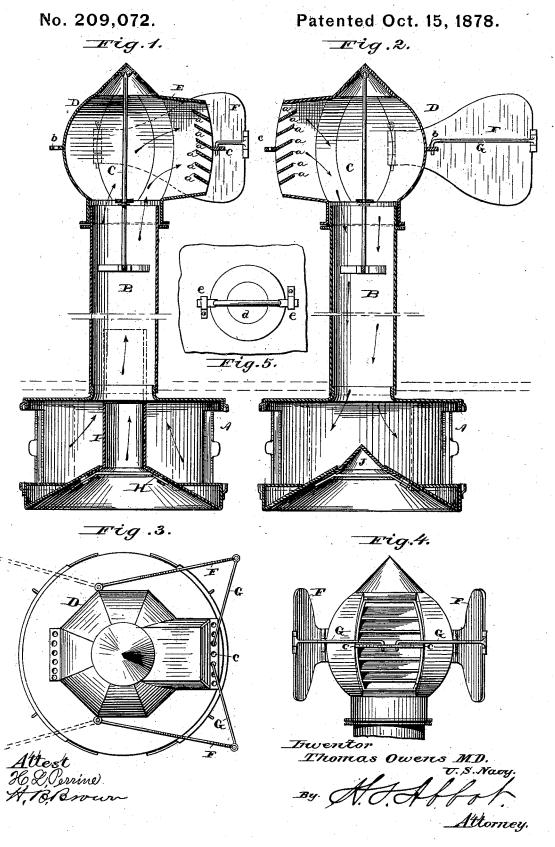
T. OWENS. Ventilators.



## UNITED STATES PATENT OFFICE.

THOMAS OWENS, OF WASHINGTON, DISTRICT OF COLUMBIA.

## IMPROVEMENT IN VENTILATORS.

Specification forming part of Letters Patent No. 209,072, dated October 15, 1878; application filed April 11, 1878.

To all whom it may concern:

Be it known that I, THOMAS OWENS, of Washington, in the county of Washington and District of Columbia, have invented certain new and useful Improvements in Ventilators; and I do hereby declare that the following is a full, clear, and exact description thereof.

This invention relates to certain improvements in ventilators; and is designed as an improvement on a ventilator for which Letters Patent No. 195,039 were granted to me

September 11, 1877.

The invention consists in two hinged wings, arranged to be adjusted to hold the face of the ventilator in or out of the wind; also in the special construction, arrangement, and combination of parts, all of which will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and arrangement, reference being had to the accompanying drawing, which forms a part of this specification, and

Figure 1 is a central vertical section of my ventilator, showing the face turned from the wind, and the deflecting chamber provided with a section of pipe, extending up from the deflector, for the egress of air. Fig. 2 is a central vertical section, with the face turned to the wind, and the deflector provided with a stopper to close the opening in the pipe. Fig. 3 is a top view of the device shown in Fig. 1. Fig. 4 is an elevation of the head, showing the face turned from the wind and the wings arranged to hold it in this position; and Fig. 5 is a bottom view of the deflectingchamber.

A denotes a deflecting-chamber, from which extends a pipe, B, at the upper end of which a head, D, is pivoted upon a rod, C, supported within the pipe B by a suitable bracket. (Shown in Figs. 1 and 2.) This head is provided with a face, E, having slats a, arranged in a slanting position, to prevent rain or snow entering the head.

On opposite sides of the head are hinged |

wings F. These wings are provided with rods G, for adjusting them to and fro, as the velocity of the wind may require. When it is desired to hold the face E in the wind, the rods G are hooked in either of a series of holes in a flange, b, arranged on the back of the head D; and when it is desired to hold the face from the wind, the wings F are thrown around, and the rods G hooked into the flange c on the face E, as shown in Figs. 1, 3, and 4 of drawing.

When the ventilator shown in Fig. 1 is used only as an egress-passage, the deflector H of the chamber A is provided with a section of pipe, I, extending up a suitable distance in the pipe B, as shown by dotted lines.

When the ventilator is used as an ingresspassage, the pipe I is removed, and a conical stopper, J, is inserted in its place to close the opening, and the wings F arranged to hold the face to the wind.

The pipe I and the stopper J are both held in place on the deflector H by a cross-bar, d, having flattened ends, which pass inside of lugs e, secured to the deflector, and set in opposite directions, as shown in Fig. 5 of the drawing.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is-

1. A wing, F, hinged to the side of the head D, and arranged to be adjusted to hold the face in or out of the wind, substantially as described.

2. A deflecting-chamber provided with a detachable pipe, I, substantially as described.

3. A deflecting-chamber provided with a detachable stopper, J, substantially as described.

4. The combination in a ventilator of the hinged wings F, head D, face E, pipe B, and deflecting chamber A, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

THOMAS OWENS, M. D.

Witnesses: H. B. Brown, ALBIN M. LONG.