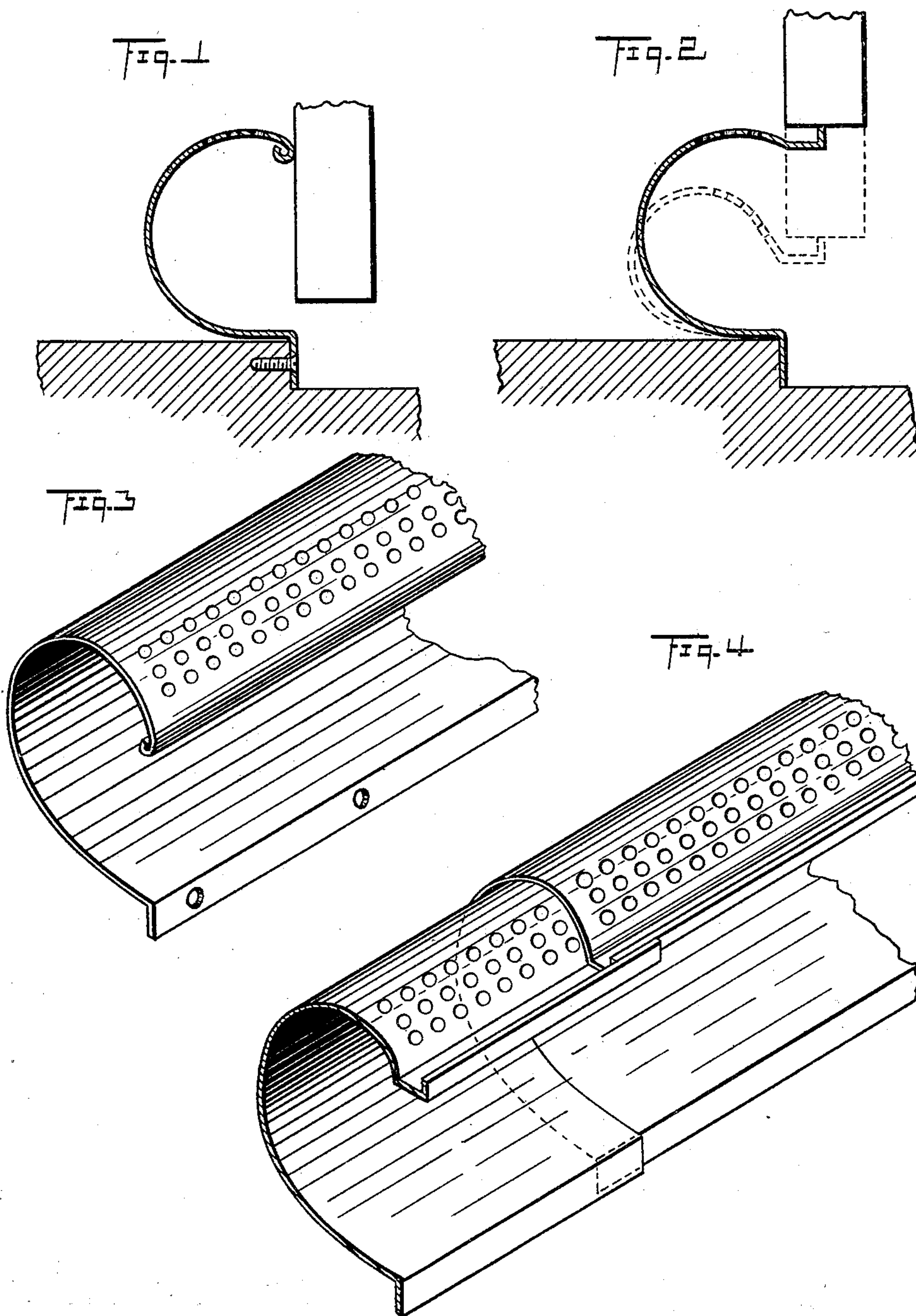


(No Model.)

E. L. HOWE.
WINDOW VENTILATOR.

No. 424,113.

Patented Mar. 25, 1890.



Witnesses.
P. J. Howe.
W. R. Edson.

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UNITED STATES PATENT OFFICE.

EUGENE L. HOWE, OF CLEVELAND, OHIO.

WINDOW-VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 424,113, dated March 25, 1890.

Application filed June 27, 1889. Serial No. 315,720. (No model.)

To all whom it may concern:

Be it known that I, EUGENE L. HOWE, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Window-Ventilators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to improvements in ventilators for windows; and it consists in certain features of construction and in combination of parts hereinafter described, and pointed out in the claim.

In the accompanying drawings, Figures 1 and 2 are elevations. Figs. 3 and 4 are views in perspective.

A represents the lower window-sash, and B the ventilator. The latter is of thin material, preferably metal, and curved approximately, as shown, to inclose an air-chamber C, the bellying portions thereof projecting inward. Along the upper section of the ventilator is a series of small perforations *b*, discharging upward next inside the window. If the ventilator is to be permanently secured, the downwardly-offset portion thereof *B'* is provided with holes *b'* for securing-screws, member *B'* engaging the shoulder of the window-sill to which it is secured. (See Fig. 1.) The ventilator extends the width of the window and fits close to the side casings of the window. In Fig. 1 the free edge of the ventilator is shown curved, so as not to chafe the window-sash, against which latter the ventilator, by reason of its elasticity, bears with gentle force. When the sash is raised a trifle, air is admitted into chamber C, and from thence passes up through perforations *b*, the discharge of air into the room being in upwardly-directed jets next inside of the window. If it is desired to remove the ventilator when not in use,

holes *b'* may be dispensed with and the free edge of the ventilator should extend outward at *b*² and then turn upward at *b*³, so as to hook more or less under the lower edge of the window-sash, (see Fig. 2;) also, the removable ventilator had better be made in two or more overlapping sections for convenience in placing it between the window-casings. The sash is first raised and the ventilator is placed in position, after which the sash is lowered, bringing the lower edge thereof onto member *b'* with sufficient force to hold the ventilator in place. If less air is wanted, the sash may be still farther lowered, thereby compressing the ventilator, as shown in dotted lines, Fig. 2. With the permanently or detachably secured ventilator the sash may be raised or lowered to graduate the air-supply from zero to the full capacity of the ventilator.

For ordinary purposes a ventilator of the size shown in Figs. 1 and 2 will be found ample, and if the ventilator be polished and plated it will be considered more ornamental than otherwise.

The removable ventilators may be made of larger size than would be desirable if the ventilator were to remain permanently attached.

What I claim is—

A ventilator for windows, consisting of an elastic casing composed of overlapping sections and forming an air-chamber, the upper portion of such casing having a series of openings discharging next inside the window, the said casing engaging the window sill and sash, substantially as set forth.

In testimony whereof I sign this specification, in the presence of two witnesses, this 1st day of May, 1889.

EUGENE L. HOWE.

Witnesses:

WILLIAM H. HOUSMAN,
FRED SCHUCH.