

(No Model.)

J. N. ADAMS.
WINDMILL.

No. 253,651.

Patented Feb. 14, 1882.

Fig. 1.

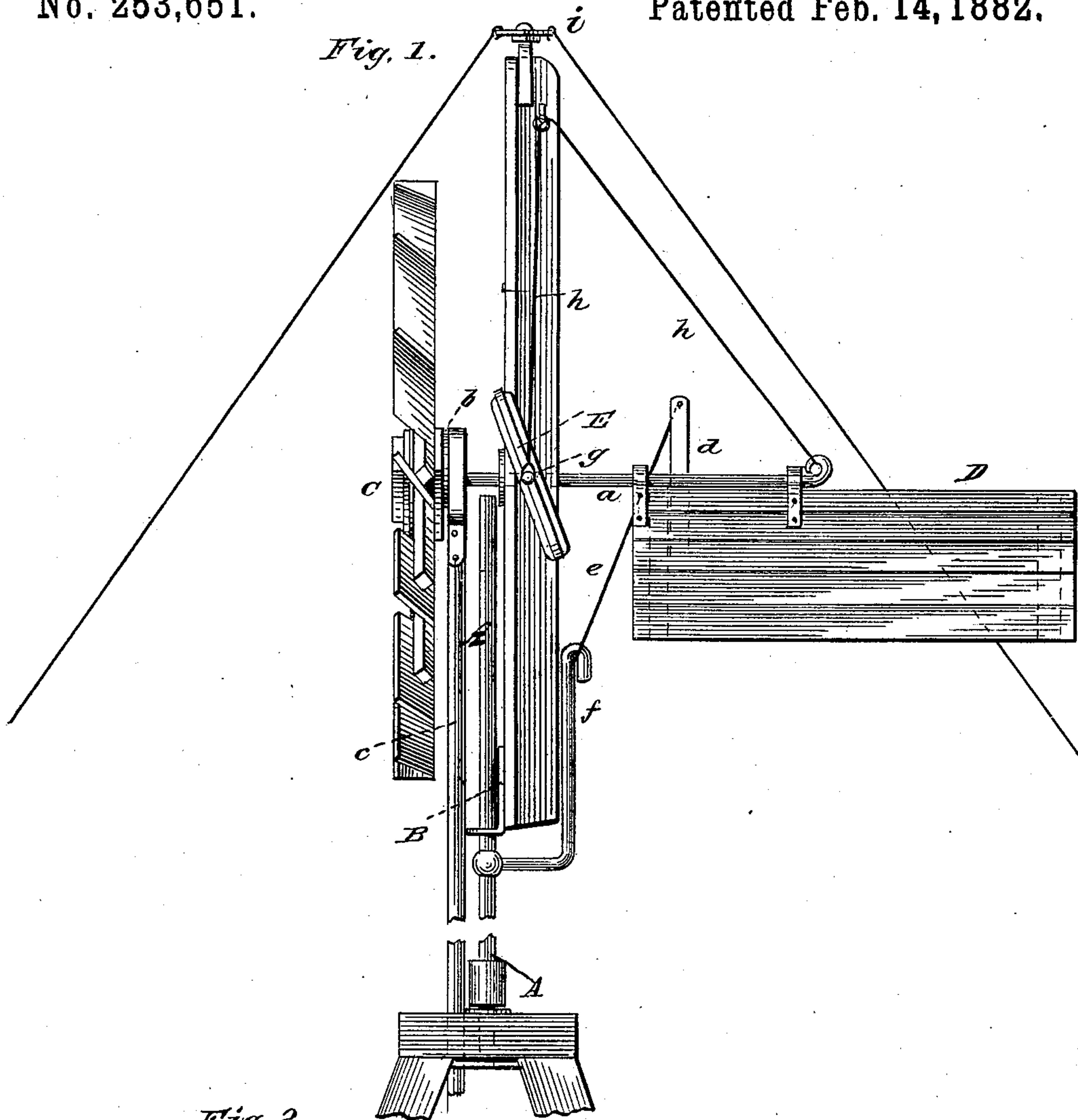
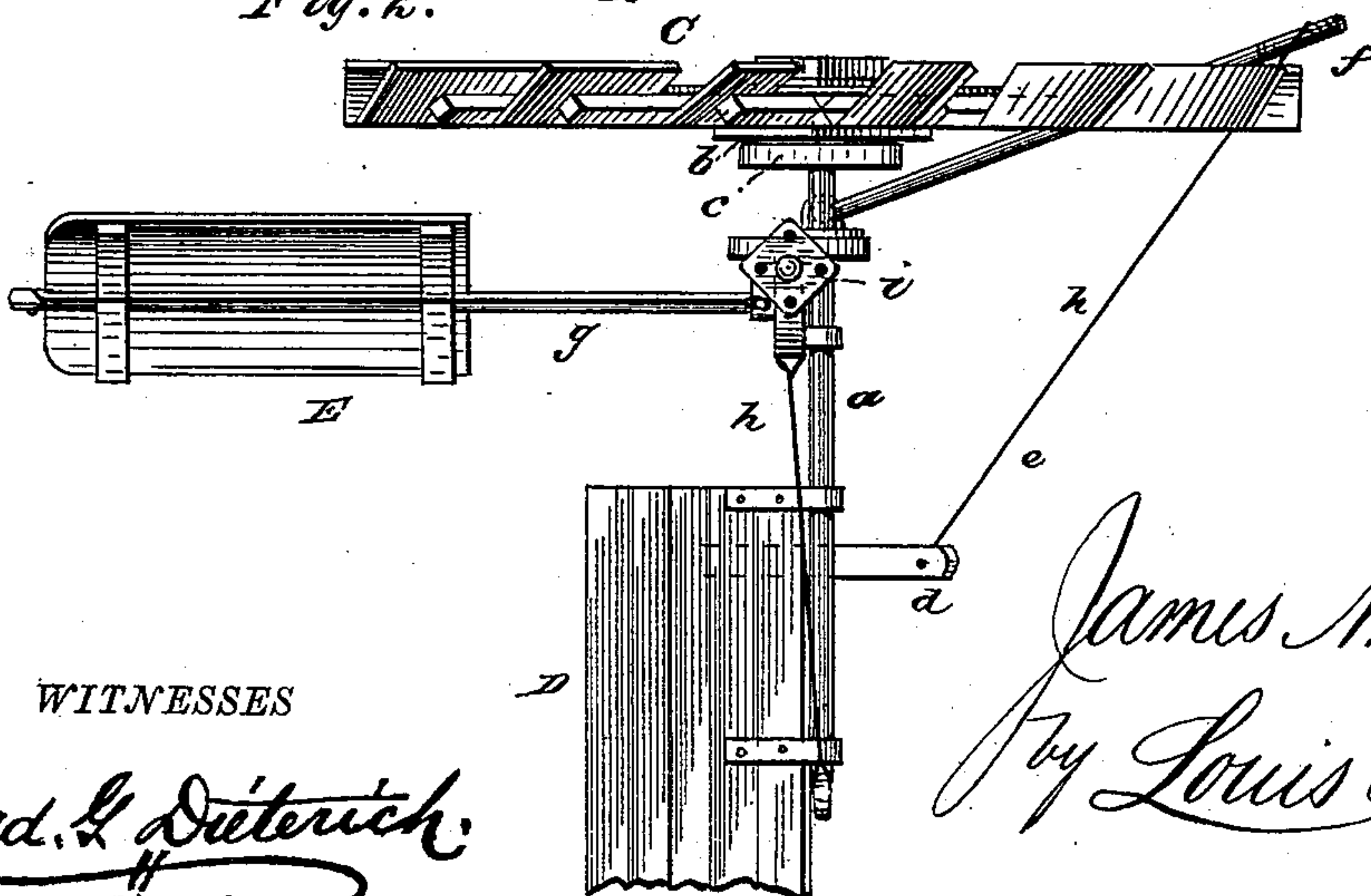


Fig. 2.



WITNESSES

Ad. L. Dieterich
Geo. Pinkenburg

James N. Adams
INVENTOR,
By Louis Bagger & Co.

Attorneys.

UNITED STATES PATENT OFFICE.

JAMES N. ADAMS, OF STERLING, KANSAS.

WINDMILL.

SPECIFICATION forming part of Letters Patent No. 253,651, dated February 14, 1882.

Application filed September 12, 1881. (No model.)

To all whom it may concern:

Be it known that I, JAMES N. ADAMS, of Sterling, in the county of Rice and State of Kansas, have invented certain new and useful
5 Improvements in Windmills; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference
10 being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation of my improved windmill; and Fig. 2 is a plan view thereof,
15 showing the wheel out of the control of the large or main vane, and being controlled by the auxiliary or supplemental vane.

This invention relates to improvements in windmills adapted to control the angle of presentation of the wheel to the wind to increase
20 or diminish its speed, and to permit of the ready stopping of the wheel; and it consists in the combination and arrangement of parts, substantially as hereinafter more fully set forth
25 and claimed.

Referring to the accompanying drawings, A indicates a shaft, preferably hollow, upon which the upright casting B is swiveled to turn with the wheel and vanes presently described.

30 C is the wheel constructed after the usual form of wind-wheels, and hung or journaled upon the shaft *a*, fixed in the casting B. To the hub of this wheel is affixed an eccentric or cam, *b*, upon which is adjusted the yoke of the pitman *c*, reaching down into the hollow shaft A and connecting with the piston of the pump or other machinery it is desired to operate.
35 Upon the shaft *a* is also hung the swinging main vane D, having an arm, *d*, to which is attached a rope, cord, or chain, *e*. This cord or chain is looped over a hook or arm, *f*, of the shaft A when it is desired to arrest the motion of the wheel, the drawing or pulling upon the cord
40 *e* elevating the vane D into a horizontal position, permitting the wheel to be presented edge-wise to or taken out of the wind, so to speak.

E is an auxiliary or supplemental vane, fixed upon an arm, *g*, of the shaft *a*. The arm *g* is arranged at right angles to the shaft *a* to bring the lesser vane, E, into action to present the
50 wheel more or less to the wind to vary the speed of the wheel, the main vane D being elevated by and unable to withstand the wind in which it is required to bring into action the auxiliary or lesser vane, E, arranged parallel with the
55 wheel.

The ends of the shaft *a* and its arm *g* are connected to the upper end of the casting B by chains or other braces, *h*, while at the top of the casting is a swiveled plate, *i*, having con-
60 nected to it the upper ends of guy ropes or chains, which are in turn fastened to stakes driven into the ground to stay and brace the structure in an upright position.

By journaling the wheel, say, about five
65 inches (more or less) upon that side upon which the vane is hung, from its center, it will serve to turn itself out of a strong wind, thus dispensing entirely with the vane.

I am aware that it is not new to arrange the
70 wheel and a supplemental vane parallel to each other and the main vane at right angles thereto, nor to hang the main vane so as to be capable of swinging horizontally.

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

In a windmill, the combination, with the shaft *a*, having the wheel C, the arm having the vane E, and the swinging vane D, having an arm, *d*, of the fixed shaft A, having the
80 fixed right-angled hooked arm *f*, and the cord *e*, connecting the vane D to the arm *f*, substantially as shown and described, for the purpose set forth.

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

JAMES N. ADAMS.

Witnesses:

JNO. W. ROBERTSON,
HARVEY C. BATES.