

W. E. HUENEFELD.
OVEN DOOR.
APPLICATION FILED JAN. 23, 1911.

1,016,566.

Patented Feb. 6, 1912.

FIG. 1.

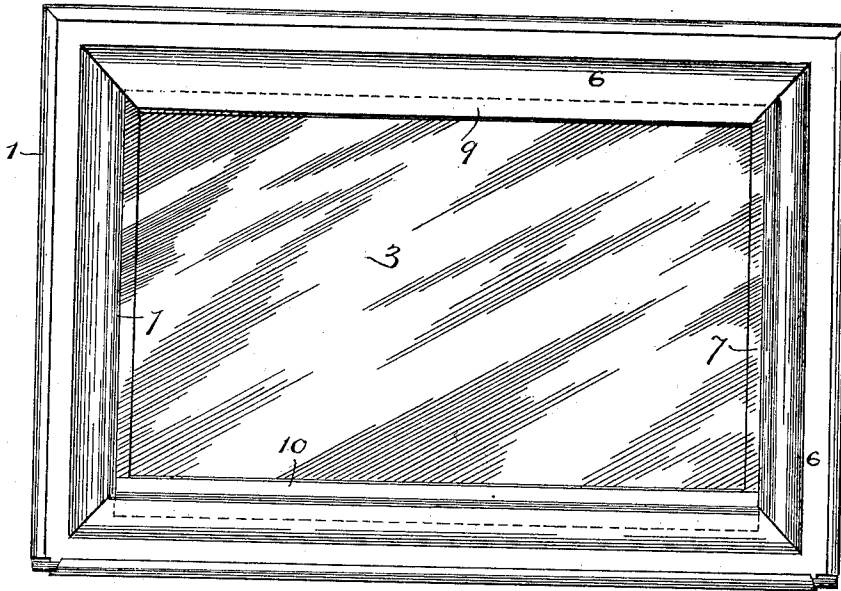


FIG. 3.

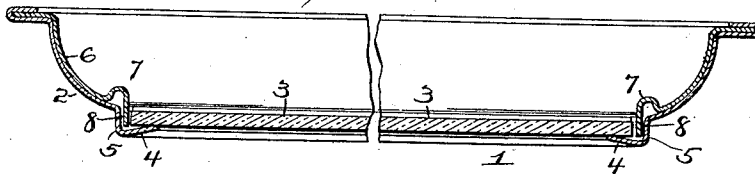


FIG. 2.

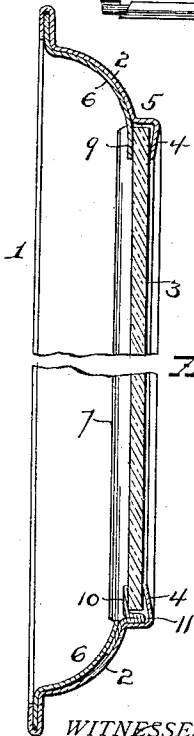


FIG. 4.

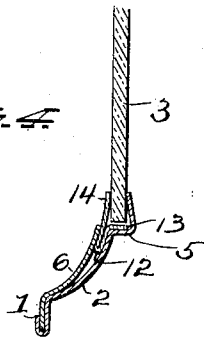
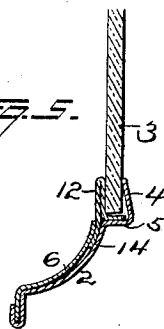


FIG. 5.



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.

1,016,566.

Specification of Letters Patent.

Patented Feb. 6, 1912.

Application filed January 23, 1911. Serial No. 604,233.

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 more particularly to such as are adapted for use on portable ovens,—the object of my present invention being to provide simple and efficient means whereby a glass panel can be supported in the door without the use of packing material, and in such manner that yielding seats or abutments will be afforded for said glass panel and so compensate for expansion and contraction of the latter and the metal door frame as to prevent breakage of the panel.

A further object is to so construct the holding means for a glass panel in an oven door, that the panel can be easily placed in position and readily replaced by a new panel in case of breakage.

With these objects 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 transverse sectional view. Fig. 3 is a longitudinal sectional view, and Figs. 4 and 5 are views of modifications.

1 represents the frame sheet of an oven door having a bulged portion 2 provided with an opening to be closed by a glass panel 3, seats for which latter are formed by flanges 4 at the sides and ends of said opening. The flanges 4 project inwardly at slight inclinations from the outer edges of off-set portions 5 of the bulged part of the door frame sheet so that when the glass panel is pressed (as hereinafter explained) against said flanges 4, the latter will afford seats which will be somewhat yielding. The door frame is also provided with a lining 6 which conforms to the general contour of the frame 1. At the respective ends of the opening in the door, the lining 6 is bent to form 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 lining is extended inwardly a sufficient distance to form a seat 9 for the glass panel, said seat lying substantially parallel with the adjacent flange 4 which constitutes the outer seat for the glass panel. At the opposite longitudinal edge of the opening, the lining terminates rearwardly of the plane of the adjacent flange or seat 4. At this side of the opening in the door, a retaining strip 10 is located. This retaining strip is made out of sheet metal and bent intermediate of its side edges to form a flattened bead 11. The portion of the strip at one side of said bead is inserted between the lining and the frame sheet and the bead is disposed between the side edge of the glass panel and the adjacent off-set 5 of the frame sheet, while the portion of the strip at the inner side of the bead is disposed parallel with the glass panel and constitutes a seat therefor which co-operates with the adjacent flange 4 of the frame to hold the glass panel in place.

It will be observed that at one side of the opening in the door, the adjacent off-set 5 constitutes a side abutment for the glass panel while at the other side of said opening, the bead 11 of the retaining strip forms a yielding abutment for the edge of the glass panel and the latter will serve to prevent displacement of said strip. The elasticity of the lining at this side of the door will serve to hold the strip in place and the inner portion thereof yieldingly against the panel,—the bead 11 also acting to hold the retaining strip yieldingly against the glass panel.

In the construction shown in Fig. 4 the retaining strip consists of sheet metal bent upon itself as shown at 12 and then bent outwardly as shown at 13. The portion 12 of the strip is inserted between the lining and the outer frame sheet and the portion 13 is disposed between the off-set 5 of the frame sheet and the adjacent side edge of the glass panel to form a yielding abutment for the latter, while the portion 14 of said strip bears against the inner face of the glass panel.

In the construction shown in Fig. 5, the form of the retaining strip is substantially the same as that shown in Fig. 4, but instead of inserting the portion 12 between the lining and frame sheet, this portion constitutes

a seat for the glass panel and the portion 14 is forced between the lining and the outer frame sheet.

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

1. In an oven door, the combination with a frame sheet and a lining sheet, both having openings for a panel, said frame sheet provided at diametrically opposite edges with off-set flanges, and a glass panel seated against said off-set flanges, of a removable retaining strip cooperating with one of said off-set flanges of the frame sheet to hold the glass panel in place, said retaining strip comprising a strip of metal bent to form a flattened bead member and two members projecting from the bead member, one member of said retaining strip entering between the frame and lining sheets, another member of said strip disposed to form a yielding abutment for an edge of the glass panel, and the remaining member of said strip bearing with yielding pressure against the inner face of the glass panel near an edge thereof.

2. In an oven door, the combination with a frame sheet provided at diametrically opposite edges with off-set inwardly projecting

flanges, and a lining sheet for the door having an opening in line with the opening of which said inwardly projecting flanges constitute the side edges, of removable retaining means for a glass panel, said retaining means consisting of a sheet metal strip bent between its ends to form a flattened bead and having a member at one side of said bead disposed between the lining and frame sheets and said strip having an inwardly projecting member at the opposite side of said bead disposed approximately parallel with the adjacent inwardly projecting off-set flange of the frame sheet, and a glass panel seated against said inwardly projecting off-set flange of the frame sheet and engaged by the inwardly projecting member of the retaining strip, the flattened bead of said retaining strip disposed to form an abutment for the side edge of the glass panel.

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

WALTER E. HUENEFELD.

Witnesses:

CHARLES F. RIETMAN, Jr.,
CHARLES E. PFAU.

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