

G. R. MOORE.

VENTILATOR.

No. 189,054.

Patented April 3, 1877.

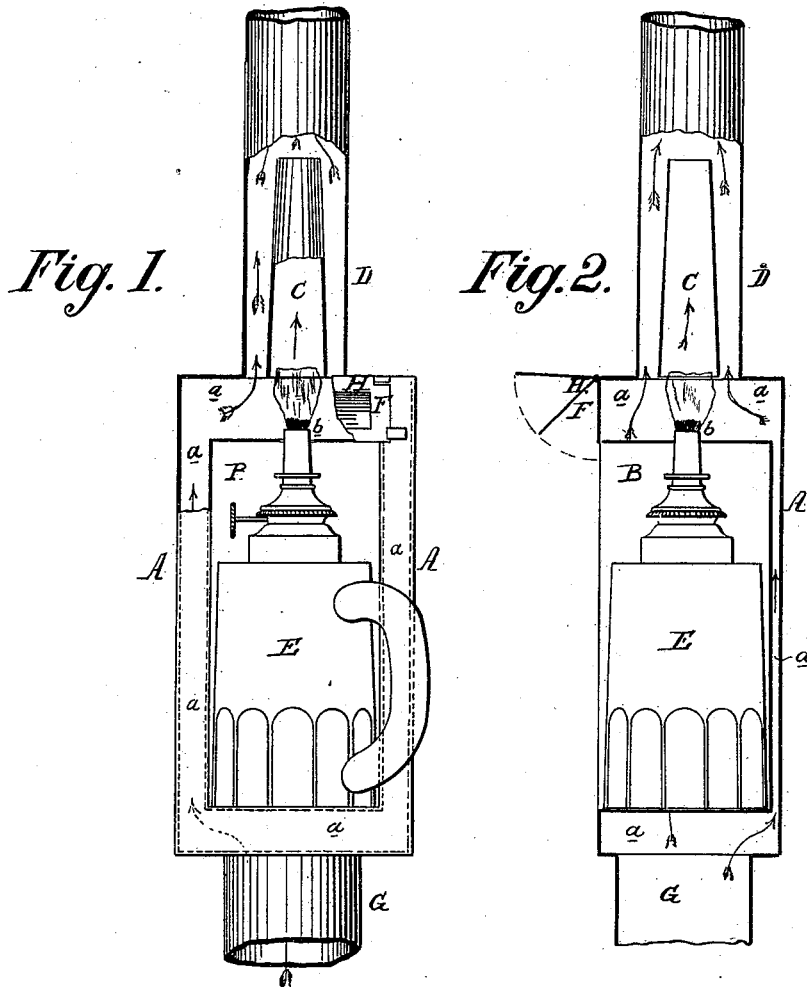


Fig. 1.

Fig. 2.

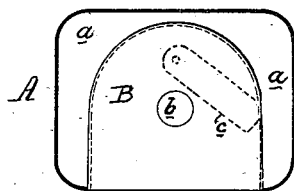


Fig. 3.

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN VENTILATORS.

Specification forming part of Letters Patent No. 189,054, dated April 3, 1877; application filed February 28, 1877.

To all whom it may concern:

Be it known that I, GEO. R. MOORE, of the city and county of Philadelphia, and State of Pennsylvania, have invented new and useful Improvements in Ventilators, which improvements are fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to furnish improved facilities for applying a lighted lamp or gas-jet to the internal atmosphere of any flue, air-draft pipe, or chimney, whereby the circulation of air through the same may be impelled whenever desired to increase draft for ventilating rooms, or any other places; also, to conserve the light of the said lamp or gas-jet nearly as much as if the same were not in use for ventilation.

Figure 1 is a front view of a section of air-pipe containing my invention, and showing a removable lamp standing in its proper place in the niche of the said pipe. Beneath the front casing, as indicated by dotted lines, and a part in section, the air-passages *a a a* up past the lamp inclosure or niche are clearly shown.

Fig. 2 is a vertical transverse section taken at right angles to Fig. 1. In both these views the direction of the air-current is shown by arrows.

Fig. 3 is a plan view taken just above the niche. It shows, also, in dotted lines, a pivoted slide, *c*, for closing the passage *b* from the niche into the air-pipe when not in use by a lamp or gas-jet.

A is the part of the air-pipe, chimney, or flue, in which my invention is more specifically included. *B* is a concaved niche placed externally into the flue, and forming the front wall of the same, so that the whole is completed for ordinary use without the lamp, and when the lamp is used its body is not brought in contact with the internal air of the flue.

C is a lamp-chimney, placed centrally within the flue and supported at a short distance above the niche, from which it extends up into the air-pipe *D*—in this instance in the ordinary form of air-pipe. It may be extended to any point desired.

E is an ordinary lamp, removable at will. Its burner is fitted to pass easily through the aperture *b* into the flue proper, just beneath the stationary chimney *C*.

F is a hinged door or window, with mica

center. It may be of glass, and of any desired color. It allows the light of the lamp to pass into the room, while all its heat is working to carry on ventilation by moving a volume of air through the flue. This window or door may, of course, be made either with or without hinges, and of any size or shape desired.

The portion of the flue back of the light has a bright reflecting-surface, so as to conserve nearly all the light, and pass it through the window *F*.

G is a part of the flue in the ordinary form of air-pipe, and may be extended at will, and connected in any desired manner with any place to be ventilated.

Let the section *A* be located wherever is most convenient or desirable, and then extend the other portions of the air-pipes so as fully to meet all requirements of the case.

H is an adjustable reflector before the window *F*. It is hinged with sufficient friction to hold its own weight, and may therefore be placed at any desired angle at will.

I claim—

1. The flue-chimney or air-pipe *A*, provided with external lamp-holder or niche *B*, with its communicating aperture *b* into the said pipe or chimney, substantially as and for the purpose herein set forth.

2. In combination, the chimney or air-pipe *A*, niche *B*, internal chimney *C*, and pipe *D*, substantially as and for the purpose herein set forth.

3. In combination, the air-pipe *A*, with aperture *b* and side door or window *F*, either with or without mica or glass, substantially as and for the purpose herein set forth.

4. In combination, the air-pipe *A*, with aperture *b* and pivoted slide *c*, substantially as and for the purpose herein set forth.

5. In combination, the air-pipe *A*, with aperture *b*, mica or glass front *F*, and a bright or reflecting surface back of the light, substantially as and for the purpose herein set forth.

6. In combination, the air-pipe *A*, lamp *E*, or gas-jet, mica or glass front *F*, and adjustable reflector *H*, substantially as and for the purpose herein set forth.

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Witnesses:

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