



## Wishing Well

*Once upon a time, when every village had a well at its center, it was believed that spirits took up residence there. Of course the better looking your well, the better the quality of occupant you got. Drop a little loose change in, make a wish, and hope the spirit of the well looked kindly upon having coins dropped on its head.*

*You're sure to draw a class tenant with this wishing well project. You can make this rustic lawn decoration from inexpensive waferwood, some shingles, and 2 x 4's. The base is a 35-inch-wide hexagon, 38 inches tall. The roof peak is just over 6 feet tall. Go ahead and make a wish come true.*

### **Materials**

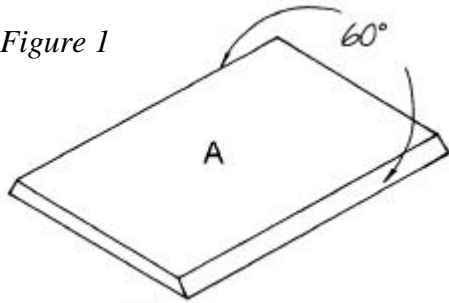
- 18 linear feet of pine 2 x 2 (Or you can use a 9-foot length of 2 x 4 ripped in half.)
- 31 linear feet of pine 2 x 4
- 33 square feet of 1/2 inch waferwood
- 41-inch length of 3/4" diameter wooden dowel rod
- A few inches of 1-inch diameter wooden dowel rod for washers
- Two bundles of flat cedar shingles
- 3d or 4d finishing nails
- 9/16-inch staples or roofing nails
- Six No. 6 gauge flathead wood screws 1-1/2" long and two 1-inch long
- Waterproofing wood sealer, wood stain, carpenter's wood glue

### **Cutting List**

Code	Description	Quantity	Material	Dimensions
A	Side	6	1/2" Waferwood	15" x 36"
B	Roof	2	1/2" Waferwood	21" x 33"
C	Support	2	2 x 4 pine	72 inches
D	Rafter	4	2 x 4 pine	18-1/4 inches
E	Brace	4	2 x 4 pine	13 inches
F	Trim	6	2 x 4 pine	16-5/8 inches
G	Corner	6	2 x 2 pine	36 inches

## Cutting Instructions

Figure 1



1. Cut and label each piece.
2. Bevel both long edges of each Side (A) piece at 60-degree angle as shown in *Figure 1*.
3. Bevel one long edge of each Corner (G) piece at 30-degree angle as shown in *Figure 2*.

4. Miter both ends of each Trim (F) piece at a 60-degree angle as shown in *Figure 3*.
5. Miter one end of each Brace (E) piece at a 35-degree angle, and the opposite end at a 75-degree angle as shown in *Figure 5*. Do not miter the opposite end.

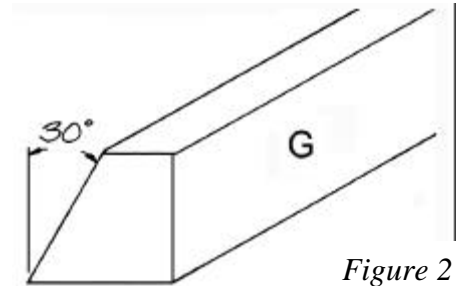


Figure 2

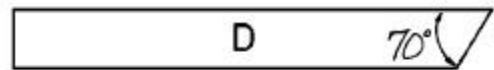


Figure 3



Figure 4

Figure 5



## Assembly

We've divided the assembly into two sections, the base and the roof. In the final assembly, you'll put the roof on the base, then add the shingles, trim and hand crank (spirits optional).

### Assembling the Base

1. It's easiest to build the well base in three sections with each section composed of two Sides (A) and one corner (G). Attach two Side pieces by gluing the beveled edges together; secure the joint by nailing through the Sides into the beveled edges of a Corner piece. Refer to *Figure 6*.
2. Follow the procedures in Step 1 to build two more identical sections, using all the remaining Side pieces (A) and two of the remaining Corner pieces (G).
3. To finish the base, join the three sections using the remaining Corner piece as shown in *Figure 7*. Glue and nail each joint.

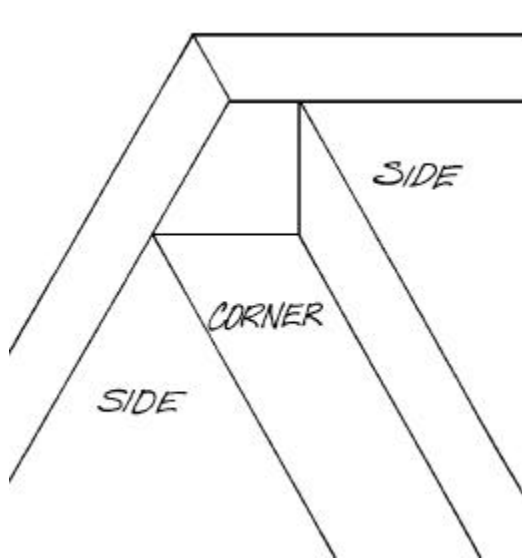


Figure 6

## Assembling the Roof Frame

1. Cut the upper end of each Support piece (C) into a peak as shown in Figure 8. Center and drill a 13/16-inch-diameter hole 10-1/2 inches from the peak end of each Support piece (C).
2. The frame is constructed one side at a time. Attach the Rafter (D) and Brace (E) pieces to the Support (C) piece as shown in figure 9, toenailing the joints. The upper edge of each Rafter (D) should be flush with the mitered corner of the Support piece, as shown.

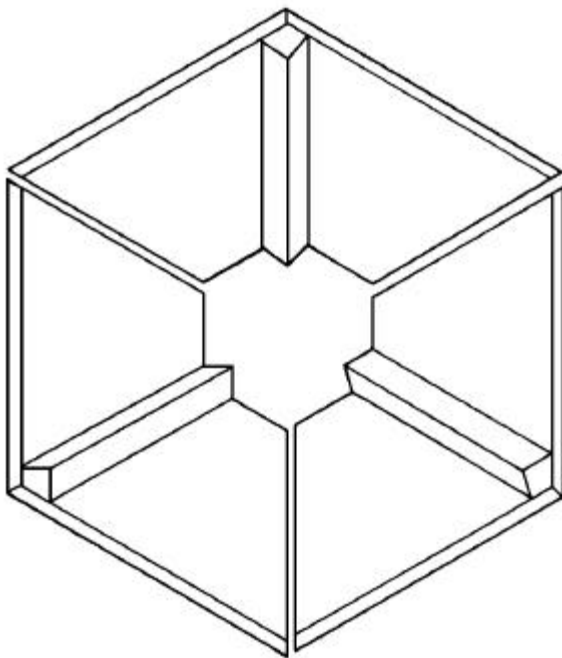


Figure 7

## Final Assembly

1. To attach the roof frame to the well base, center one Support piece (C) on the inner surface of one Side piece (A) of the base. Secure it with glue and three 1-1/2-inch screws (Figure 10). The lower ends of the support and Side pieces should be flush.
2. Attach the remaining Support piece to the opposite Side (A) of the well base, securing with glue and screws.
3. Glue and nail the Roof pieces (B) to the rafters, butting their upper edges at the peak of the roof (Figure 11). We chose not to bevel the Roof piece edges (we'd had enough beveling by this time!) and the slight gap at the peak of the roof can be covered by shingles.
4. The Trim (F) is attached to the upper edge of the base, and supported by the inside Corner pieces (G). Modify two of the trim pieces to fit around the Support pieces as shown in Figure 12. Cut a 1-1/2 x 3-1/2-inch notch, centered on the shorter edge of the board.
5. Attach each of the notched Trim pieces (F) to the upper edges of the base where the roof supports are connected (Figure 13). The inner edge of the Trim piece should now be

flush with the inner edge of a Corner piece (G). Secure the joints by nailing through the Trim piece (F) into the ends of the Corner pieces (G).

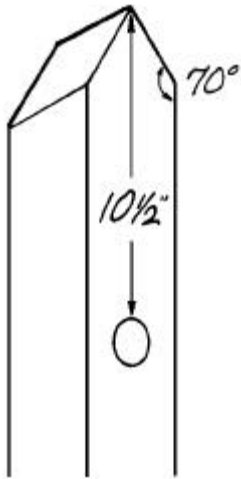


Figure 8

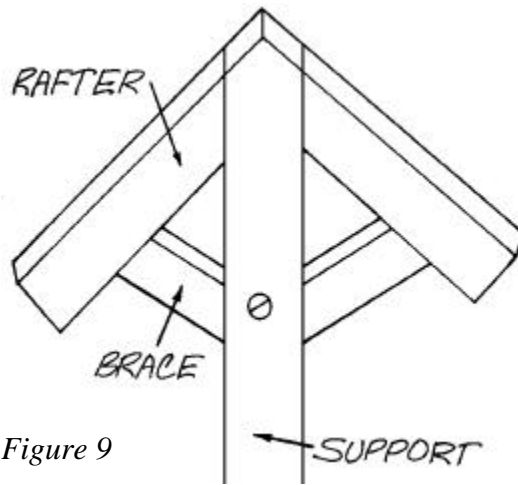
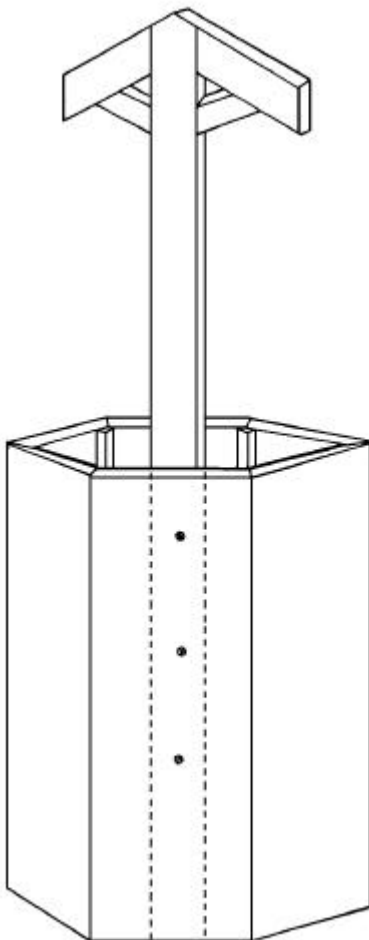


Figure 9



6. Attach the remaining Trim pieces in the same manner, matching the mitered ends around the well base (*Figure 14*). For extra strength, we toenailed each Trim piece joint.
7. Attach the shingles starting at the lower end of the base, overlapping them approximately eight inches. With that amount of overlap, we were able to put five rows on each side (*Figure 15*). We used a staple gun with 9/16-inch staples. Roofing nails will work just as well, but the ends will protrude on the inside of the well base. For better weatherproofing, the shingle edges on each row should overlap the edges of the row underneath it (*Figure 15*). You'll need to trim the shingles to different widths to allow for the overlap.
8. Shingle the roof in the same way as the sides, starting at each lower edge and working to the peak. To cover the peak, cut several 2-inch-wide shingle strips and overlap them along the upper edge of each Roof piece as shown in *Figure 16*.

Figure 10

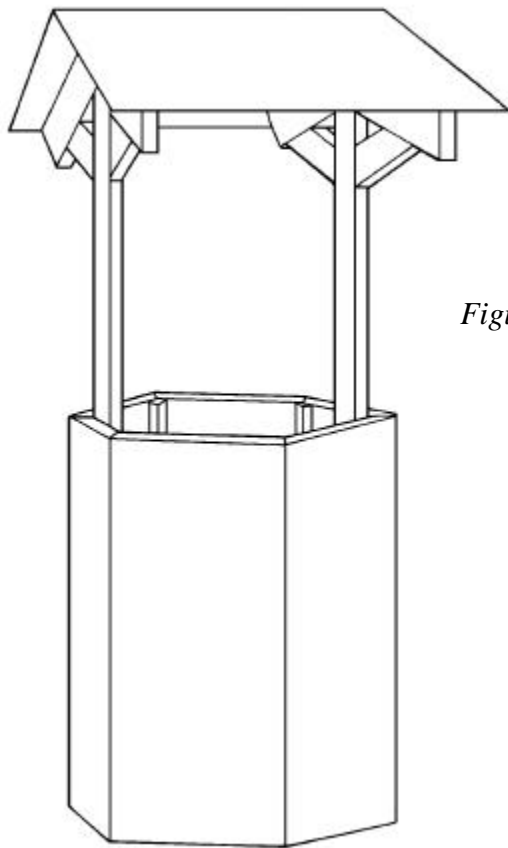


Figure 11

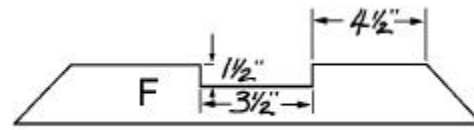


Figure 12

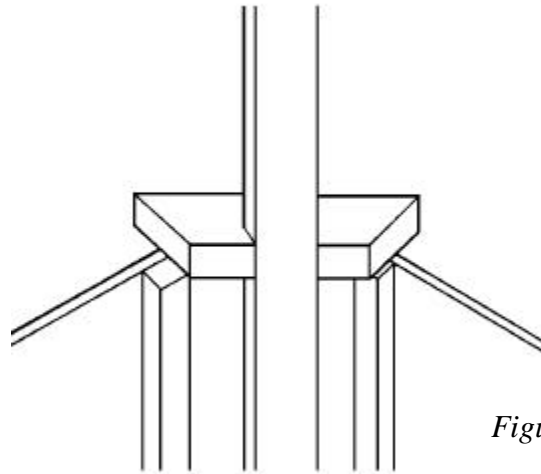


Figure 13

### **Assembling the Hand Crank**

1. The hand crank is assembled in two sections, the shaft and the crank handle.
2. Cut a 28-inch length of the wooden dowel rod to make the shaft. Drill a shallow  $\frac{3}{4}$ -inch-diameter socket  $\frac{3}{4}$  inch from one end (Figure 17). Drill a screw hole through the center of the socket, enlarging it on the opposite side so you can countersink a screw.
3. To make a handle, cut a 7- $\frac{1}{4}$ -inch length of dowel rod and drill a shallow  $\frac{3}{4}$ -inch-diameter socket  $\frac{3}{4}$  inch from one end. Drill and enlarge a screw hole in this socket the same way you did in Step 1. Insert one end of the remaining piece of dowel rod into the socket, securing it with glue and a 1-inch screw from the opposite side (Figure 18).
4. Insert the assembled handle into the socket of the shaft, and secure it with glue and a 1-inch screw from the opposite side (Figure 19).
5. Make a pair of wooden washers to hold the hand crank shaft in place by drilling a  $\frac{3}{4}$  inch-diameter hole into the center of a 1-inch diameter dowel rod. Slice off two  $\frac{1}{4}$ -inch pieces to make the washers.

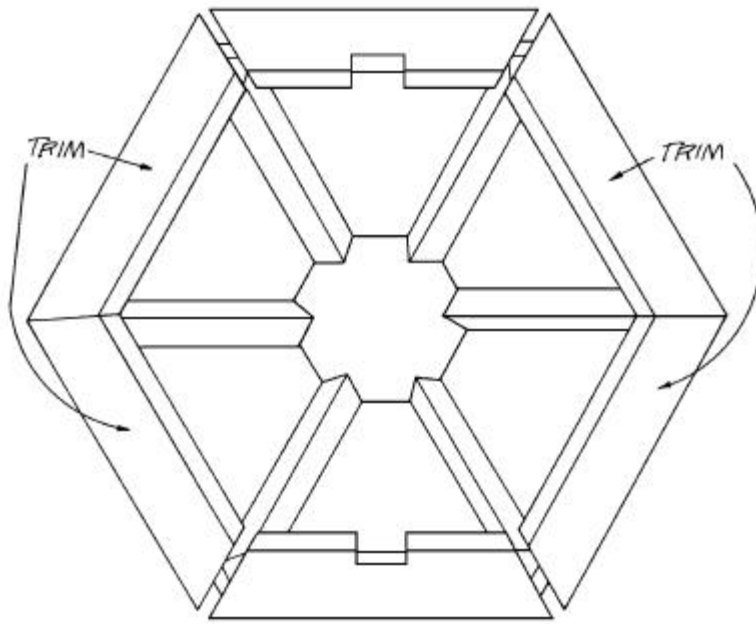


Figure 14

Figure 15

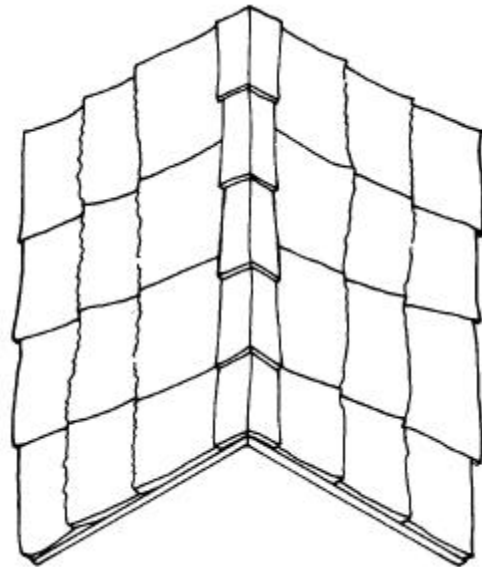
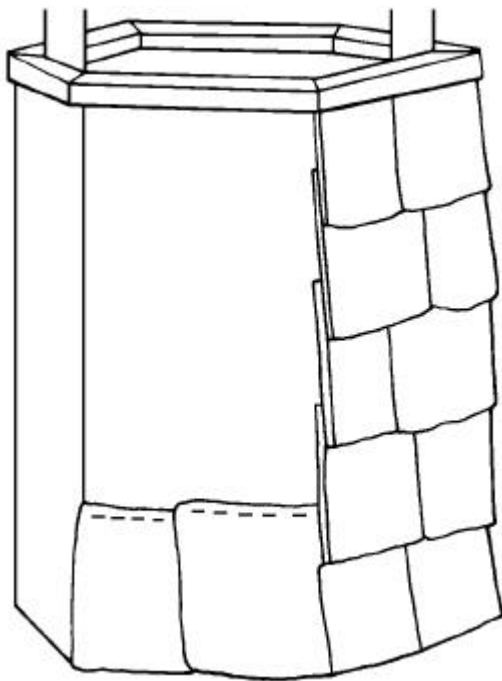


Figure 16

6. To install the hand crank, slip one washer on the end of the shaft and slide it all the way down to the handle. Slide the shaft into one hole in one of the roof support pieces, continuing through the hole in the opposite support. Glue the remaining washer on the top of the shaft that protrudes through the support. Glue the washer on the handle end of the crank so the crank will turn easily.

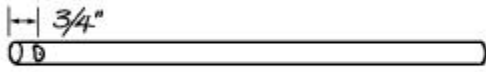


Figure 17

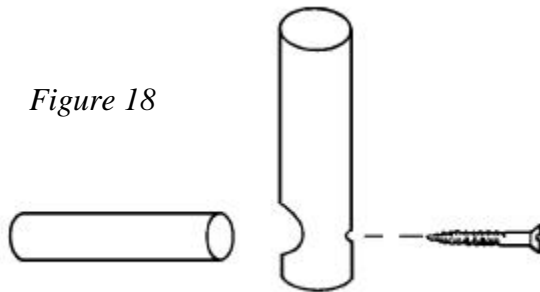


Figure 18



Figure 19

7. For an authentic touch, add a rope and a wooden bucket as in *Figure 20*. (The older and more weathered the better!)

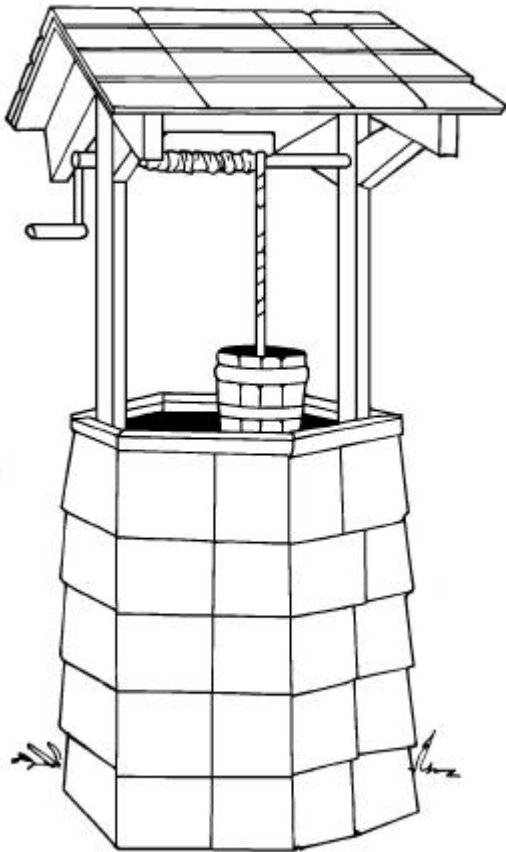


Figure 20

## **Finishing**

1. Stain or paint the wishing well, or leave it natural. We opted to stain only the exposed 2 x 4 pieces, leaving the shingles to age naturally. If the finished piece will be exposed to harsh weather conditions, you may wish to apply a waterproof finish to avoid deterioration.