(No Model.)

J. HAMM.

WINDMILL.

No. 386,466. Patented July 24, 1888.

Fig. 1.

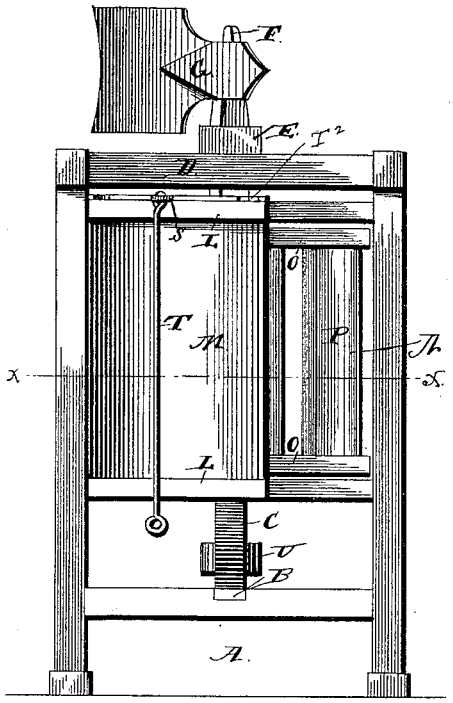


Fig. 2.

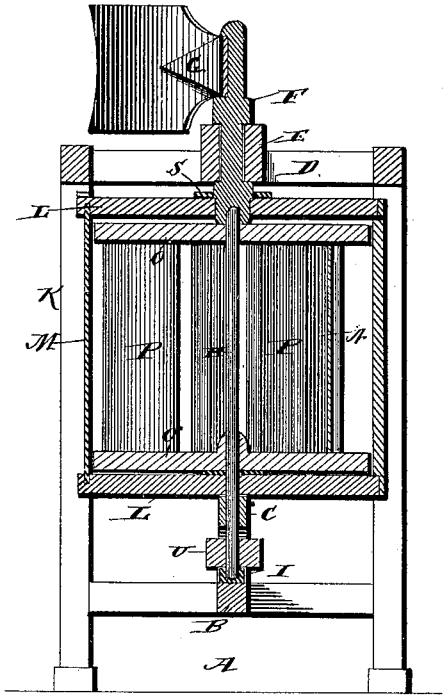


Fig. 3.

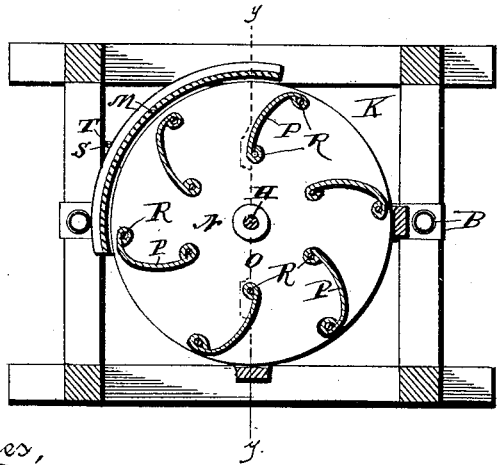
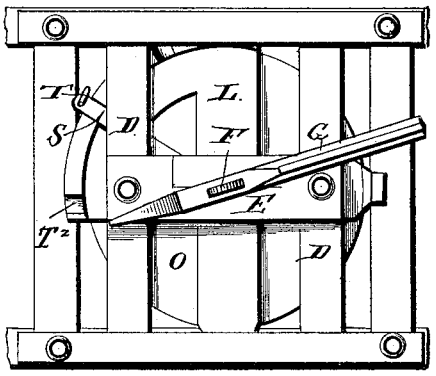


Fig. 4.



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UNITED STATES PATENT OFFICE.

JORDAN HAMM, OF MAY, TEXAS.

WINDMILL.

SPECIFICATION forming part of Letters Patent No. 386,466, dated July 24, 1888.

Application filed November 1, 1887. Serial No. 253,994. (No model.)

To all whom it may concern:

Be it known that I, JORDAN HAMM, a citizen of the United States, residing at May, in the county of Brown and State of Texas, have invented a new and useful Improvement in Windmills, of which the following is a specification.

My invention relates to an improvement in windmills; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claim.

In the drawings, Figure 1 is a side elevation of a windmill embodying my improvements. Fig. 2 is a longitudinal section on line *y y* of Fig. 3. Fig. 3 is a horizontal section taken on the line *x x* of Fig. 1. Fig. 4 is a top plan view.

A represents a vertical rectangular frame, which is provided at a suitable distance from its lower end, in the center, with a bridge, B, on the central portion of which, on its upper side, is located an arched bracket, C. Across the upper side of the frame A extends a pair of transverse bars, D, which are connected at their centers and in a vertical line with the bridge by a block, E. In the center of this block is journaled a short vertical shaft, F, to the upper end of which is attached a vane, G.

H represents a vertical shaft, the lower end of which is journaled in the bracket C, and is stepped in a bearing, I, arranged on the upper side of the center of the bridge B, the upper end of the said shaft H being journaled in a vertical opening made in the lower end of the shaft F, and thereby the said shafts F and H are independently revoluble.

K represents a vertical cylindrical case, having the heads L, which are connected together on one side for a suitable space by a curved plate, M, which is preferably made of sheet metal and extends around about one-third the circumference of the case. If desired, a piece of canvas of suitable size may be substituted for the metallic plate M. The upper side of the case is pivotally connected to the lower end of the shaft F, and the lower side of the case is journaled centrally on the shaft H and bears upon the upper side of the bracket C.

N represents the wind-wheel, which comprises the circular horizontal heads O, connected together by means of concave wings P, which are preferably made of sheet metal, and are curved, as shown in Fig. 3, and have their sides bent around bolt-rods R, which connect the circular heads of the wind-wheel. The shaft H extends through the central portions of the heads of the wind-wheel and is firmly secured to the same, so that the wind-wheel rotates with the said shaft.

S represents a lever, which is attached to the lower portion of the shaft F just above the casing, and extends outwardly from the said shaft for a suitable distance. To this lever is attached a depending rod, T, that extends to within a suitable distance of the ground.

Near the lower end of the shaft H is attached a band-pulley, U, by means of which power may be transmitted from the said shaft to any suitable machinery.

The operation of my invention is as follows: When the lever S is released, the shaft F and casing are disconnected and the casing cuts off the wind from the wheel, as will be readily understood; but when the lever S, which is attached to the lower end of the shaft F, is made to engage with one of the notches T^2 in the head L of the case, (by means of the depending rod T,) the shaft F and casing are attached to each other and are free to rotate together, so that the vane G turns the said shaft and casing to expose one side of the wind-wheel to the wind, and thus permit the wind to strike fairly upon the wings of the wind-wheel one side thereof, so as to rotate the wind-wheel and the shaft H.

Having thus described my invention, I claim—

The combination of the horizontal wind-wheel, the semi-cylindrical case partly inclosing the same and independently revoluble, the case having the notches T^2 in its upper side, the vane having the shaft or port whose lower end forms the upper pivot for the said case, and the lever S, having its inner end fast to the vane shaft or port, and adapted to engage the said notches, and thereby cause the case to expose any desired area of the wheel to the wind, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JORDAN HAMM.

Witnesses:
THOS. MAPLE,
CHAS. H. ALLEN.