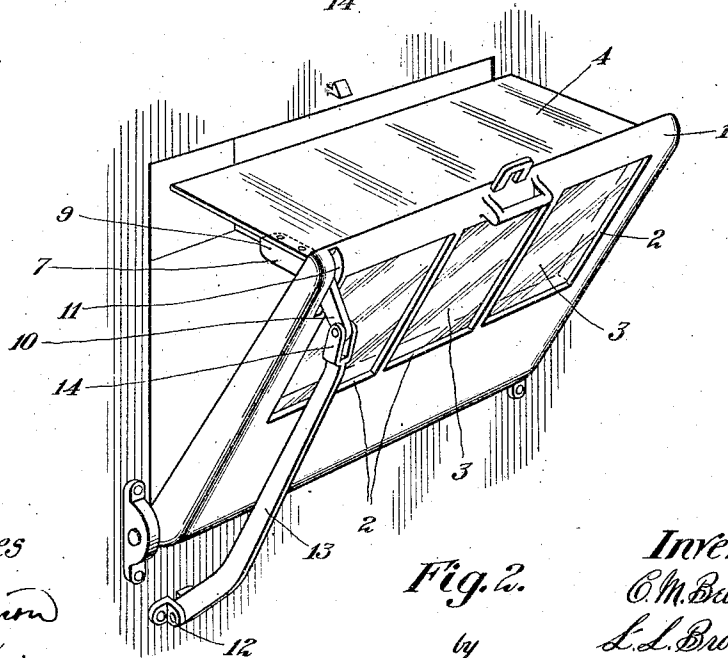
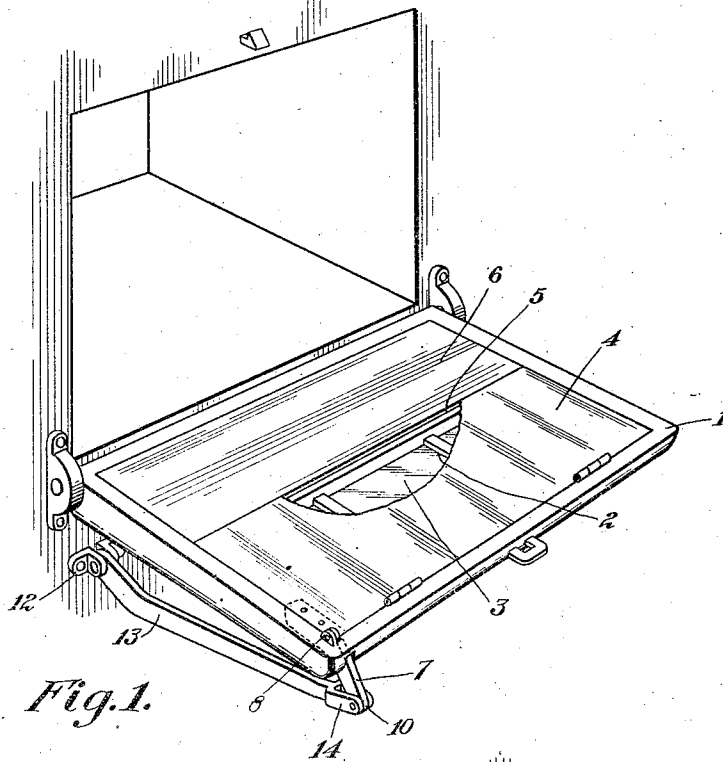


C. M. BECKER & L. L. BROWN.
 TRANSPARENT OVEN DOOR.
 APPLICATION FILED NOV. 25, 1910

1,010,845.

Patented Dec. 5, 1911.



Witnesses
Admission
W. M. Beckman

Inventors
C. M. Becker
L. L. Brown.
 by *E. J. Peterson* *att'y*

UNITED STATES PATENT OFFICE.

CHARLES M. BECKER AND LEIGHTON L. BROWN, OF PORT ROWAN, ONTARIO, CANADA.

TRANSPARENT OVEN-DOOR.

1,010,845.

Specification of Letters Patent.

Patented Dec. 5, 1911.

Application filed November 25, 1910. Serial No. 594,211.

To all whom it may concern:

Be it known that we, CHARLES M. BECKER and LEIGHTON L. BROWN, subjects of the King of Great Britain, and residents of Port Rowan, in the county of Norfolk, in the Province of Ontario, Dominion of Canada, have invented certain new and useful Improvements in Transparent Oven-Doors; and we do hereby declare that the following is a full, clear, and exact description of the same.

The invention relates to improvements in transparent oven doors, as described in the following specification and illustrated in the accompanying drawings that form part of the same.

The invention consists essentially in the novel construction and arrangement of parts, whereby the transparent portion of the door is covered by a movable shield member operating with the movement of the door.

The objects of the invention are, to prevent the breakage of the glass front in the door when the door is open, and to devise a simple, cheap and positive operating means for covering over the inner surface of the glass front on the opening of the door and which will automatically open on the closing of the door so that the contents of the oven are visible from without.

In the drawings, Figure 1 is a perspective view of the improved oven door shown in its open position, the protecting shield being partly broken away. Fig. 2 is a perspective view showing the oven door partly closed.

Like numerals of reference indicate corresponding parts in each figure.

Referring to the drawings, 1 is the oven door pivotally supported at its lower edge and having the apertures 2 therein, said apertures being closed by the glass 3.

4 is a plate of sheet metal hinged at the upper edge to the door frame and adapted to fit into a recess 5 flush with the inner or upper surface of the door and with the bottom portion 6 thereof, said plate completely covering over the glass 3 on the inside of the door so that articles may be placed upon the door in their placing or removal from the oven without danger of breaking the glass. The glass is also protected from being broken by spilling of liquids thereon.

7 is a bell crank lever pivotally secured to the inwardly extending lug 8 on the inside

of the door frame and having one of its members 9 rigidly secured to the inside of the plate 4 and its other member 10 projecting outwardly through a slot 11 in the door 1.

12 is a bracket secured to the front of the oven a short distance below the bottom edge of the door 1.

13 is a bar pivotally secured at one end to the bracket 12 and formed with a jaw shaped outer end 14 pivotally secured to the outer end of the outwardly extending member 10 of the bell crank lever.

In the operation of this device, when the door is closed, the bar 13 holds the outwardly extending member 10 of the bell crank lever toward the bottom end of the slot 11 with the plate 4 extending into the oven at an angle to the oven door and practically parallel with the top of the oven. The apertures 2 are thus uncovered and the contents of the oven may be seen from the outside without opening the door. Upon the opening of the door, the downward movement changes the relative position of the bar 13 and door 1 and the said door swings the lever 7 on its pivot keeping the plate 4 practically in a horizontal position until when the door reaches its lowermost position, the said plate rests within the recess 5 and completely covers over the glass 3.

The device is very simple in its construction and operation. There are no parts to get out of order and as the lever 7 fits snugly in the slot 11 there are no apertures left open for the ingress of cold air to the oven when closed.

What we claim as our invention is:—

1. In a transparent oven door, the combination with the oven door having glazed apertures therein, of a member pivotally secured to said door and adapted to swing over and cover said apertures, and means operatively connected to said pivotal member adapted to hold said member swung from said apertures when the oven door is closed and to swing said member to cover said apertures on the opening of the door.

2. In a transparent oven door, the combination with the oven structure, of a door hinged at its bottom edge and adapted to swing upwardly to close the door opening, said door having closed apertures therein, a plate hinged at its upper edge to the inner side of said door and adapted to cover said apertures, a lever rigidly secured to said plate and extending outwardly from said

door, and means secured to the front of the oven and to said lever for swinging said plate on its hinges to close said apertures as the door is opened.

5 3. In a transparent oven door, a pivotal door member having apertures therein, a plate pivotally secured to said door, a lever rigidly secured to said plate, and a bar pivotally secured at one end to the oven and at
10 the opposite end operatively connected to said lever.

4. In a transparent oven door, a door pivotally supported at its bottom edge and having apertures therein and a recessed inner
15 face and a slot extending through the frame thereof, a plate hinged at its upper edge to the inner side of said door and adapted to rest in said recess when the door is open, a bell crank lever having one of its members

rigidly secured to said pivotal plate member 20 and its other member extending outwardly through the slot in said door frame, and an arm pivotally secured to the outwardly extending end of said lever and to the oven at a point below said door. 25

Signed at Brantford, Canada, this 25th day of October, 1910.

CHARLES M. BECKER.

Witnesses:

KATHLEEN O'GRADY,
A. S. PITCHER.

Signed at Duluth, Minnesota, U. S. A.,
this 8th day of November, 1910.

LEIGHTON L. BROWN.

Witnesses:

MARY E. MURPHY,
WALTER A. HALL.