

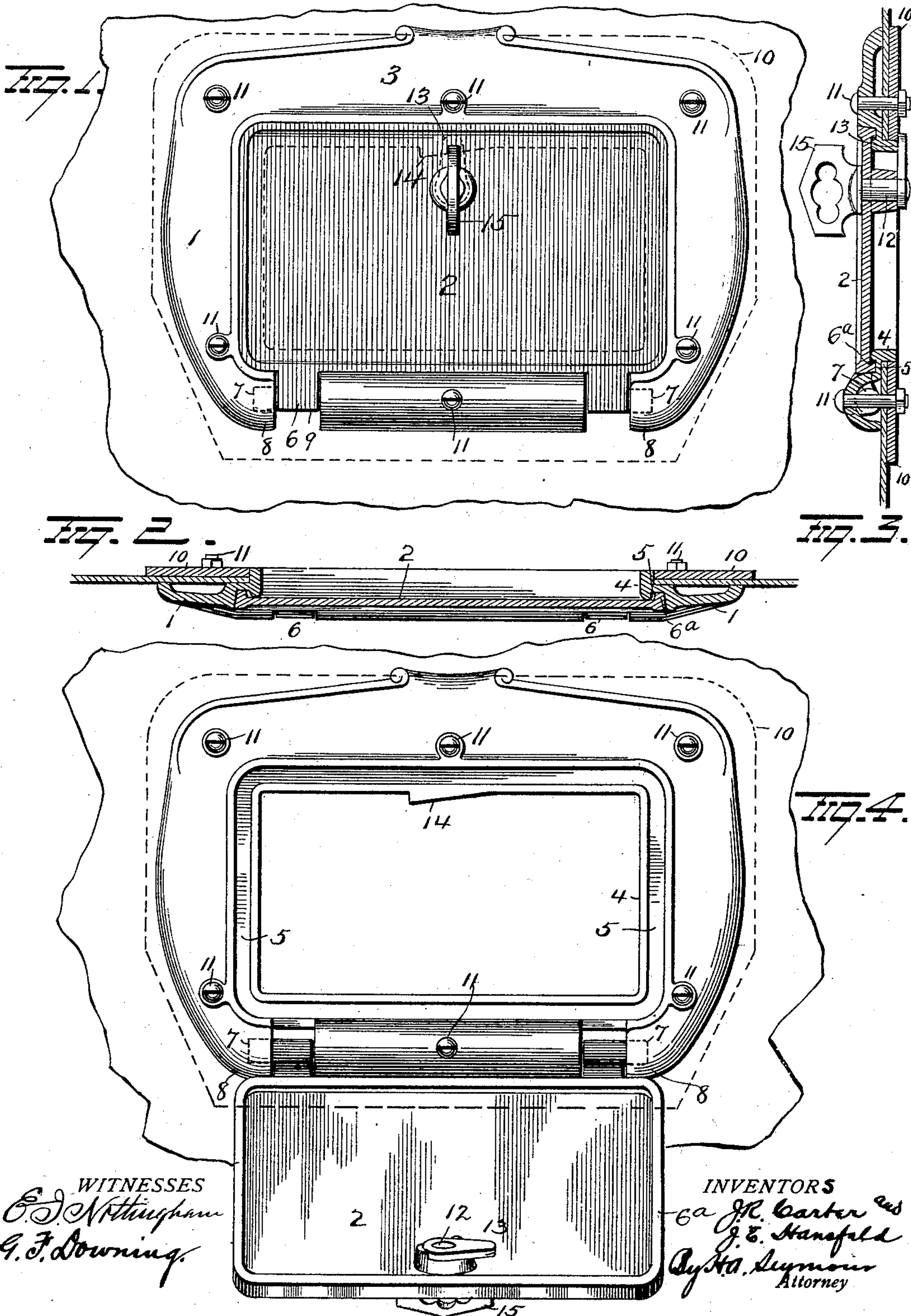
No. 679,830.

Patented Aug. 6, 1901.

J. R. CARTER & J. E. HAUSFELD.
STOVE DOOR AND FRAME THEREFOR.

(Application filed Dec. 3, 1900.)

(No Model.)



WITNESSES
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UNITED STATES PATENT OFFICE.

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STOVE-DOOR AND FRAME THEREFOR.

SPECIFICATION forming part of Letters Patent No. 679,830, dated August 6, 1901.

Application filed December 3, 1900. Serial No. 38,535. (No model.)

To all whom it may concern:

Be it known that we, JOHN R. CARTER, of Augusta, in the county of Bracken and State of Kentucky, and JOSEPH E. HAUSFELD, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Stove-Doors and Frames Therefor; and we 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.

Our invention relates to an improvement in stove-doors, and more particularly to a stove-door and frame therefor, the object of the invention being to provide a device of this character wherein the frame will serve as a part of the hinge of the door and will also permit the door when closed to lie flush with the outer face thereof.

With this object in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view illustrating our improvements. Figs. 2 and 3 are views in section of the same, and Fig. 4 is a view with the door open.

1 represents a door-frame, and 2 a door mounted therein. The frame 1 comprises a plate 3, having any desired ornamentation thereon and made with an angular opening, as shown. An inwardly and outwardly projecting flange 4 is made on the plate 3 all around said opening in the plate, and between the flanged edge 4 and the main portion of the plate the metal is depressed, as shown, to form an inwardly-projecting seat 5 for the door 2, which latter is provided on its inner face with a flange 6, adapted to fit beside flange 4 on the frame to make the door airtight when closed. The inner face of flange 4 at the top of the frame is enlarged and beveled, as shown at 14, and a spindle 12 is mounted in the door and provided on its inner end with an arm 13, adapted to be moved into close engagement with the enlargement 14 to lock the door in its closed position, a suitable

handhold 15 being provided on the outer end of the spindle to facilitate turning the same.

The lower portion of frame 1 is made concavo-convex in cross-section and said lower portion cut away at two points to receive depending lugs 6 on the door, which carry oppositely-disposed trunnions 7, adapted to fit into the semicircular bearings 8 at the bottom of the frame formed by concavo-convex curvature of the lower portion of the frame, as above described. The lugs 6 are preferably enlarged and flattened on their lower ends to form shoulders 9, which when the parts are assembled will serve as stops to limit the opening of the door. These shoulders, however, are not essential and may be dispensed with.

In assembling the parts an opening is first made in the stove large enough to receive the inwardly-projecting seat 5 on the frame 1, and the latter is then inserted around the opening in the stove, and a rectangular plate 10, having an opening therein at least as large as that in the frame, is disposed inside the stove, and suitable bolts or screws 11 are passed through alined holes in the frame, stove, and plate 10 to retain the parts in place, the trunnions 7 of the door being inserted in their bearings 8 before the frame is placed against the stove. It will thus be seen that the frame 1, constructed with the depressed seat 5, permits the outer face of the door 2 to lie flush with the outer face of the same and that the trunnions of the door are securely held in their bearings by the mere act of securing the frame to the stove.

It is evident that various slight changes might be resorted to in the relative arrangement of parts herein shown and described without departing from the spirit and scope of our invention. Hence we would have it understood that we do not wish to confine ourselves to the exact construction and arrangement of parts herein shown and described; but,

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a stove-door, the combination with an

open frame cut away at two points, said frame having journal-bearings therein to one side of each cut-away portion, of a door having lugs to enter said cut-away portions of the frame
5 and trunnions projecting laterally from said lugs and entering the said journal-bearings within the frame.

2. The combination with an open frame having a depressed seat around the opening
10 therein, said frame being cut away below said seat and having bearings in its rear face communicating with said cut-away portions, of a door constructed to enter said seat and close the opening in the frame, lugs on the door to
15 enter said cut-away portions and trunnions projecting from said lugs and entering said bearings in the rear face of the frame.

3. The combination with an open frame

having a depressed seat around the opening therein, said frame being cut away below said
20 seat and having bearings in its inner face and communicating with the cut-away portions, of a door having flanges to enter said seat, lugs on the door, entering said cut-away portions, shoulders on said lugs to limit the movement
25 of the door and trunnions projecting from said lugs and entering said bearings.

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

JOHN R. CARTER.

JOSEPH E. HAUSFELD.

Witnesses:

GEO. W. CORMANY,

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