G. HAYES.
Ventilator.

No. 218,265. Patented Aug. 5, 1879.

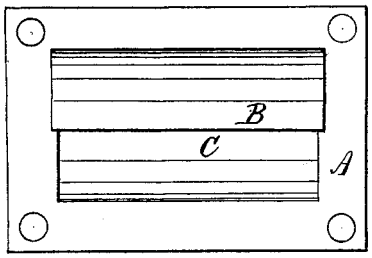

Fig. 1.

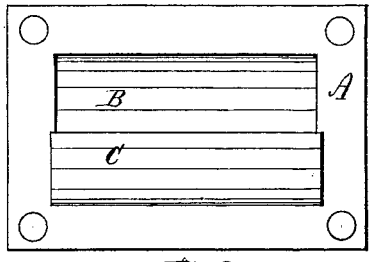

Fig. 2.

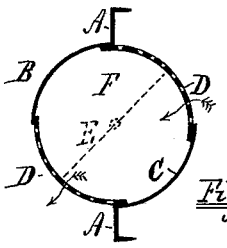

Fig. 3.

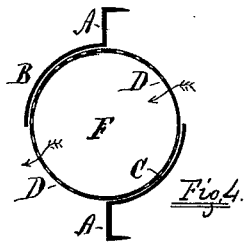

Fig. 4.

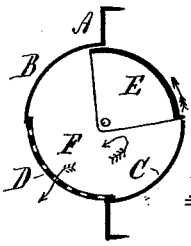

Fig. 5.

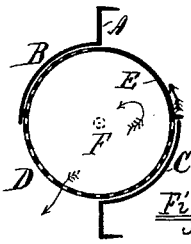

Fig. 6.

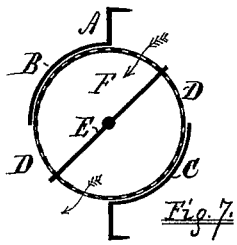

Fig. 7.

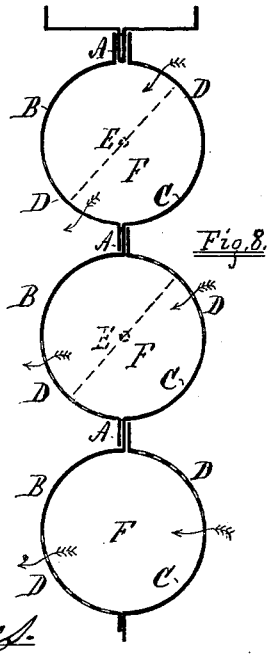

Fig. 8.

Witnesses.
Sam^l M. Hopkins
Chas Hayes

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George Hayes.

UNITED STATES PATENT OFFICE.

GEORGE HAYES, OF NEW YORK, N. Y.

IMPROVEMENT IN VENTILATORS.

Specification forming part of Letters Patent No. **218,265**, dated August 5, 1879; application filed May 23, 1879.

To all whom it may concern:

Be it known that I, GEORGE HAYES, of the city, county, and State of New York, have invented a new and Improved Ventilator, of which the following is a specification.

The object of my invention is to provide a device readily placed in position wherever desired, and which will effectually exclude rain, snow, &c., while permitting outward or inward currents of air to pass freely, and, when desired, a means of regulating or entirely excluding the air-currents at pleasure; also, providing against leakage or drip.

My invention consists of a ventilating device formed wholly of metal, through which are one or more openings. Above the opening, reaching outward and curving downward from its face, is a flange forming a hood to cover and protect the opening, its shape about a one-fourth circle, and from its inside face, reaching inward and curving upward, a corresponding flange, forming a gutter or "set-back," to prevent water passing in, and to turn the same out should any reach so far, the arrangement of hood and gutter being such that a cylindrical chamber is formed within the opening or ventilating-aperture. There may be a series of such openings, or the ventilator may have but one, as may be requisite in its location intended. Next the opening is screened or further protected by perforated or otherwise constructed metallic screen or screens, in curved or cylindrical form, and also I provide valve, damper, or the equivalent thereof, wherever desired, for the purpose of limiting or excluding at pleasure the passage of air-currents, and the same may be located therein at the outer face or inner face, or centrally, according to circumstances.

In the accompanying drawings, Figure 1 is an outside elevation; Fig. 2, inside elevation; Fig. 3, vertical section, showing hood, gutter, and screens of curved shape, and valve dotted; Fig. 4, section showing the hood, gutter, and cylindrical screen; Fig. 5, section showing hood, screen, and revolving valve; Fig. 6, section similar, showing valve and screen united to revolve; Fig. 7, section similar, but showing valve placed interiorly or inside a cylindrical and revolving screen, and Fig. 8 is a section showing a series of ventilating-openings combined.

Like letters refer to like parts.

A represents ventilator-plate; B, the hood; C, the gutter or set-back; D, screen or screens; E, valve or damper; and F serves to mark the cylindrical chamber through which the air-currents must pass. Arrows show the direction as they pass outward.

It will readily be seen that the hood protects the opening, the gutter turns back any water that may have entered, and the air passes through a single or double screen, and, when dampered, currents may be diminished or excluded at pleasure. In some places dampers or valves would not be needed; but the form which I consider most complete, perfect, and useful is that marked Fig. 7, as it contains all the elements of a satisfactory ventilator.

The manner in which two or more may be combined is shown in Fig. 8. A large window or other suitable opening may be thus filled, dampered or not. Damper or valves may be operated by cord or any other suitable means.

By means of the screens, &c., snow and rain are prevented from beating through, and leakage or drip turned out by the gutter.

In Fig. 8 is shown a construction very convenient in sheet metal.

What I claim as my invention, and desire to secure by Letters Patent, is—

A ventilating device formed wholly of metal, and having a curved flange, forming a hood, reaching outward and downward from its face, to cover and protect an opening below, and from its inner face, below the opening, reaching inward and curving upward, a corresponding flange, to form a gutter or set-back, in such position that a cylindrical chamber is formed between hood and gutter in the ventilating-aperture, the opening being also screened by perforated, curved, or cylindrical screen or screens, with or without a valve or damper for diminishing or excluding air-currents, the whole arranged and combined essentially as shown and described.

GEORGE HAYES.

In presence of—
CHARLES HAYES,
SAML. M. HOPKINS.