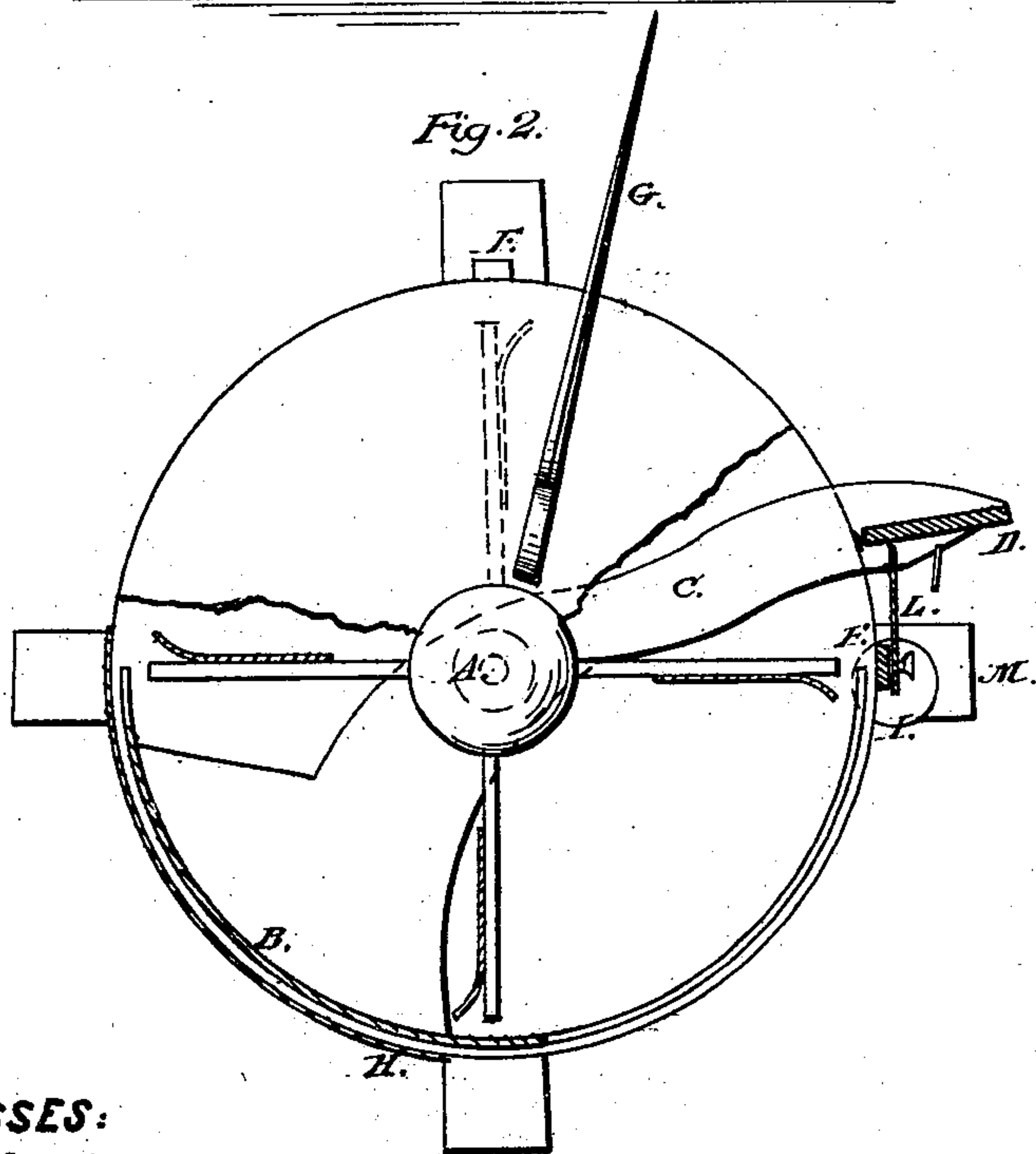
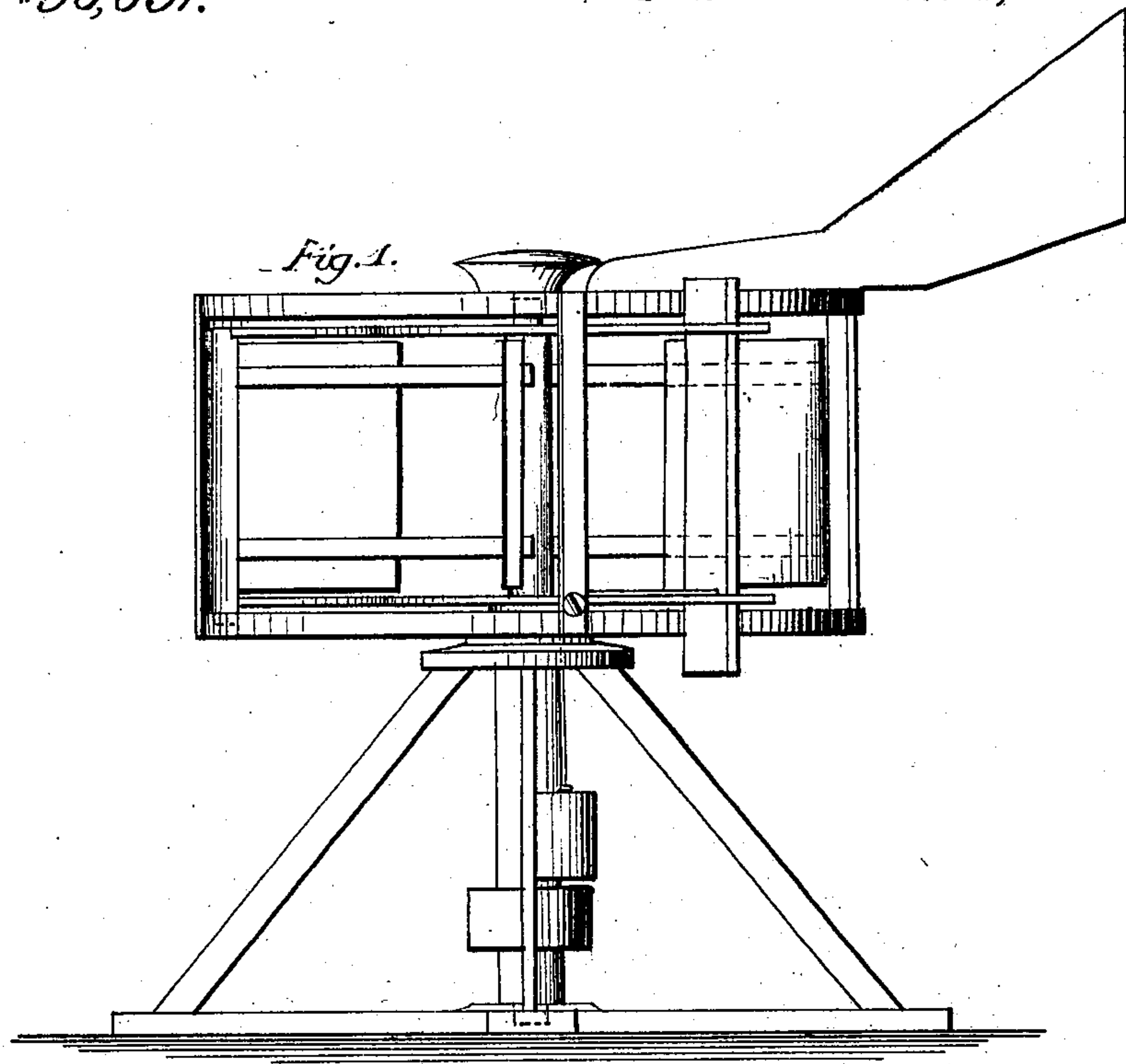


*I. H. Sutton.*

*Wind Wheel.*

*N<sup>o</sup> 96,631.*

*Patented Nov. 9, 1869.*



**WITNESSES:**  
*Wm. F. Clark.*  
*Frank J. Kelley.*

**INVENTOR:**  
*I. H. Sutton*  
PER.  
*Wm. F. Clark.*  
*Attorneys.*

# United States Patent Office.

ISAAC H. SUTTON, OF COON RAPIDS, IOWA.

*Letters Patent No. 96,631, dated November 9, 1869.*

## IMPROVEMENT IN WIND-WHEELS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, ISAAC H. SUTTON, of Coon Rapids, in the county of Carroll, and State of Iowa, have invented a new and useful Improvement in Windmills; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in windmills, and has for its object to provide a wind-regulating and stopping and starting device or gate, for increasing or diminishing the area of the buckets exposed to the wind.

Figure 1 represents a sectional elevation of a windmill, having my improvement, and

Figure 2 represents a plan view of the same, with a part of the upper wall of the turret broken away.

Similar letters of reference indicate corresponding parts.

On the vertical shaft A, around which the vanes work, I support a circular gate B, so as to oscillate thereon, and I attach to the arms thereof long arms C, extending beyond the periphery of the case or turret, and supporting a vane, D.

These arms are arranged to project between a stop, E, at the side where the vanes take the wind, and

another, F, at or near the vane G, which controls the position of the turret.

When the arms C stand against the stop E, the gate B will be behind the fixed part H of the case, and it is held here normally by a weight, I, and cord, L, the latter passing over a pulley, M.

When the wind blows too hard, it will drive the vane D and the arms around toward the stop F, drawing the gate B around, so as to shut off or cover a part of the area of the vanes of the wheel exposed to the wind, thereby regulating the speed of the wheel.

Heavy or light weights may be used, as required, and they may be raised up, to allow the vane D to turn around, so as to wholly shut off the wind, when required for stopping the wheel, and the starting of it may be accomplished by attaching or allowing the weights to act.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

The combination, with a wind-wheel, of a gate, B, arms C, vane D, cord, and weight, when arranged substantially as specified.

Witnesses:

ISAAC H. SUTTON.

DANIEL H. SMITH,  
ISAAC SLAYBAUGH.