

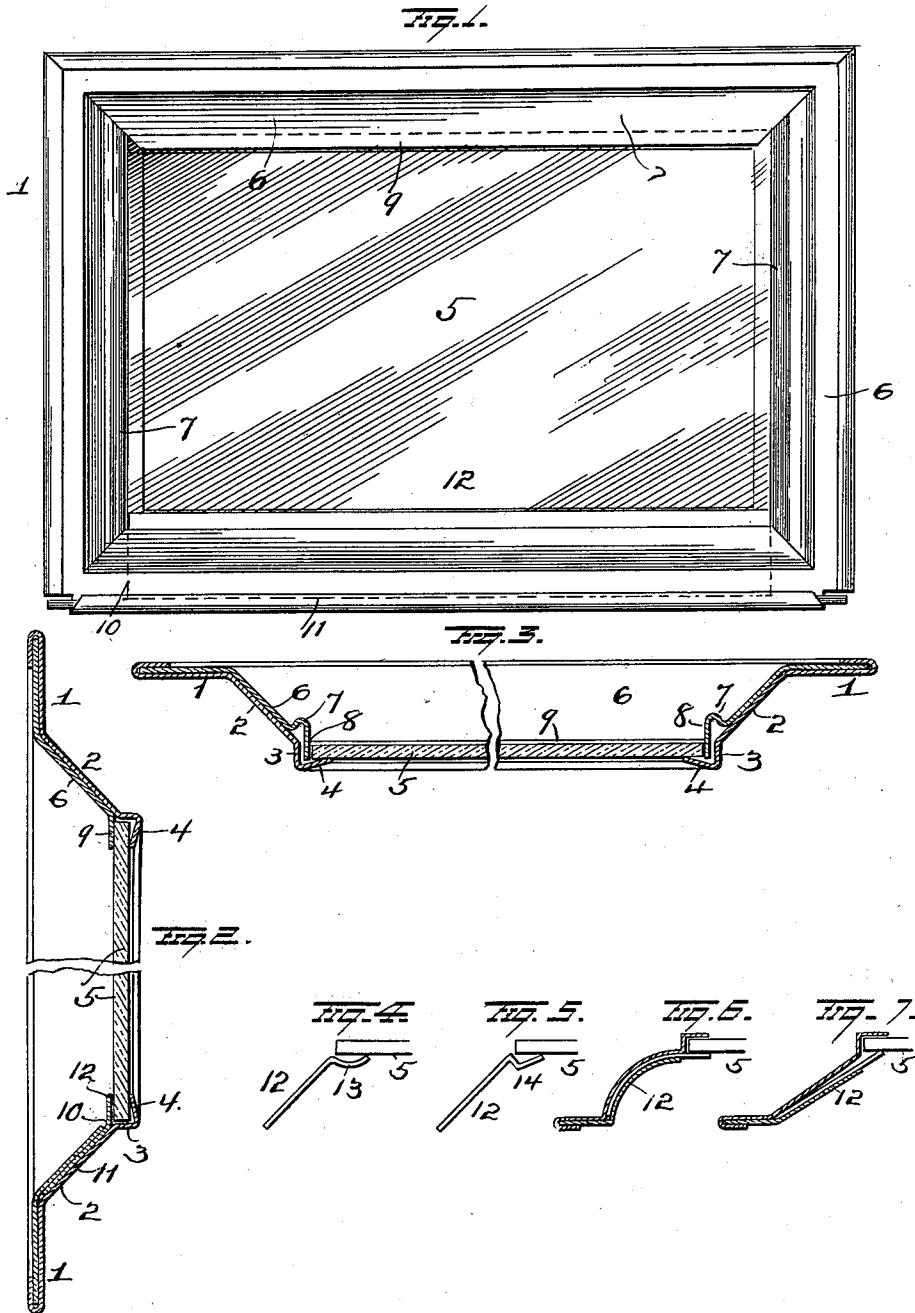
W. E. HUENEFELD

OVEN DOOR.

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1,013,390.

Patented Jan. 2, 1912.



WITNESSES

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# UNITED STATES PATENT OFFICE.

WALTER E. HUENEFELD, OF CINCINNATI, OHIO, ASSIGNOR TO THE HUENEFELD COMPANY, OF CINCINNATI, OHIO.

OVEN-DOOR.

1,013,390.

Specification of Letters Patent.

Patented Jan. 2, 1912.

Application filed January 23, 1911. Serial No. 604,234.

*To all whom it may concern:*

Be it known that I, WALTER E. HUENEFELD, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Oven-Doors; 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 appertains to make and use the same.

This invention relates to improvements in oven doors and particularly to that type employing glass panels,—the object of the invention being to provide simple and efficient means for retaining the glass panel in position in such manner as to reduce liability of breakage to a minimum.

With this object in view the invention consists in certain novel features of construction and combinations of parts as hereinafter set forth and pointed out in the claims:

In the accompanying drawings, Figure 1 is a rear face view of an oven door embodying my improvements. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a transverse sectional view, and Figs. 4, 5, 6 and 7 are views illustrating modifications.

1 represents a door frame sheet having a central opening and made with a bulged portion 2 having straight inclined walls. At the free edges of the inclined walls of the bulged part of the sheet, off-set flanges 3 are formed and from the free edges of these flanges, inwardly projecting flanges 4 are made to extend inwardly (preferably somewhat inclined) and constitute seats for the outer faces of a glass panel 5 near the edges of the latter. A lining sheet 6 is secured to the frame sheet 1 and conforms to the general contour of the latter. At respective ends of the opening in the lining sheet, the latter is provided with beads 7, the inner sides of which are free and constitute yielding abutments 8 for the ends of the glass panel.

At one longitudinal side of the opening in the door, the inclined wall of the lining sheet is bent so as to form a seat 9 bearing against the inner face of the glass panel opposite the adjacent flange 4 on the frame sheet. At the diametrically opposite side of the opening in the door, the lining sheet terminates approximately in line with the upper edge of the adjacent inclined wall of the frame sheet. At this side of the open-

ing for the panel, a retaining strip 10 is provided. This retaining strip is preferably made of sheet metal and comprises a member 11 inserted between the lining sheet and the inclined wall of the frame sheet, and a member 12 disposed at an obtuse angle to the member 11 and constituting a seat for the inner face of the glass panel and bearing against the same directly opposite the adjacent flange 4 of the frame sheet. It will be observed that the lining sheet will tend, not only to hold the retaining strip in place, but its elasticity will press the member 12 of the retaining strip yieldingly against the inner face of the glass panel. It will also be observed that the upper edge of the inclined portion of the lining sheet at this side of the panel opening, will constitute an abutment against which the member 12 of the retaining strip will bear and thus said retaining strip will be held in place should the member 11 thereof be not made of sufficient depth to reach the inner end of the bulged portion of the door.

Instead of making the member 12 of the retaining strip straight as shown in Fig. 2, said member may be curved as shown at 13 Fig. 4, or said member of the retaining strip may have the form shown at 14, Fig. 5,—in each of which constructions, the free edge only will bear against the inner face of the glass panel.

In the construction shown in Fig. 7, the retaining strip is made straight and its outer edge only bears against the inner face of the glass panel. In this construction displacement of the strip is prevented by the abutment formed at the angle of the bulged portion of the lining sheet with the flat portion thereof and the bulged portion of the lining sheet has sufficient elasticity to press the free outer edge of the retaining strip yieldingly against the glass panel.

In the construction shown in Fig. 6, the bulged portions of the frame sheet and of the lining sheet are made curved and the retaining strip is curved concentric with the curvature of said bulged portion of the door and is inserted between the frame and lining sheets,—its free edge projecting inwardly from the outer edge of said bulged portion and bearing yieldingly against the inner face of the glass panel diametrically opposite the bearing of the flange 4 of the frame sheet against the outer face of said glass panel.

Having fully described my invention what I claim as new and desire to secure by Letters-Patent, is—

1. In an oven door, the combination with  
5 a frame sheet and a lining sheet having  
alined openings and each having a bulged  
portion, said frame sheet having inwardly  
projecting flanges off-set from said bulged  
portion, and a glass panel seated against  
10 said off-set inwardly projecting flanges, the  
lining sheet having at one side of the open-  
ing, a seat for the glass panel opposite the  
adjacent off-set flange of the frame sheet,  
15 of a retaining strip at the opposite side edge  
of the opening in the door, said retaining  
strip having a part entering between the  
bulged portions of the frame sheet and lin-  
ing sheet and also having a portion pro-  
jecting beyond the free edge of the lining  
20 sheet and bearing against the inner face of  
the glass panel opposite the bearing of the  
adjacent off-set flange of the frame sheet  
against the outer face of said glass panel.

2. In an oven door, the combination of a  
25 frame sheet having an opening, a lining sheet  
having an opening, said frame and lining  
sheets being bulged outwardly and having

straight walls forming said bulged portion,  
said frame sheet provided at the free edges  
with outwardly projecting flanges and with 30  
off-set flanges projecting inwardly from said  
outwardly projecting flanges, a glass panel  
seated against said inwardly projecting off-  
set flanges, the lining sheet having a member  
at one side of the opening in the door con- 35  
stituting a seat for the glass panel, and a  
removable retaining strip at the opposite  
side of the opening in the door and com-  
prising a member inserted between the par-  
allel walls of the bulged portions of the 40  
frame and lining sheets and said retaining  
strip having a member projecting at an  
angle from the free edge of the adjacent  
lining sheet and bearing against the inner  
face of the glass panel opposite the adjacent 45  
off-set flange of the frame sheet.

In testimony whereof, I have signed this  
specification in the presence of two subscrib-  
ing witnesses.

WALTER E. HUENEFELD.

Witnesses:

CHARLES F. RIETMAN, Jr.,

CHARLES E. PFOU.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,  
Washington, D. C."