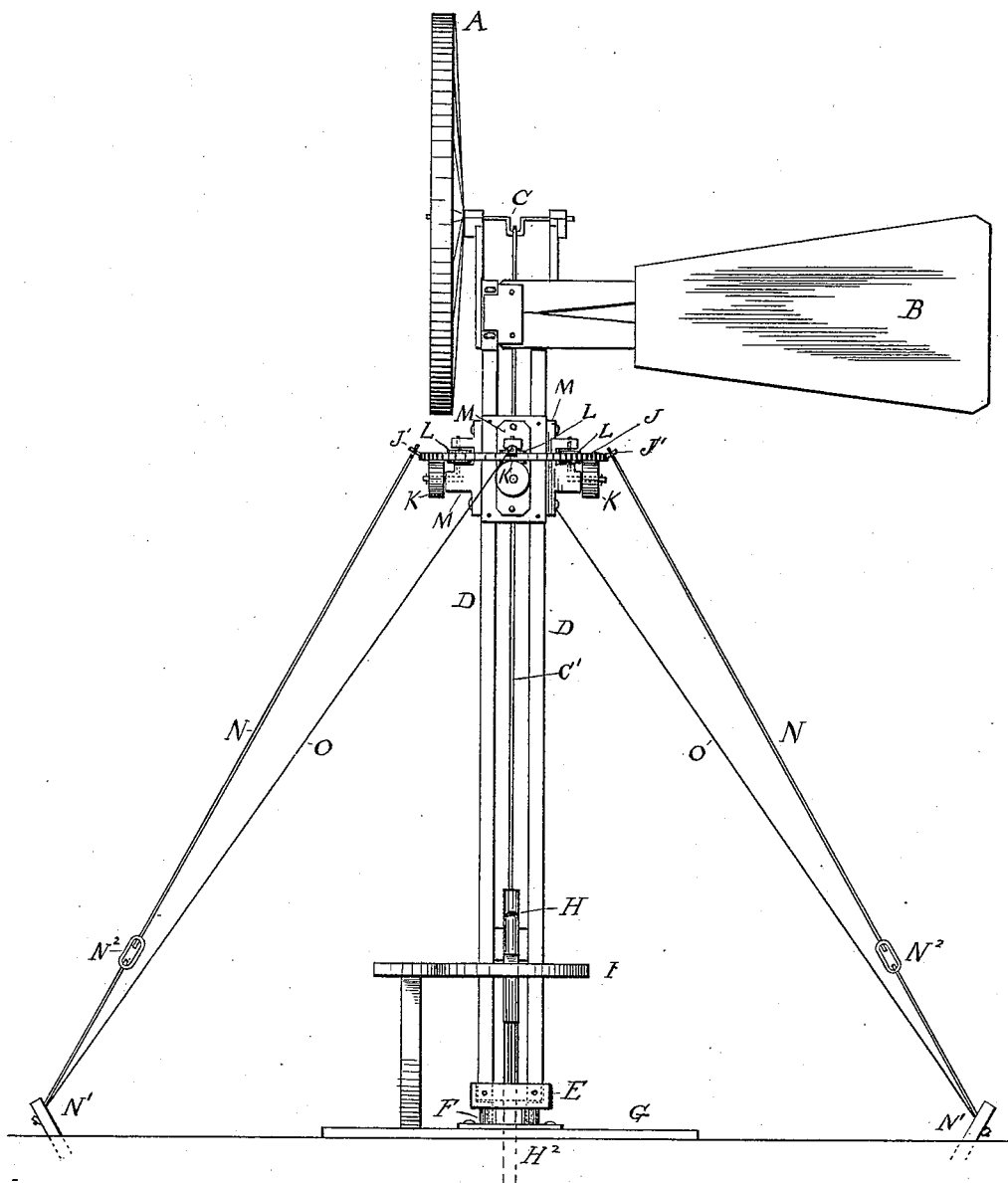


(No Model.)

W. H. KEEP.
WINDMILL.

No. 419,526.

Patented Jan. 14, 1890.



Witnesses
Elihu B. Howe
J. Lewis Dennis

Inventor
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UNITED STATES PATENT OFFICE

WILLIAM H. KEEP, OF STOCKTON, CALIFORNIA, ASSIGNOR OF ONE-HALF TO
SELIM A. HATHAWAY, OF SAME PLACE.

WINDMILL.

SPECIFICATION forming part of Letters Patent No. 419,526, dated January 14, 1890.

Application filed July 29, 1889. Serial No. 319,110. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. KEEP, a citizen of the United States, residing at Stockton, in the county of San Joaquin and State of California, have invented certain new and useful Improvements in Windmills; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to certain improvements in windmills; and it consists in a means for producing a revolving tower or frame.

The figure is a side elevation of my improved windmill.

A is the wheel, and B is the tail, of my mill, both constructed in any suitable manner, the wheel being secured to the crank-shaft C. This shaft has its bearings in boxes which are mounted on top of the two standards or posts of the frame. The posts D at their feet are bolted in the sockets of a shoe E, which fits over a step F, which is firmly bolted to the base-timber G.

H is the pump, located between the posts D, and having the pipe H² passing downward through an opening in the shoe E and step F into the well. Around the pump and the posts D is a circular discharge-trough I.

In order to support the frame and mill, I surround the posts D just below the wheel with an iron circle J, resting upon supporting vertical rollers K, and within the rim impinging upon horizontal guide-rollers L, the bearings of the pins of both the rollers K and L being in suitably-constructed iron plates M,

which are bolted to the posts D. There are three of these plates shown in the drawing. The circle J is provided with eyelets J', to which are attached brace guy-rods N, provided with tightener turn-buckle N², and secured at their lower ends to posts N'. The crank-shaft C is connected to the pump by plunger-rod C'. In large mills the shoe E may be provided with trunnions. Additional brace-rods O are attached to the circle J and to the posts N' as counter-braces to the guy-rods N.

The above-described construction permits of the entire frame and mill revolving within the circle J, the guy-rods and braces securing the same firmly in required position.

What I claim as new is—

1. The frame-posts D, in combination with the circular plate J, the shoe E, engaging with the step F, secured to the base-timber G, and with the iron plates M, attached to the posts D and supplied with the bearing and guide rollers K and L, engaging with the circle J, said circle J being provided with eyelets J', to which are attached the upper ends of guy-rods, and being unsupported except by the guys, posts, and rollers, all substantially as shown and described.

2. The combination, substantially as described, of the revolving frame and mill, the pump and its connecting plunger-rod mounted on the frame, and the fixed circular trough I.

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

WILLIAM H. KEEP.

Witnesses:

JOSHUA B. WEBSTER,
SELIM A. HATHAWAY.