

F. WARRINER.
Stove-Windows.

No. 136,884.

Patented March 18, 1873.

Fig. 1.

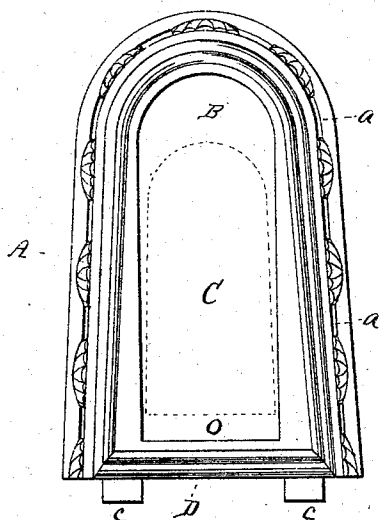


Fig. 2.

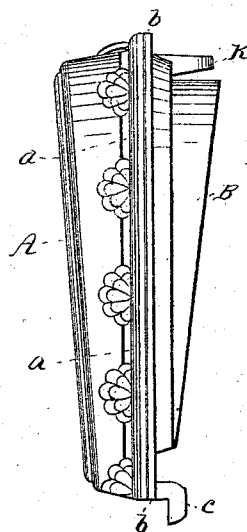


Fig. 3.

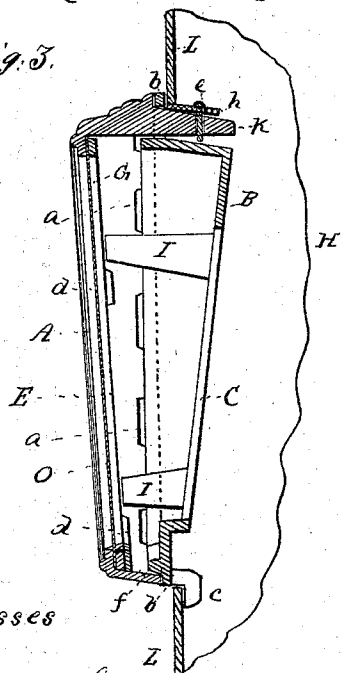
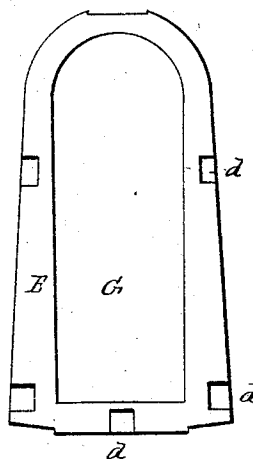


Fig. 4.



Witnesses

Alexander, Scott

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Francis Warriner
By J. D. Green atty

UNITED STATES PATENT OFFICE

FRANCIS WARRINER, OF TROY, NEW YORK.

IMPROVEMENT IN STOVE-WINDOWS.

Specification forming part of Letters Patent No. 126,884, dated March 18, 1873.

To all whom it may concern:

Be it known that I, FRANCIS WARRINER, of the city of Troy, county of Rensselaer, and State of New York, have invented certain Improvements in Stoves, or windows for illuminating purposes in stoves or ranges, of which the following is a specification:

My invention consists in the construction of a box-frame for windows for illuminating purposes for stoves or ranges, and the attachment to and the position of such windows in and to stoves or ranges when so attached and combined; also, to prevent smoke adhering to or discoloring the mica in such windows. This box-frame is made in two parts, the outside part, that holds the mica, and the inner part, that projects into the fire-chamber when attached to a stove or range. This inner part projects more at the top than at the bottom, so that the box is sloping or wedge-shaped on the side next the fire. This inner part is provided with nibs that extend to and hold in its proper position a ring-plate, which holds the mica firmly to the front plate of the box. The inside or sloping part has an opening into the fire-chamber much smaller than the opening in the front part where the mica is. The outside part or frame has suitable apertures in the edge or face to admit small jets of air from the room into the chamber of the box and behind the mica. The air thus admitted into said box will come in contact with the heat from the fire-chamber and become highly heated and cause a rotating motion of said air in said box, and will thereby prevent the discoloration, to a large extent, of the mica by the smoke arising from imperfect combustion, and will also aid in perfecting combustion in the fire-chamber. This box-frame is attached to the outer plate of a stove by means of hook-lugs at the bottom, and a tapering lug at the top of said frame, and a pin or screw passing through a projection on said outside plate of the stove and said tapering lug which is attached to the outer part of the box-frame.

Figure 1 is a front view of the box-frame, showing the opening D for mica, and the dotted lines show the opening C in the inner plate of the box next the fire. Fig. 2 is a vertical edge view of the box-frame when put together. Fig. 3 is a vertical longitudinal section showing the outer part of box-frame A, the mica

O, the inside mica-frame E, the inner part of the box-frame B with the nibs I attached thereto, and which rests against and holds the inner mica-frame E against the mica and keeps both in proper position; also the outer plate L of the stove or range, &c.; also the position and combination of the box-frame with a stove or range, &c., and its projection into the fire-chamber. Fig. 4 is a plan of the inside mica frame E.

A represents the outside frame, which may be made of any configuration desirable. D is the opening to show the mica O. On the inside of this frame, and near the opening D, are nibs to keep the mica in place, so that the mica may be smaller than the full size of the inside mica-frame E. There are hook-lugs c attached to the lower part of said outside frame A, by which device the lower end of said frame is hooked into and fastened to the outer plate L of the stove. K is a tapering lug attached to the top part of the outside frame A, and is for the purpose of fastening the top part of said frame A to the outside plate L by passing a pin or screw, e, through a projection, h, on plate L and through the lug K. Thus it will be seen that this box-window can be readily attached to or detached from a stove or range. a is the aperture in the front frame, through which the air from the room passes into the box, and from thence into the fire-chamber through the opening C in the inner part of the box-frame B. The inside part of this box is constructed as follows: b is a flat rim, in which are notches to admit the passing through it the hook-lugs c and the tapering lug K. On one side of this rim b is a flange, f, to fit into the outside part of said box. To this rim b, and on the opposite side from the flange f, and at nearly right angles thereto, are sides or a projecting plate, which is covered by the plate B forming a wedge-shaped box with an opening, as shown by the dotted lines at C, Fig. 1, and at C, Fig. 3. On the inside of this wedge-shaped box, or inside part of said box-frame, are attached nibs I, projecting therefrom sufficient to rest upon and hold firmly in its place the inside mica-frame E and the mica O when all the parts of the box-frame are put together. E, Fig. 4, is the inside mica-frame, and G is the opening in said frame. d are cavities in said frame to set over the nibs on the in-

side of the outside part of the box-frame, and are intended to keep the mica in its proper position; but these nibs may be dispensed with by making the mica large enough to fill the whole space. The crooked or serpentine line H, reaching (in somewhat of a circular form) from plate L at top to plate L at the bottom of said box-frame, is designed to show a part of the fire-chamber, with the beveled or wedged-shaped part of said box-frame projecting into said fire-chamber.

I do not claim the introduction of air through the face or edges of a mica-frame into a stove, or apertures admitting the air behind the mica, with a guide-plate to direct the cool air across the inside of the mica. These devices have been before known.

Having described the construction of my device for a box-frame for holding mica, and for illuminating and other purposes, what I claim as my invention and desire to secure by Letters Patent, is—

1. A frame for mica or other windows made in a box form, with apertures in the outer part of such frame for the admission of small jets of air into said box, when such box projects into the fire-chamber of a stove or range sufficient to admit of its attachment to a stove or range, substantially as and for the purposes hereinbefore described and set forth.

2. The inner part of the box B, with the opening C, nibs I, when extending to and holding in position the mica O, the inner frame E in combination with the flange *f*, the lugs *c* and *k*, or their equivalents, and the apertures *a*, outer part of frame A, the projection of said box into the fire-chamber of a stove or range, substantially as and for the purposes hereinbefore described and set forth.

FRANCIS WARRINER.

In presence of—

S. W. TYLER,
RICHARD H. REILLE.