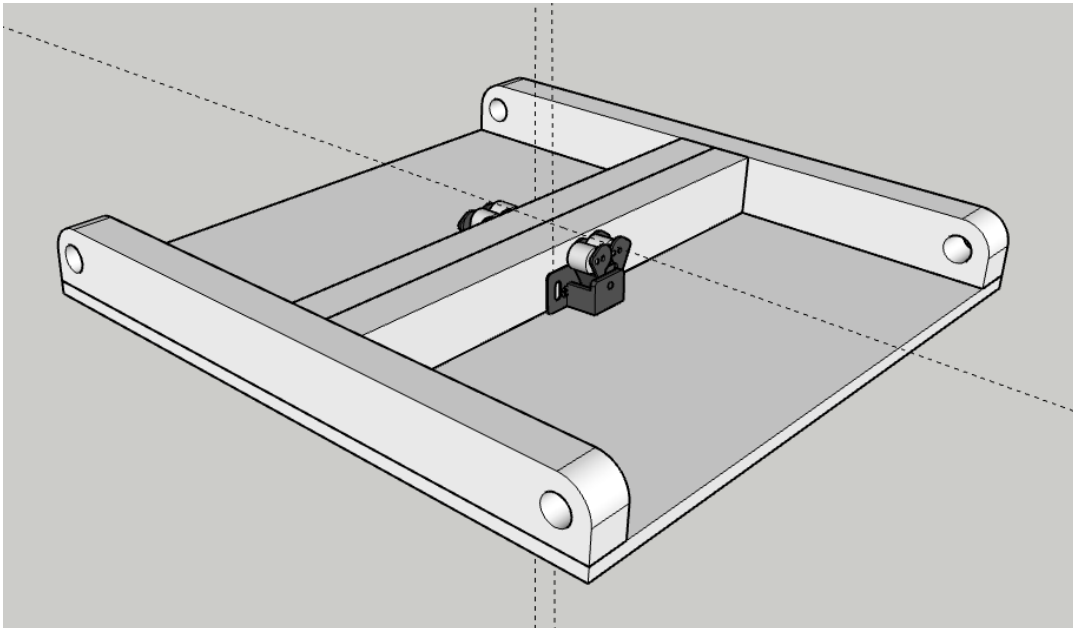


5. Route the length of each of the hinges along one side with a $\frac{1}{2}$ " round over bit

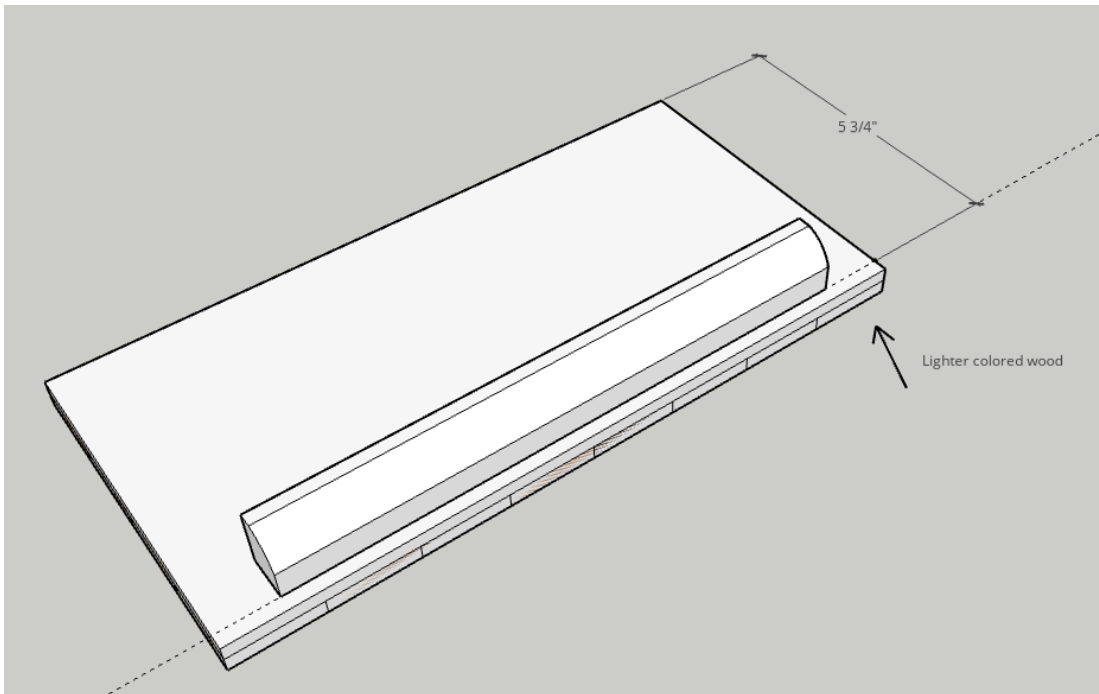




6. Attach the sides and center pieces to the bottom piece with glue and nails



7. Attach the hinge pieces to the underside of each top piece. Make sure that the pattern of the squares of the two sides line up properly. [It's best if the lighter of the two woods is in the bottom right corner – see drawing]. The “outside” edge of the hinge piece should be $5\frac{3}{4}$ ” from the center of the top.



8. Lay the top pieces face down, and lay the bottom in place, lining the edge of the hinge piece, with the bottom edge. With the $\frac{1}{4}$ " drill bit, drill through the holes in the side pieces into the hinge pieces.



9. Remove the top pieces, and drill the $\frac{1}{4}$ " holes larger, using a $\frac{7}{16}$ " bit, into the hinge piece

10. Put the unit back together, and insert the 1/4" dowels through the side pieces, into the hinges. Pin nail the dowel through the half round end of the side pieces, to keep it from rotating



11. Attach the interlocking piece of the roller latch to the underside of the top



Finished project:

