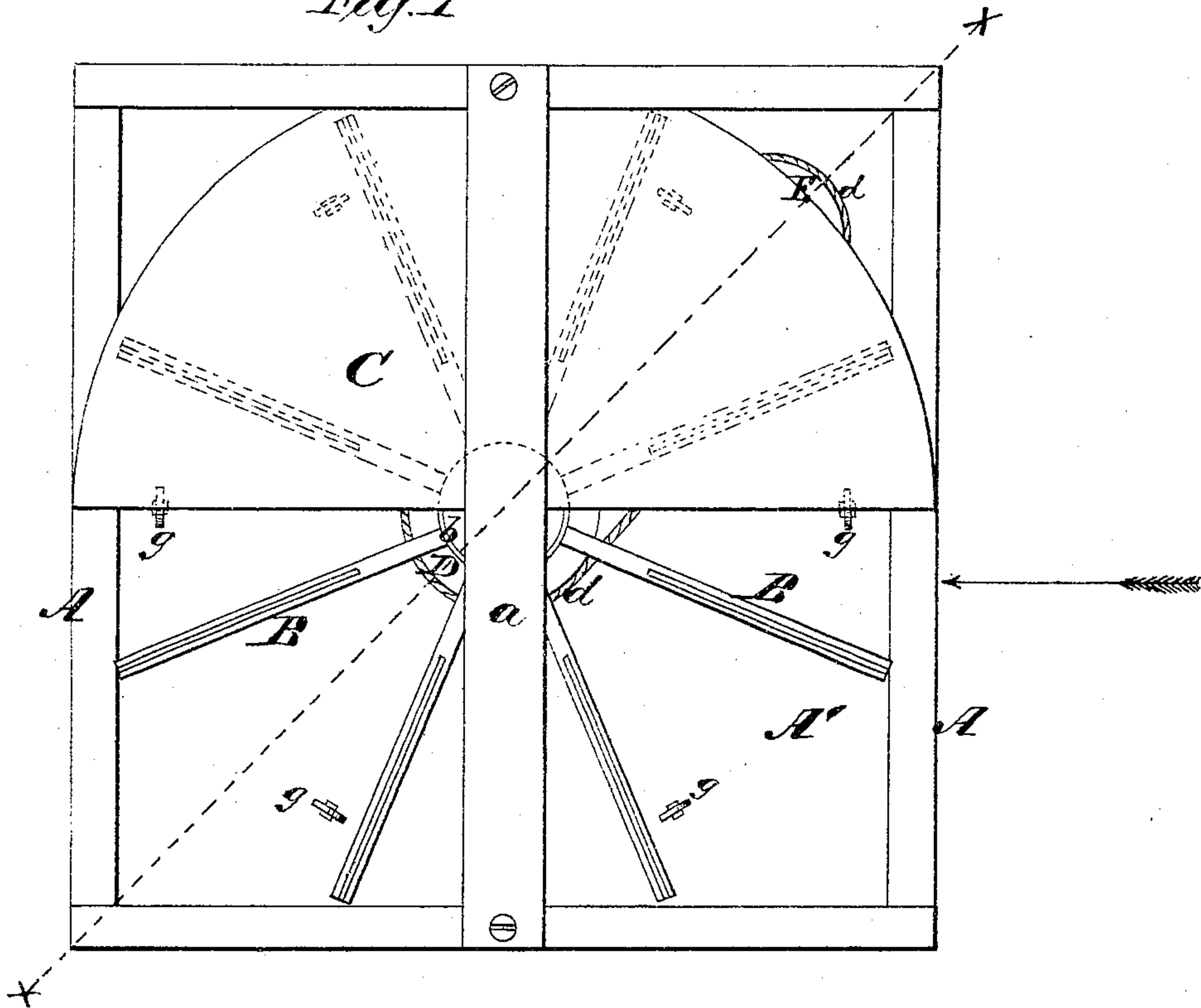


T. R. & A. C. JACKSON.  
Wind-Mills.

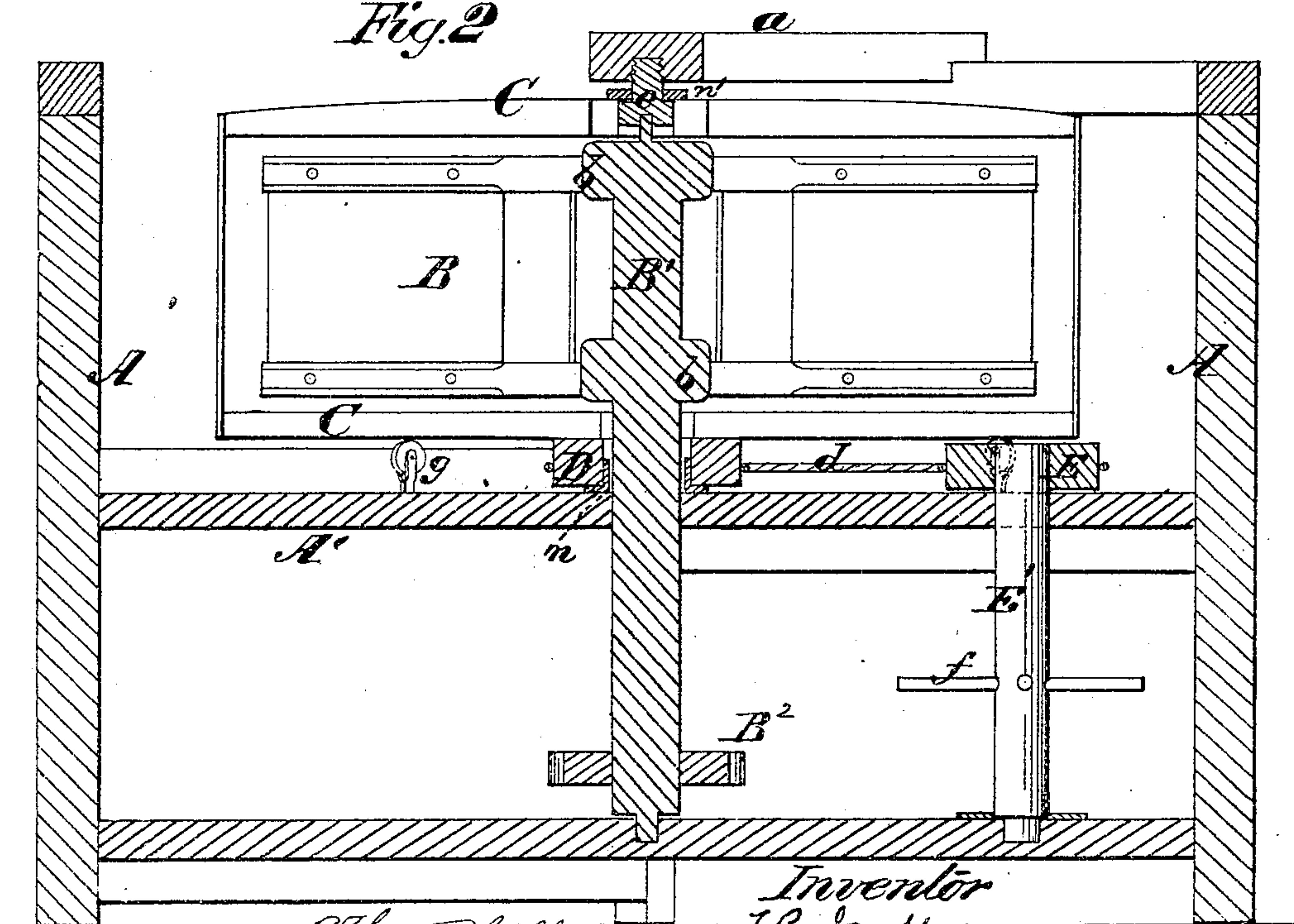
No. 139,007.

Patented May 20, 1873.

*Fig. 1*



*Fig. 2*



Witnesses  
R. Campbell,  
J. K. Campbell.

Inventor  
T. R. Jackson  
A. C. Jackson  
Mason Penwell & Lawrence

# UNITED STATES PATENT OFFICE.

THOMAS R. JACKSON AND ASBERRY C. JACKSON, OF SABINE PASS, TEXAS.

## IMPROVEMENT IN WINDMILLS.

Specification forming part of Letters Patent No. **139,007**, dated May 20, 1873; application filed January 13, 1873.

*To whom it may concern:*

Be it known that we, THOMAS R. JACKSON and A. C. JACKSON, of Sabine Pass, in the county of Jefferson and State of Texas, have invented a new and useful Improvement in Windmills; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a top view of the windmill to which our improvement is applied. Fig. 2 is a vertical section taken through the same in the plane *x x*.

Similar letters of reference indicate corresponding parts in the two figures.

The object of our invention is to improve windmills of the kind which consist of a semicircular case combined with a wind-wheel by the employment of adjusting devices arranged beneath the said case, as will be hereinafter explained.

The following is a description of our improvement: In the accompanying drawing, A is the frame of the mill. BB represent the wings or blades of the wind-wheel, which radiate from a vertical shaft, B<sup>1</sup>, and are secured to hubs *b b*. The wind-wheel will thus rotate in a horizontal plane. The shaft B<sup>1</sup> is stepped below on a suitable bearing, and has a spur-wheel, B<sup>2</sup>, keyed to it for transmitting motion to machinery. The upper end of the shaft B<sup>1</sup> is journaled in a bearing, *e*, which is applied to a bridge-tree, as shown. C represents a semicircular case, which is concentric to the axis of the shaft B<sup>1</sup>, and which is allowed to turn about this shaft by means of an eye-piece, *n'*, that embraces the bearing *e*. The bottom of the case C has secured cen-

trally to it a hollow-pulley, D, which receives into it and is supported upon a collar, *n*. This collar *n* is made fast upon a horizontal platform, A', and is concentric to the axis of the shaft B. The pulley D receives around it a rope or chain, *d*, which is carried around a pulley, E, applied on the upper end of a shaft, E', to which latter arms *f* are applied below the platform A'. A suitable device—such, for instance, as a ratchet and pawl—will be applied to the shaft E' for fixing the case C at any desired point to which it may be adjusted.

It will be seen that when the wind is blowing in the direction indicated by the arrow in Fig. 1, and the case C is adjusted as shown in this figure, the wheel B will receive the full force of the wind on one side of its center. By adjusting the case C at right angles to the arrow the wheel will be completely shielded from the wind; by adjusting the case at different angles between such positions the speed of the wheel can be regulated.

We are aware that it is not new to combine a case, A, with a wind-wheel, and this we do not claim.

Having described our invention, we claim as new—

The pulley D, applied fast to the bottom of the semicircular case C, and receiving freely through it the shaft B<sup>1</sup> of the wind-wheel B, in combination with the pulley E and belt *d*, substantially as and for the purpose described.

THOMAS R. JACKSON.  
ASBERRY C. JACKSON.

Witnesses:

THOS. P. HARRIS,  
WM. ALLISON.