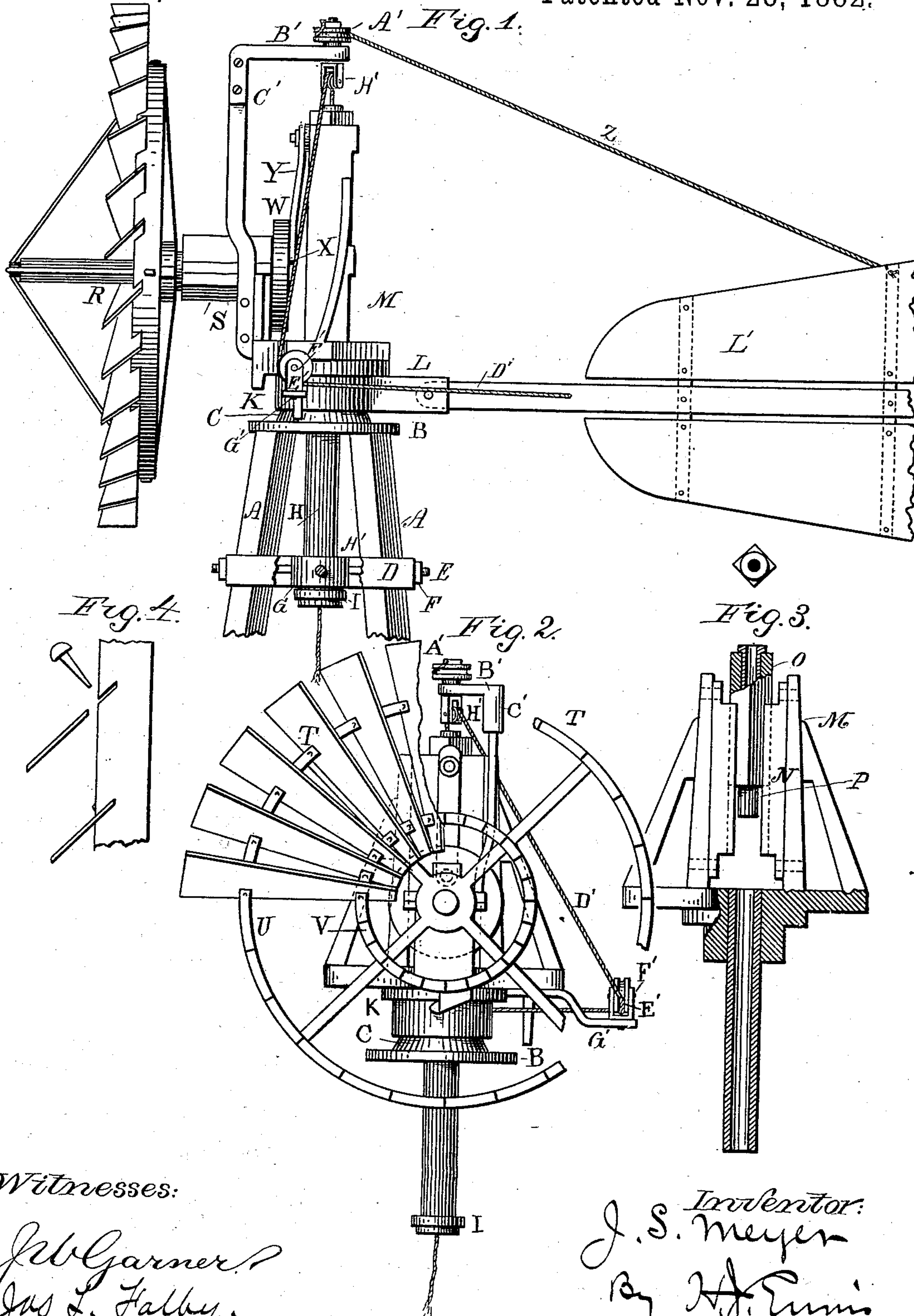


(No Model.)

J. S. MEYER.
WINDMILL.

No. 268,262.

Patented Nov. 28, 1882.



Witnesses:

J. W. Garner
Jas L. Falby.

Inventor:
J. S. Meyer
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Atty

UNITED STATES PATENT OFFICE.

JACOB S. MEYER, OF BLOOMVILLE, OHIO.

WINDMILL.

SPECIFICATION forming part of Letters Patent No. 268,262, dated November 28, 1882.

Application filed July 6, 1882. (No model.)

To all whom it may concern:

Be it known that I, JACOB S. MEYER, a citizen of the United States of America, residing at Bloomville, in the county of Seneca and State of Ohio, have invented certain new and useful Improvements in Windmills, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain improvements in windmills; and it consists in certain new and improved combinations and arrangements of parts, as more fully hereinafter set forth, and pointed out in the claims.

In the drawings, Figure 1 represents a side elevation of my improved windmill. Fig. 2 represents a partial front view of the upper part of the same; and Fig. 3 represents a detached view of the turn-table and its attachments, partly in side elevation and partly in section; and Fig. 4 is a detached view of a portion of the wind-wheel.

The letters A A indicate the supporting-timbers of the mill, upon the top of which is mounted a supporting-plate, B. The said plate is formed on its top with a beveled supporting-seat, C, for a ring, to be hereinafter more particularly explained. The supporting-timbers have attached to them the cross-pieces D, which are provided with four screw-bolts, E, and nuts F, the bolts supporting a central ring, G, into which sets the lower end of a gas-pipe or other tube, H, which is shouldered at H', so as to rest upon the ring G, and is provided at its lower end with a screw-nut, I, by which it may be held in place. These screw-bolts F and nuts E are for the purpose of adjusting the ring G and the tube H to a vertical position when the standards or frame-timbers are set up, or whenever the tube H may be altered from its proper position from any cause. I am not aware that such adjustment has ever heretofore been used in windmills. The said tube extends upward through the center of the plate B, and to it is secured a turn-table, which rests upon a ring, K, seated upon the seat C, as indicated. The ring is provided with a slotted projection, L, in which is pivoted the arm of a vane, L', so as to permit the vane to be moved up and down. The turn-table is provided with upright standards M, having ways N, between which is adapted

to travel a vertical slide, O, which is bored longitudinally, and is provided with a gas-pipe or other tube, P, flanged at both ends to permit the turn-table to move independently of the pump-rod. The letter R indicates a horizontal shaft journaled in a bearing, S, which shaft has secured to the forward end the skeleton T of the wind-wheel. The said skeleton is formed with two rings, U V, which are slotted obliquely, as shown, for the reception of the vanes of the wheel. These are set in the slots, and are secured by upsetting the metal upon them by a suitable tool. The rear end of the shaft is provided with a disk, W, having a wrist-pin, X, to which is pivoted one end of a pitman, Y, the other end of which is pivoted to a pin on the vertical slide before mentioned. The vane L' has secured to it a cord, Z, which extends to a pulley, A', rigidly secured to the horizontal arm B' by a standard, C', attached to the turn-table. The said pulley acts to wind the cord when the vane is exposed to a storm and raise the vane out of the wind. To the arm of the vane is secured one end of a rope, D', which passes under a pulley, E', journaled in a swiveled block, F', on the arm G', secured to the turn-table. The cord then passes over a pulley in a swiveled block, H', attached to the standard-arm B', and thence down through the tubular sections of the mill below, in order to permit the vane to be drawn back away from the wind when desired.

The operation of my invention will be obvious from the above description.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In combination with the supporting-timbers and the cross-pieces, the adjusting screw-bolts and nuts, and the supporting-ring and vertical tube resting upon and secured therein, substantially as and for the purposes specified.

2. In combination with the supporting-plate and its conical seat, the ring and its slotted extension, and the vane-arm pivoted therein, substantially as specified.

3. In combination with the supporting plate and ring, the turn-table and its standards, the reciprocating hollow slide, and inclosed tube flanged at both ends, substantially as and for the purposes specified.

4. In combination with the vane and supporting-ring, the rope passing over pulleys and down through the tubular sections of the mill, the cord Z, and bracket-arm B', whereby the
5 vane is raised as the wind-wheel is deflected, substantially as and for the purposes set forth.
5. The wind-wheel skeleton provided with two rings slotted obliquely, and having two vanes secured in said slots by upsetting the
10 metal upon them, substantially as specified.
6. In combination with the wind-wheel shaft,

the disk and its wrist-pin, and the pitman connecting with the vertical slide, the whole arranged to operate substantially in the manner specified.

In testimony whereof I affix my signature in presence of two witnesses. 15

JACOB S. MEYER.

Witnesses:

J. D. WILSEY,

J. R. WILSON.