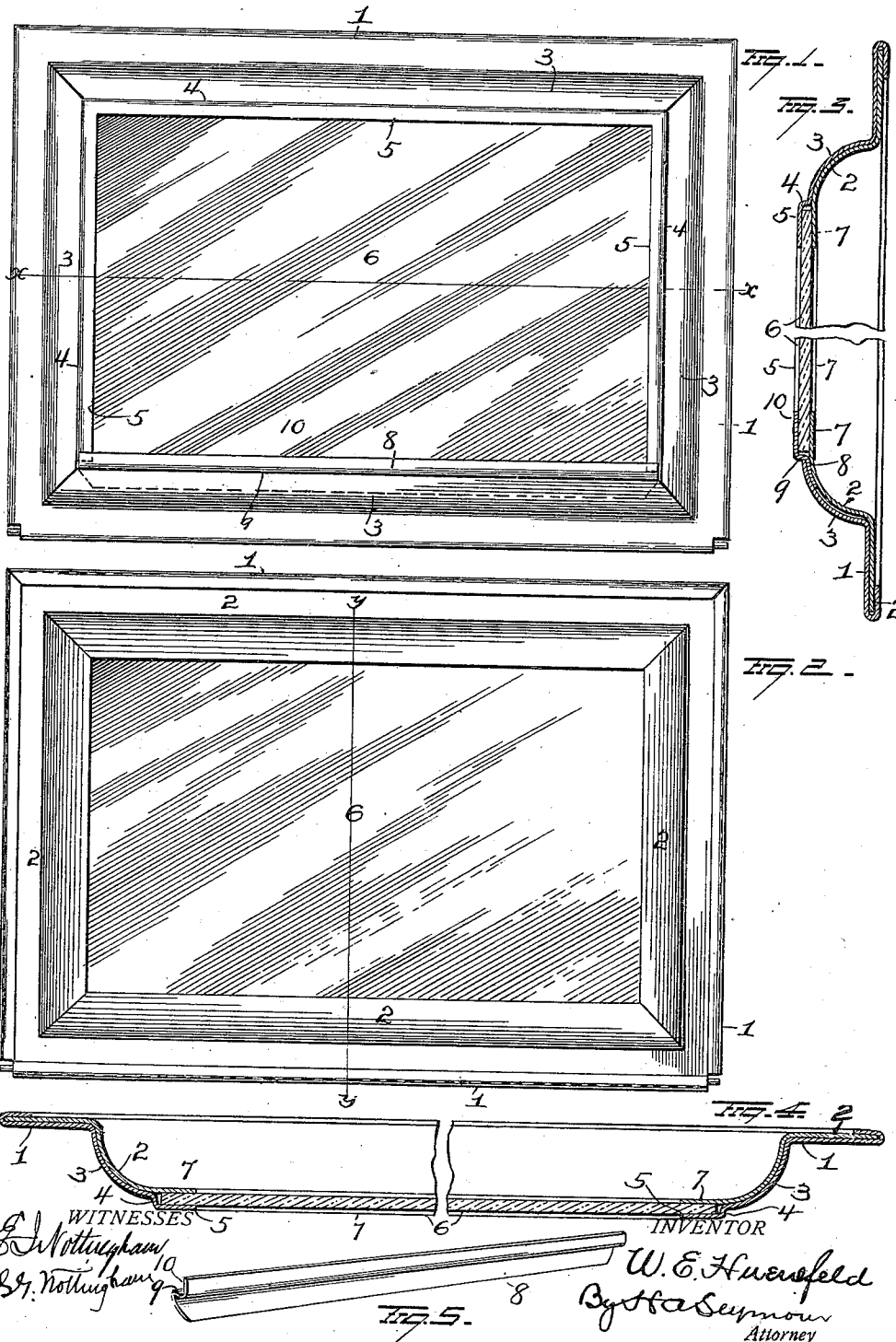


W. E. HUENEFELD.
DOOR FOR OVENS.
APPLICATION FILED AUG. 6, 1910.

990,983.

Patented May 2, 1911.



UNITED STATES PATENT OFFICE.

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

DOOR FOR OVENS.

990,983.

Specification of Letters Patent.

Patented May 2, 1911.

Application filed August 6, 1910. Serial No. 575,945.

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 Doors for Ovens; 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.

My invention relates to an improvement in doors for ovens and particularly to oven doors having a transparent panel of glass or other suitable material, the object being to provide simple and efficient means for locking the transparent panel in place, the said locking means being retained in place solely by engagement with the inner and outer sheets of the door and without the use of any bolts or screws, the construction being such that a broken panel may be readily removed and replaced by a new one without the aid of skilled labor.

With this object in view my invention consists in the parts and combinations of parts as will be more fully described and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in front elevation of a door embodying my improvements. Fig. 2 is a view in rear elevation of same. Fig. 3 is a view in section on the line $x-x$ of Fig. 1. Fig. 4 is a view in section on the line $Y-Y$ of Fig. 2 and Fig. 5 is a detached view of the locking strip.

1 represents the sheet metal rectangular frame, which may be of any ornamental design, and of a size to fit the oven to which it is to be applied. This frame is open at its center, and is preferably bulged outwardly on its four sides as shown at 3, for the purpose of ornamentation, and is provided with a sheet metal lining 2 which conforms in shape to said outer sheet or frame 1 except at its edges and is permanently secured to said outer sheet by bending the outer edges of the latter around the outer edge of the lining as clearly shown in Figs. 2 and 3.

The outer frame 1 is provided at the inner edges at three of its sides, with outwardly and inwardly extending flanges which form abutments 4 for three edges of the glass panel 6, and which also form seats 5 for the edge portions of the outer face of

the panel 6. The lining 2 projects inwardly at its four sides in rear of seats 5, and forms seats 7 which support the edge portions of the inner face of the panel at the four sides of the latter. By this construction a continuous uninterrupted seat integral with the door frame is formed, and against which the four edges of the panel are solidly supported.

On one of the sides of the outer frame the abutments 4 and seats 5 are omitted, thus leaving an opening between seats 5 and 7 into which the panel 6 may be slid endwise, and when the panel 6 is so entered in the frame it is held in place by the locking strip 8, which latter is shaped as shown in Fig. 5 and is of approximately the same length as the side of the glass panel 6 which is engaged by said strip. The strip is secured in place by inserting its outer edge between the frame 1 and lining 2, as shown in Fig. 3, and is bent outwardly as at 9 to form an abutment for the edge of the glass which it overlaps, and bent inwardly as at 10 to form a seat for the edge portion of the outer face of the panel. This locking strip when in place resembles the inner edge of the frame 1 and hence presents the appearance of a continuation of the seats 5 which as before explained are integral with the outer frame.

The glass panel 6 must be a trifle less in width than the distance between the abutment 9 and the abutment 4 on the opposite side of the panel opening in the frame, in order to permit the outer edge of the locking strip to be introduced between the inner edge of frame 1 the adjacent edge of panel 6, and inserted between the frame and its lining.

The frame, lining, and locking strip are made of light sheet metal which is sufficiently flexible to permit the outer edge of the locking strip to be sprung into position between the frame and its lining, and to be withdrawn when necessary to repair or replace a panel.

It is evident that numerous slight changes might be resorted to in the relative arrangement of parts shown and described without departing from the spirit and scope of my invention hence I would have it understood that I do not wish to confine myself to the exact construction and arrangement of parts shown and described, but,

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
an outer frame, a lining, the said outer
5 frame and lining having an open center, and
a transparent panel, the said lining forming
seats at the four sides of the central opening
for the panel, and the outer frame having
abutments and seats for three sides of said
10 panel, of a locking strip inserted between the
lining and outer frame and having an abutment
and seat for the fourth side of said
panel.

2. In an oven door, the combination with
15 an outer sheet metal frame, a lining permanently
attached thereto, the said frame and lining
having an open center, and a transparent
panel located within said open center, the
said lining forming seats at the four
20 sides of the open center for the panel, and
the outer frame having outwardly projecting
abutments and inwardly projecting seats
for the panel at three sides of said opening,
the fourth side being open for the insertion
25 of the panel edgewise, of a locking strip
inserted at its edge between the lining and
frame and provided with an outwardly projecting
abutment and inwardly projecting
seat for the fourth side of said panel.

3. In an oven door, the combination with 30
an outer sheet metal frame, a lining permanently
attached thereto, the said frame and lining
having an open center, and a transparent
panel located within said open center, the
said lining forming seats at the four 35
sides of the open center for the panel, and
the outer frame having outwardly projecting
abutments and inwardly projecting seats
for the panel at three sides of said opening,
the fourth side being open for the insertion 40
of the panel edgewise, of a locking strip
inserted at its edge between the lining and
frame and provided with an outwardly projecting
abutment and inwardly projecting
seat for the fourth side of said panel, the 45
said locking strip closing the opening
through which the panel is inserted and its
abutment and seat conforming in shape and
size to the corresponding parts on the frame,
substantially as and for the purpose de- 50
scribed.

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

WALTER E. HUENEFELD.

Witnesses:

B. A. HULSWITT,

L. S. GETZENDANNER.