B. F. Prentis,

Ventilator.

NO. 108,185. Patented Oct. 11. 1870.

Fig. 1.

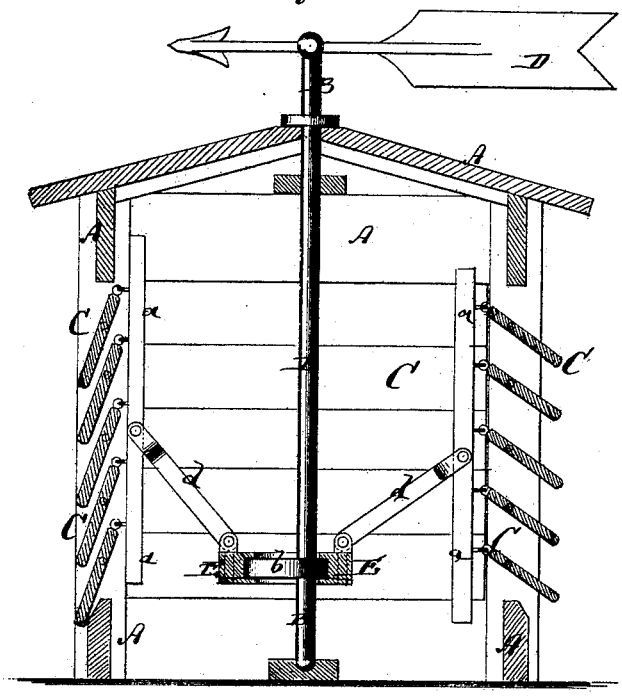
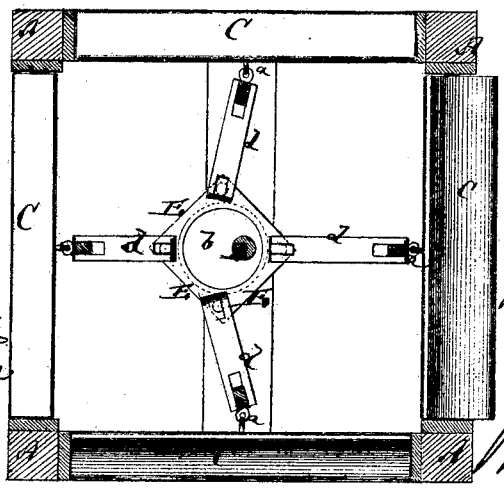


Fig. 2.



WITNESSES

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BENJAMIN F. PRENTIS, OF BENWOOD, WEST VIRGINIA.

IMPROVEMENT IN AUTOMATIC VENTILATORS.

Specification forming part of Letters Patent No. **108,185**, dated October 11, 1870.

To all whom it may concern:

Be it known that I, BENJAMIN F. PRENTIS, of Benwood, in the county of Marshall and State of West Virginia, have invented a new and Improved Automatic Ventilator; 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 drawing, forming part of this specification, in which—

Figure 1 represents a vertical central section of my improved automatic ventilator. Fig. 2 is a horizontal section of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new apparatus for adjusting the slats on roof-ventilators, so that the same are closed to the wind and open to the leeward.

The invention consists in connecting the pivot of a weather-vane with an eccentric, which works in a ring that is by rods connected with the covered slats, so that by turning the said eccentric the slats will be adjusted in the desired manner.

A in the drawing represents the frame of a ventilator, projecting from the roof or upper part of a house or other building of suitable construction. The ventilator is made with four (more or less) sides, and is provided with a set of slats, C, in each open side. The slats constituting each set are connected with each other by slat-rods *a*, of ordinary kind.

B is an upright shaft, arranged in the middle of the frame A, and projecting beyond the roof or cover of the same. Its upper end carries the vane D. When the vane is turned by the action of the wind it will rotate the shaft B with it.

Within the ventilator-frame is mounted, upon the shaft B, a cam, *b*, which works within a loose ring, E. This ring is, by means of rods *d d*, connected with the several sets of slats or slat-rods. The eccentric is so set upon the shaft B as to project least from the same on that side from which the vane is made to project. Thus, on the side opposite to the vane, the cam projects farthest and closes the slats, as shown in Fig. 1, while to the lee side the slats are thrown open. The position of the vane will, therefore, serve to automatically regulate the position of the slats so as to always exclude the air from the windward, and permit the escape of spent air from the lee side.

The ring E is grooved to receive the cam, or rather overlaps both faces of the same, to prevent the displacement of the parts.

In place of the rods *d*, other suitable connections may be employed, which may necessitate a different position of the cam without changing the general operation of the device.

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

1. The combination of the vane D, shaft B, cam *b*, ring E, rods *d*, bars *a*, and slats C, all arranged as shown and described.

2. The grooved ring E, fitted upon the cam *b*, for the purpose of connecting the same with the slats, substantially as herein shown and described.

BENJAMIN F. PRENTIS.

Witnesses:
WILLIAM BOLE,
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