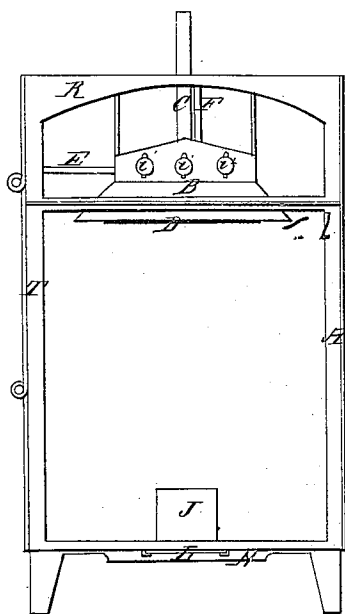


H.A. Gouge, House Ventilator.

N^o 38,675
Fig. 1



Patented May 26, 1863.
Fig. 2

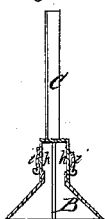


Fig. 3.

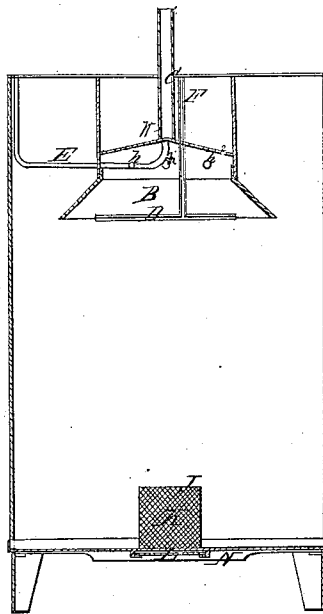


Fig. 4.

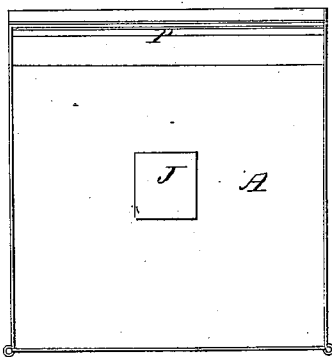


Fig. 5.

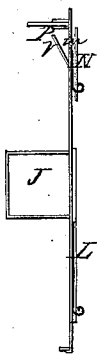
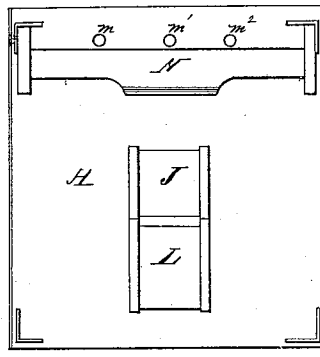


Fig. 6.



Witnesses.
J. Gordon
Geo. H. Collins

Inventor:
H.A. Gouge

UNITED STATES PATENT OFFICE.

HENRY A. GOUGE, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN VENTILATORS FOR SHOP-WINDOWS.

Specification forming part of Letters Patent No. 38,675, dated May 26, 1863.

To all whom it may concern:

Be it known that I, HENRY A. GOUGE, of Brooklyn, Kings county, and State of New York, have invented a new and Improved Ventilator for Store-Windows and Stores; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, and the letters of reference marked thereon, in which the same letter represents the same thing in each figure.

Figure 1 is an exterior front elevation showing the interior arrangement; Fig. 2, a cross-section of the reflector and gas-burner; Fig. 3, a vertical cut section; Fig. 4, a plan view of the base of the ventilator; Fig. 5, a cut section of the same, and Fig. 6 a bottom view thereof.

Letter A represents the bottom and sides of the ventilated apartment; B, the reflector; C, the ventilating-pipe; D, the illuminating-gas pipe; E, the ventilating gas-pipe; F, the feed-pipe to the illuminating-gas burner; J, the cold-air register; K, the perforated back plate thereof; L, the slide-door beneath register J; N, the slide-door to close holes $m m' m^2$ beneath the bottom of the window-sill; P, the narrow open space between the inclined plate V and the front glass of the window; R, the ventilating-door at the top of the window; T, the inside window-door; V, an inclined plate, extending from the bottom of the window-sill toward and close to the front window glass; W, the ventilating gas-burner; $i i' i^2$, valves to holes $h h' h^2$ at the top of the reflector; $m m' m^2$, holes beneath the inclined plate V.

The object of my improvement is the ventilation of store-windows, at the same time securing facilities for the ventilation of the store itself; but a more important object secured by my invention is the prevention of the condensation of moisture on the inside of store-

windows in cold weather by equalizing the temperature on the inside with the outside of the glass as nearly as possible. This is effected by creating heat near the top of the window, which, rarefying the air, promotes its escape through ventilating-pipe C, while it causes a current to be supplied with cold air from the bottom of the window-sill. In the evening this heat is obtained from the illuminating-gas burner D; in the day, by the ventilating gas-burner W. Sliding door L over opening J in the bottom of the window-sill regulates the amount of air admitted, and similar door N controls the admission of air through holes $m m' m^2$, directed by inclined plate V against the inside of the window-plate, which it reaches through passage P, thereby securing cool air to that surface of the window-plate and preventing condensation of the moisture thereon. Opening door R and valves $i i' i^2$ will assist in the ventilation of the store.

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

1. The inclined plate V, in combination with holes $m m' m^2$ and passage P, to divert the current of incoming air directly upon the inside of the window, substantially in the manner described.

2. The combination of ventilating-tube C, ventilating-burner W, and air-register J, or their equivalents, constructed and operating together substantially as and for the purposes described.

3. The combination of ventilating-tube C, ventilating burner W, and inclined plate V, with passage P and holes $m m' m^2$, or their equivalents, constructed and operating together substantially as and for the uses set forth.

H. A. GOUGE.

Witnesses:

S. I. GORDON,
GEO. H. COLLINS.