(No Model.)

B. CHAMBERLAIN.

WINDMILL GOVERNOR.

No. 262,000. Patented Aug. 1, 1882.

Fig. 1.

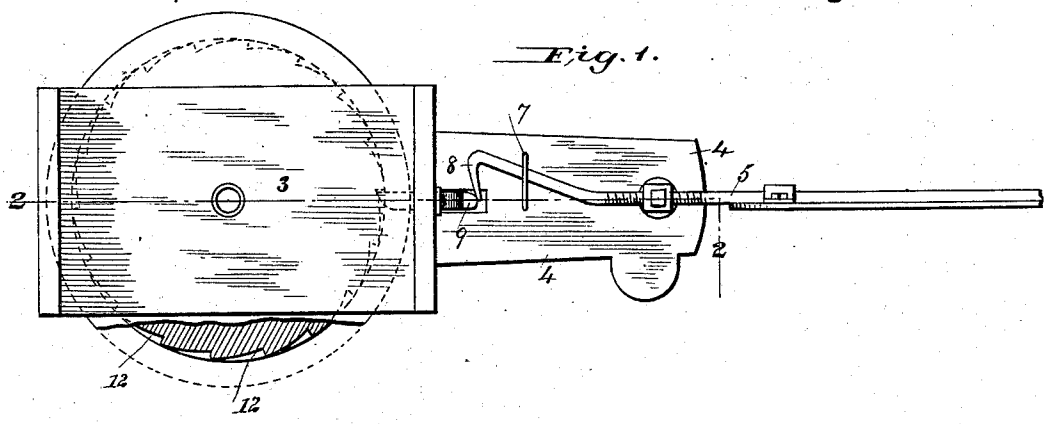
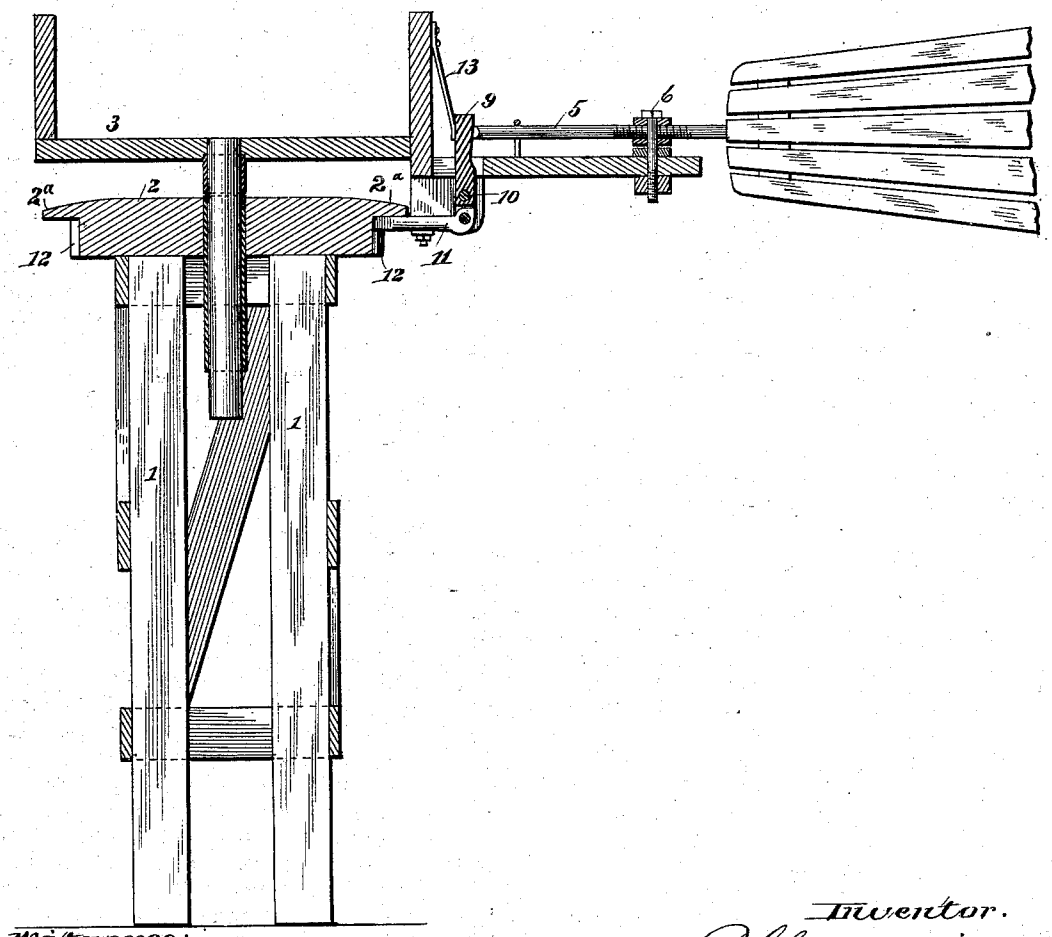


Fig. 2.



Witnesses:
D. M. Long.
Harry E. Knight

Inventor.
B. Chamberlain
By Knight Bros
Atty's.

UNITED STATES PATENT OFFICE.

BLANCHARD CHAMBERLAIN, OF BELLEFONTAINE, OHIO, ASSIGNOR OF THREE-FOURTHS TO J. H. WILSON, ROBT. LAMB, H. E. PALMER, AND GEORGE H. PALMER, ALL OF SAME PLACE.

WINDMILL-GOVERNOR.

SPECIFICATION forming part of Letters Patent No. 262,000, dated August 1, 1882.

Application filed June 14, 1882. (No model.)

To all whom it may concern:

Be it known that I, BLANCHARD CHAMBERLAIN, a citizen of the United States, residing at Bellefontaine, in the county of Logan and State of Ohio, have invented a new and useful Improvement in Windmill-Governors, of which the following is a full, clear, and exact description.

My invention relates in part to constructing a windmill derrick or tower carrying a circular rack or stop-holes for a latch operated by the vane, and with a cap surmounting said circular rack or holes, and beveled on top to protect the same from rain and snow.

The invention further consists in mounting a tail-vane on top of the rigid tail casting or arm of the mill, and connecting it with a vertical trigger for operating the stop-latch, as hereinafter described.

In the accompanying drawings, Figure 1 is a plan view of a portion of a windmill-frame, illustrating my invention. Fig. 2 is a vertical section of the same on the line 2 2, Fig. 1.

The stationary derrick or tower of the mill is shown at 1 surmounted by a cap-plate, 2, which is beveled on top to shed rain. Portions of the head-frame or gear-box of the mill are shown at 3, from the rear of which projects the customary rigid tail-piece, 4. On top of this rigid tail the governor-vane 5 is mounted by a vertical pivot, 6, permitting oscillation of the vane in a horizontal plane to an extent limited by stop-pins or staple 7. The inner end of the vane-arm is bent to form an oblique tappet, 8, which, when the vane is moved to the left by the action of the wind, presses against the upper end of the vertical trigger 9, which is fulcrumed at 10 and connected to the horizontal stop-bolt 11. This bolt is beveled at its end, and engages with the rigid teeth or bevel-faced holes 12, which extend around the cap-plate 2 of the tower beneath the projecting edge 2^a, so as to hold the mill against rotation to the left and permit it to turn freely to the right. The bolt 11 is pressed into engagement with the holes 12 by a spring, 13, acting on the upper end of the vertical trigger 9. When the wheel is directly in the eye of the wind the tail-vane projects directly backward, in which position it allows the sliding bolt 11 underneath the tail-casting 4 to engage with one of the holes 12 in the bed-plate, thereby holding the wheel rigidly in the face of the wind until it changes to the right or left. If to the left, the beveled form of the bolt 11 and the hole 12, in which it is engaged, allows the said bolt to pass freely round, not resisting the turning of the head of the mill by the action of the wind on the vane. If the pressure of the wind be to the right, it causes the inner end, 8, of the vane-arm to move to the left, thereby retracting the bolt 11 by means of the trigger 9 and releasing the mill-head or gear-box, so that it can be carried around to the eye of the wind in that direction until the vane, being relieved of pressure on its right side, resumes its normal position, when the blade 11 is pressed in by the action of the spring 13 and the top of the trigger 9, locking the mill, as before, until another change occurs in the direction of the wind.

Having described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. A mill tower or derrick, 1, having a series of holes or notches, 12, for locking the rotary head of the mill by means of a suitable bolt or catch, and a cap-plate, 2, provided with a beveled projecting edge, 2^a, to protect said holes or notches, as described.

2. In combination with a windmill-stop-bolt device, the vane 5, pivoted on top of the rigid tail-piece 4, to operate said stop-bolt device, substantially in the manner described.

3. The combination of the vane 5, having an arm inclined or beveled at its inner end, 8, the trigger 9, stop-bolt 11, holes or notches 12 to engage said stop bolt, and a suitable spring, 13, to press the bolt into engagement with the holes or notches when released by the vane, substantially as set forth.

BLANCHARD CHAMBERLAIN.

Witnesses:
J. O. SWEET,
J. A. HUSTON.