(No Model.)

A. F. DAY & H. C. FOLGER.

Oven Door.

No. 237,827. **Patented Feb. 15, 1881.**

Fig. 1.

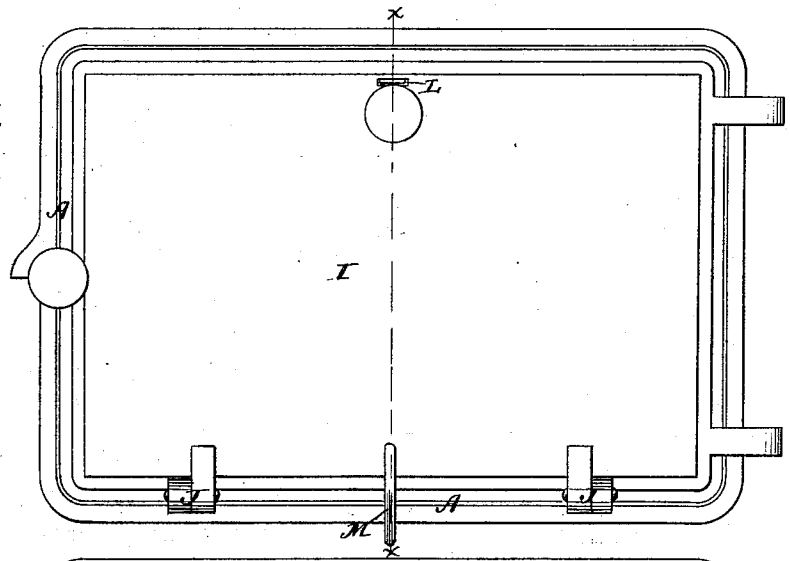


Fig. 2.

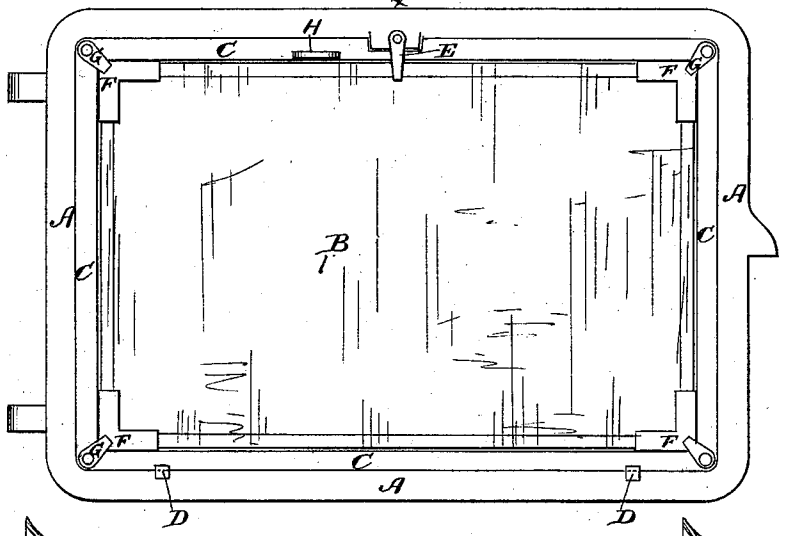


Fig. 4.

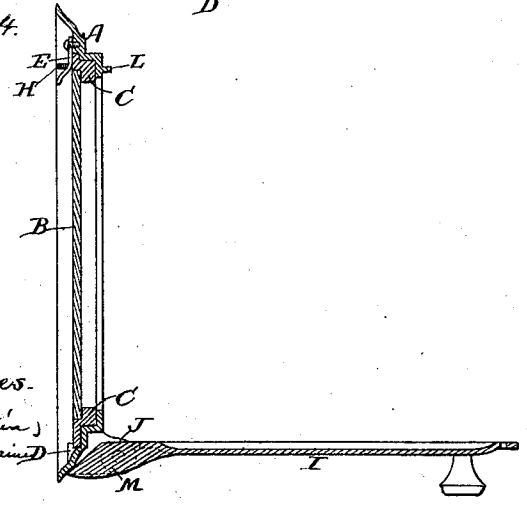
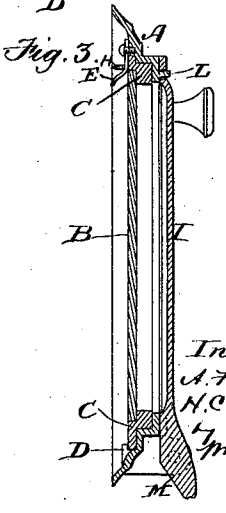


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

ARAD F. DAY, OF BOSTON, AND HENRY C. FOLGER, OF SOMERVILLE, MASSACHUSETTS.

OVEN-DOOR.

SPECIFICATION forming part of Letters Patent No. 237,827, dated February 15, 1881.

Application filed December 28, 1880. (No model.)

To all whom it may concern:

Be it known that we, ARAD F. DAY, of Boston, in the county of Suffolk and State of Massachusetts, and HENRY C. FOLGER, of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain Improvements in Oven-Doors, of which the following is a specification.

This invention relates to oven-doors having glazed openings to permit the contents of the oven to be viewed without opening the door; and it has for its object to provide simple and convenient means for applying the glass to and removing it from the door.

The invention also relates to glazed oven-doors having hinged covers or secondary doors adapted to be closed over the glass to protect the same and to be opened to expose the glass; and it has for its object to enable said secondary door to serve as a horizontal shelf projecting outwardly from the lower portion of the oven-door, when not in use, to cover the glass.

To these ends our invention consists in the improvements which we will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a front view of a door embodying our invention. Fig. 2 represents a rear view of the same. Fig. 3 represents a section on line *x x*, Fig. 1, showing the secondary door raised to cover the glazed opening. Fig. 4 represents a similar section, showing the secondary door lowered to constitute a horizontal shelf.

The same letters of reference indicate the same parts in all the figures.

In the drawings, A represents an oven-door, which is constructed of skeleton or marginal form, having a large central opening.

B represents a plate of glass placed in a cast-iron frame, C, which is fitted to the door A, and is secured thereto by upwardly-projecting lugs D D, formed on the door A, on which the lower edge of the frame C rests, and a button or fastening device, E, pivoted to the upper portion of the door and adapted to be swung over the frame C.

H represents a handle on the upper part of the frame C, to enable the frame to be conveniently held in removing it from or applying it to the door. The glass B is provided at its corners with sheet-metal caps F, and is secured to the frame C by buttons G, pivoted to the frame near its corners, and adapted to bear on the caps F of the glass, thereby holding the latter. The caps F prevent the glass from being injured by the buttons G.

By the employment of the frame C and its fastening devices, as described, the glass is enabled to be readily removed from the door to be cleaned or renewed, and as readily replaced without danger of dropping the glass or of cutting the fingers on the edges of the plate of glass.

The glass B is heavy plate-glass about three-eighths of an inch in thickness. We have found that such glass is able to retain a sufficient amount of heat to prevent moisture from the contents of the oven from accumulating on the glass and interfering with its clearness. Ordinary thin window-glass cannot retain sufficient heat, and therefore moisture is liable to collect on it.

On the outer side of the door is a secondary door or cover, I, connected thereto by hinges J J, which are arranged to permit the secondary door to swing vertically. This door or cover I is formed to cover the opening of the door A when swung upwardly, thereby protecting the glass. It is secured in the last-named position by a lug, L, on the door A entering a slot in the cover I. The lower edge of the cover I is provided with a stop, M, which, when said cover is lowered, as shown in Fig. 4, bears against the lower edge of the door A and holds the cover in a horizontal position, so that it serves as a shelf projecting outwardly from the outside of the door A. This shelf may be utilized as a support for various articles, particularly such as require drying, and is a very convenient addition to the stove or range to which the door A pertains. The cover I is preferably lined with bright tin, so that when in a horizontal position it will reflect light into the oven.

We are aware that a transparent plate has been secured in a stove or oven door by a marginal frame formed to clamp said plate against a seat on the door, the plate being loosened both from the door and from the frame when

the latter is detached from the door; but we are not aware that a glass plate has ever been secured wholly to a frame adapted to be detachably connected to an oven-door, so that the frame will hold the glass as well when detached from the door as when attached to it. The convenience and utility of this provision, in enabling the glass to be safely removed from the door for washing, and in protecting the glass from injury while it is being washed, are apparent.

We claim—

1. The combination, with the marginal or skeleton door A, of a frame, C, detachably secured to said door by fastening devices on the latter, and provided with a handle, H, and with a light of glass secured to said frame solely by fastenings G on said frame, the handle H enabling the frame to be conveniently removed and applied, and the fastenings G securing the glass to the frame whether the latter is attached to or removed from the door, as set forth.

2. In combination with the skeleton or marginal door, the frame C, having buttons G at its corners, and a light of glass having metal caps on its corners and secured to the frame by the buttons bearing on the metal caps, as set forth.

3. In combination with the skeleton or marginal door having a glazed opening, the secondary door or cover hinged at its lower edge to the lower portion of the door, adapted to be secured to the upper portion of the door when raised, to cover the glazed opening, and provided with a stop, whereby it is supported in a horizontal position, when lowered, to uncover the glazed opening, as set forth.

In testimony whereof we have signed our names to this specification, in the presence of two subscribing witnesses, this 23d day of December, A. D. 1880.

ARAD F. DAY.
HENRY C. FOLGER.

Witnesses:
MARK T. ADAMS,
CHARLES D. GILSON.