ERECTING INSTRUCTIONS for W PULL-IN WINDMILLS

CARE OF MILL

ONCE A YEAR:

(1) Grease lower tower bearing in which the mill pipe turns.

(2) With steam cylinder or auto shackle oil, lubricate the two vane hinges, latch, joints, sheaves, chain, wire, swivel and pump pole guides.

(3) Drain gear case and refill with all-weather oil.

When erecting W series mills on the No. 56 Towers, use the special tower plates furnished to fit these towers.

When erecting W mills on competitor towers, use the regular stub. It will fit all towers with very little punching. It is priced low to avoid trouble with special tower plates or tower castings.

HOW TO ORDER PARTS FOR SEARS DAVID BRADLEY WINDMILLS

MODEL NUMBERS 802.6, 802.8 and 802.10

All parts listed in this book may be ordered through any Sears retail or mail order store. In ordering parts by mail from the mail order store which serves the territory in which you live, always be sure to include sufficient postage. (The weight of each part is shown in the list.)

When ordering, always give the following information:

1. Part number.
2. Name of part and price.
3. The model number of your windmill which will be found on the name plate fastened to the main frame or oil reservoir casting.

All prices are subject to change without notice.

EXAMPLE FOR ORDERING REPAIRS

Sears, Roebuck and Co.

Enclosed find my check for $3.07 for which please send me by parcel post the following parts for my David Bradley 10 foot windmill, model number 802.10.

1 No. WD 15 Brake	$1.20
1 No. WD 49 Cover Gasket	.30
1 No. WD 79 Swivel Bail	1.20
	$2.70
Postage	.37
Total	$3.07

Yours truly,
John Marten
Box 128
Marengo, Illinois

ERECTING INSTRUCTIONS

AND PARTS-PRICE LIST FOR

David Bradley

WINDMILLS

Model Numbers

802.6	6½	Foot
802.8	8	Foot
802.10	10	Foot

The Model Number of your windmill will be found on a name plate attached to the main frame or oil reservoir casting. Always supply the Model Number when communicating with us regarding your windmill or when ordering repairs.

Good News!

Your DAVID BRADLEY windmill can bring you a new day of comfort and ease. Do you realize that windmills just like your own David Bradley are the "backbone" of inexpensive, drudgery-relieving running water systems all over the country?

We can furnish plans and equipment necessary to give you running water "on tap" at all times!

We will be glad to help you draw up plans for a running water system that will fit YOUR farm. See us immediately. It can mean a new life for you and your family.

SEARS, ROEBUCK AND CO.

APRIL, 1943

Printed in U. S. A.

ERECTING INSTRUCTIONS for W PULL-IN WINDMILLS

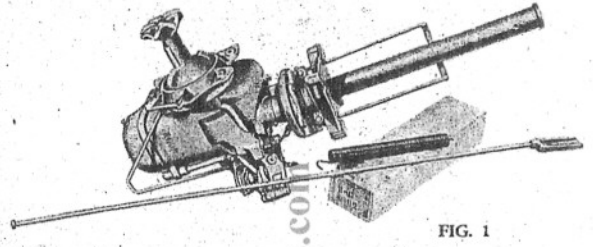


FIG. 1

1. Open the box and sort contents. Put each size and item by itself.

2. Remove all castings from the pipe, (Fig. 1), and proceed to attach the tower plates to the top of the tower with 3/8 inch x 3/4 inch carriage bolts. Before tightening, attach the lower ball race to the top of the plates with 3/8 inch x 1 inch machine bolts and tighten all nuts. (Fig. 2.) Next, attach lower tower casting to tower using 3/8 inch x 1 1/4 inch bolts for 6 1/2 foot and 8 foot mills and 1/2 inch x 1 1/2 inch bolts for 10 foot mill.

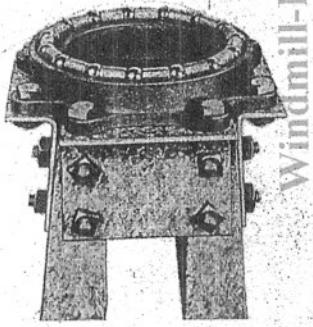
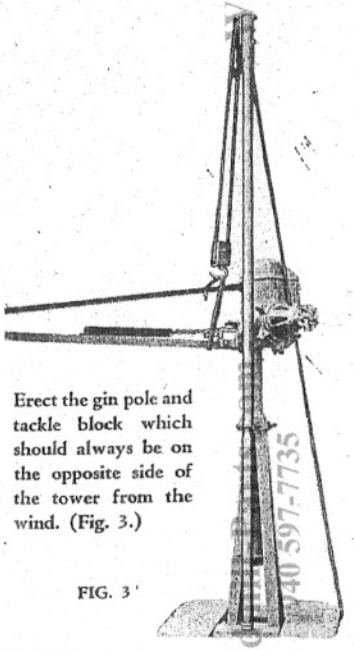


FIG. 2



3. Erect the gin pole and tackle block which should always be on the opposite side of the tower from the wind. (Fig. 3.)

FIG. 3

4. To put together the vane stem, No. 63, vane truss, No. 64, and vane sheet, No. 72A: (a) Bolt the vane stem and vane truss together at the outer end with a 3/8 inch x 3/4 inch machine bolt. (b) Bolt the sheet to them with 3/8 inch x 3/4 inch machine bolts, using a flat washer under the nut on the sheet side. (Fig. 4.)

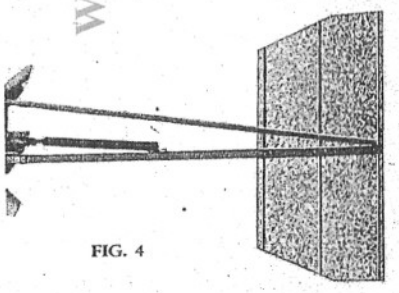
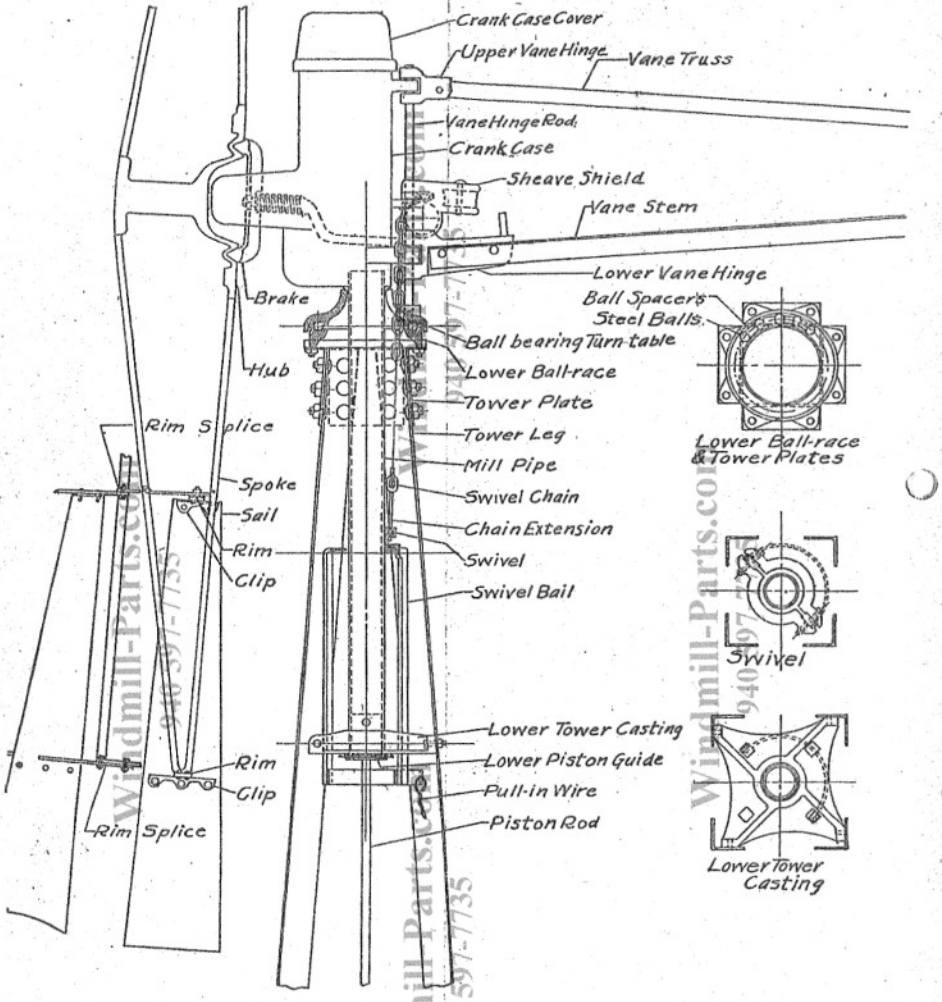


FIG. 4

CROSS SECTION VIEW W TYPE PULL-IN WINDMILLS



IT PAYS TO BECOME ACQUAINTED WITH NAMES OF PARTS, AS SHOWN ABOVE, BEFORE READING ERECTION INSTRUCTIONS.

3/8 inch x 1 1/4 inch bolts on 6 1/2 foot and 8 foot mills, and 3/8 inch x 1 1/2 inch bolts on 10 foot mills. Put the bolts in with the nuts toward the outside and tighten securely. Take down the gin pole and tackle block.

Putting in Piston Rod

8. Next, remove the cover and after removing the upper pump pole casting, No. 17, and lock nut from the piston rod, put the piston rod through the steel plate furnished with the piston swivel eye, No. 16, and down through the mill pipe. Then put No. 16 in place on the rocker and bolt the steel plate up under No. 16 with machine bolts and a lock washer under the head of each bolt. Now see that the piston rod swivels in No. 16; if not, correct the trouble. Put the cotter pin through the rocker and spread to hold No. 16 in place. Turn the mill to the bottom of the stroke and with the pump piston 3/4 inch off bottom, cut the pump pole the right length to bolt to No. 17.

Then turn the mill to the center of the stroke and put on the upper swinging pump pole guide where the tower is 19 3/4 inches wide. If it is necessary to punch holes in the tower corner angle, they should be 1 1/4 inch from the back. Bolt on the flats found in the packing box with 3/8 inch x 1 inch bolts. Put in swinging guide and fasten in position with cotters. Then bolt to pump pole in level position with two 1/4 inch x 2 inch carriage bolts and clip. (Fig. 6.)

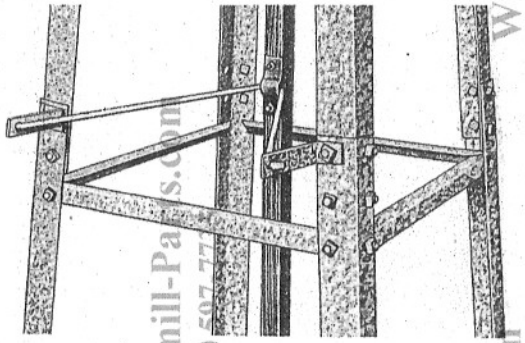


Fig. 6

If the tower has swinging pump pole guides, this top one should be on the same side as the others. Before leaving mill, oil vane hinge and latch pitman with a heavy oil and also instruct the customer to occasionally oil same.

If the mill does not go completely out-of-the-wind when the wire is released, oil all joints and see that nothing catches or binds. Observe carefully the swivel bail where it slides up between the tower legs. If, when everything is well oiled and works freely, the mill does not go out, increase the spring tension by hooking it further out on the vane stem.

5. On the 6 foot and 8 foot mills, bolt the assembled vane to the head. Use 3/8 inch x 1 1/4 inch bolts to bolt vane stem to lower vane hinge, No. WB 12, and 7/16 inch x 1 1/2 inch bolts for No. WC 12. (Use 1/2 inch x 1 3/4 inch bolts for WD 12.) Then hook one end of the spring in the widened link of the chain and the other end in the middle hole in the vane stem. (Fig. 5.)

Next, attach the tackle block to the vane stem and vane truss with a piece of rope or chain in such a way that it will not slip and also hold the head in an upright position.

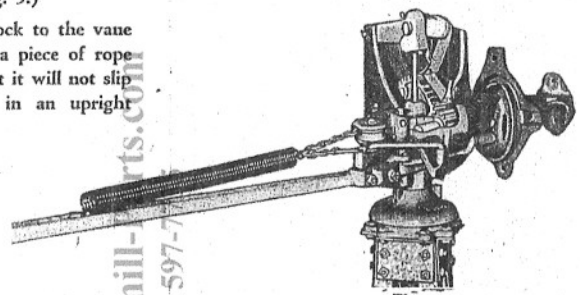


Fig. 5

6. Tie a guy rope to the head in such a way that the vane will be kept away from the tower. This rope should be at least as long as the tower is high. Pull the head up high enough to enter the pipe into the tower or stub. Before putting the balls and spacers in the race of the ball bearing turntable, FILL THE RACE WITH GREASE; otherwise the balls may drop out before the mill head is in place on the balls. Place the No. 5 casting on top of the balls, and turn to see that it works freely. Clamp in position to receive the mill with the notch in the right location to receive the chain; then lower the mill into the tower and put the No. 22 casting in the bottom of the pipe. After the mill is in place and resting on the balls in the ball bearing turntable, the LOWER TOWER CASTING SHOULD BE LOWERED AGAINST THE FLANGE OF THE CASTING No. 22, and raised 1/32 of an inch to 1/16 of an inch for clearance.

Assembling the Wheel

7. Next, assemble the wheel on the ground, straightening all spokes or sails bent in shipping. In assembling the sections, fasten the inner rim outside the cross piece in the spoke with 3/8 inch x 3/4 inch machine bolts. When facing the front of the wheel and considering the lower sections, the 3/8 inch x 1 1/4 inch machine bolt that goes through the outer end of the spoke also goes through the left end hole of the outer rim. (Use 3/8 inch x 3/4 inch bolts for the other splice holes in the outer rim.) Both inner and outer rims lap the same way all around the wheel. Keep the nuts loose until the wheel is assembled; then turn the spokes so the cross piece against the inner rim sets at right angles to the rim. Tighten all bolts. Now put a chain around the inner rim at a spoke on the inside of the wheel, hook on the tackle block and hoist the wheel up and bolt to the hub with