

INSTRUCTIONS No. 2262

Superseding Form BF119A

For Building Wood Towers for 10 ft. and 12 ft. Eclipse Windmills

First—Splice the corner Posts, lay them side by side, and square them off to length as shown in left hand side of cut.

Second—Space off the Posts for the Braces, marking square across the four sticks at once, according to the distances given in the cut. The first mark (5 feet from top of sticks for 10-foot Mill) is for top edge of Platform Sill (for 12-foot Mill, see changes required); the second and third marks are for the top edges of the horizontal Girts; the fourth mark is for the lower point of the first Brace or Cross. In building any height of Tower, always bring this first Brace to within four feet of the ground, and always put the Platform Sill at the distance from the top here given; the intermediate Crosses can be varied according to height of Tower. After spacing off, bevel that corner of each Post which is to come on the inside. This is done so that the timbers will fit into the Thimble-sockets. (See end view of Tower at top of cut.) Lay out two of the sticks in the form of the A. Set the Tower-thimble No. 17 in at the top as shown in directions for Mill. Spike on the Platform Sill, 5 feet down from the top; make the distance across at top of Platform seventeen inches outside to outside. (For 12-foot Mill see changes required.)

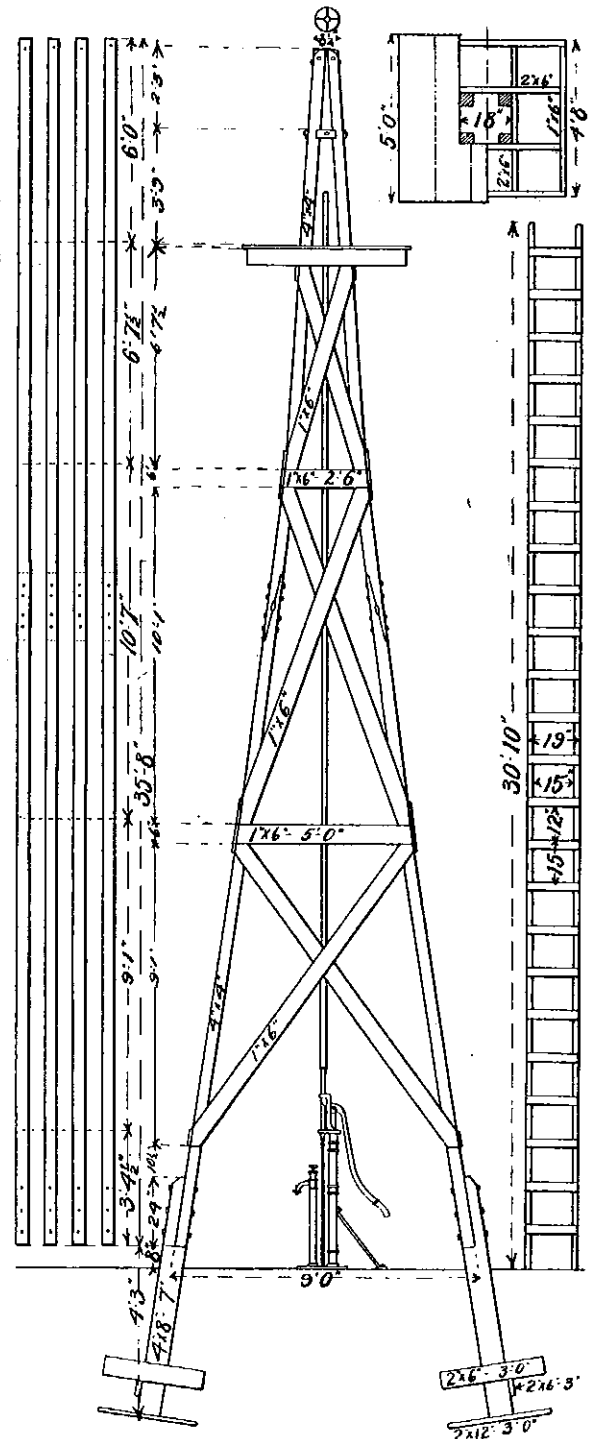
Third—Spread the bottom of the "A" nine feet for a 36-foot Tower and nail a temporary stay-lath to hold it in place. The rule for the bottom spread in all towers is one-fourth the height. Tack on the Girts, bringing the upper edge to the marks as before stated, using each of these Girts as a pattern to cut the other three by, two of which should be cut two inches longer than pattern to allow for lapping over the ends of the other two. Cut the diagonal Braces, using the first cut as a pattern to cut the other seven by, which belong in the same section of the Tower as the pattern. On four of the diagonal Braces of each set allow an extra inch to lap over the ends of the other four to cover the joints. To get length of diagonal Braces, measure across between the horizontal Girts diagonally from one corner to the other and rack the corner Posts until the distances from one corner to the other each way are equal. Then scribe on diagonal Brace using the first cut as the pattern for the other seven, allowing an extra inch on the end of four Braces, top and bottom, in each section, for lap to cover up the joints on the other four.

Proceed in the same manner with each section in the Tower, observing the following rule: That the diagonal Braces should all be of uniform length and cut, with the exception of those on which allowance has been made for lap. The two Braces which form the crosses on each of the four sides of the Tower should be exactly alike, and the Tower Posts racked out or in to accommodate the joint.

When the two "A's" of the Tower are completed, turn them up edgewise with Braces outside and bevel the end for Tower-thimble on the inside. Put in the four bolts around the Thimble No. 17, draw the four Posts snug together, and proceed to put the other two sets of Braces and Girts on. Finish the Platform as shown in cut, and raise the Tower up by pulleys and ropes. Before anchoring, level the Tower with a spirit level on the lower Girts. The Anchor-posts should be at least eight inches through at the bottom, and go into the ground at least five feet, and have a cross-piece at the bottom, so Tower cannot pull up or sink down. Never drive in the Anchor-posts, but dig holes and set them down level. After building the Ladder, as shown in cut, nail it to the side of Tower most convenient. Put the Mill together as shown in directions for Mill.

CHANGE IN TOWER FOR 12-FOOT MILL

Place Thimble No. 17 in its place, preparing the Tower same as in 10-foot Mill, only make Platform 6 feet down from top of Posts and have the Posts 20 inches outside to outside at Platform, and 4x6 for bottom Posts is generally used.



BILL OF LUMBER FOR 36-FOOT ECLIPSE TOWER WITHOUT ANCHORS

- 4 pieces 4x4 20' Lower Corner Posts.
- 4 pieces 4x4 18' Upper Corner Posts.
- 2 pieces 1x12 12' Platform Top.
- 1 piece 1x6 10' Platform Fascia.
- 2 pieces 2x6 14' Platform Joist.
- 8 pieces 1x6 18' Top and Middle Braces.
- 8 pieces 1x6 12' Lower Braces.
- 2 pieces 1x6 16' Girts.
- 4 pieces 2x4 16' Ladder Sides.
- 3 pieces 1x3 16' Ladder Steps.
- 8 3/4"x4 1/2" Bolts with Washers for Splices
- 8 1/2"x12 Anchor Bolts.
- 20 lbs. 10d Nails; 2 lbs. 20d Nails.

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