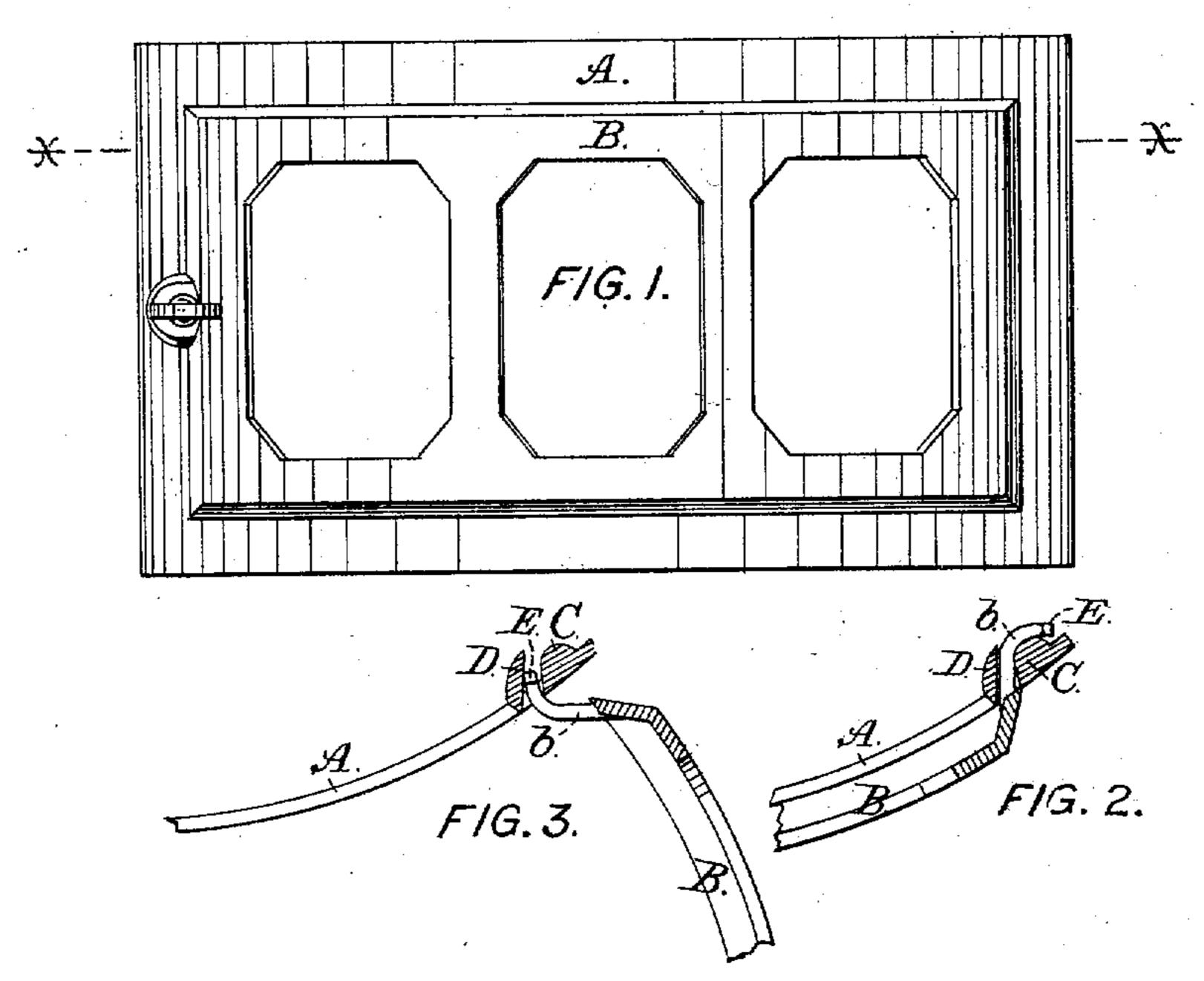
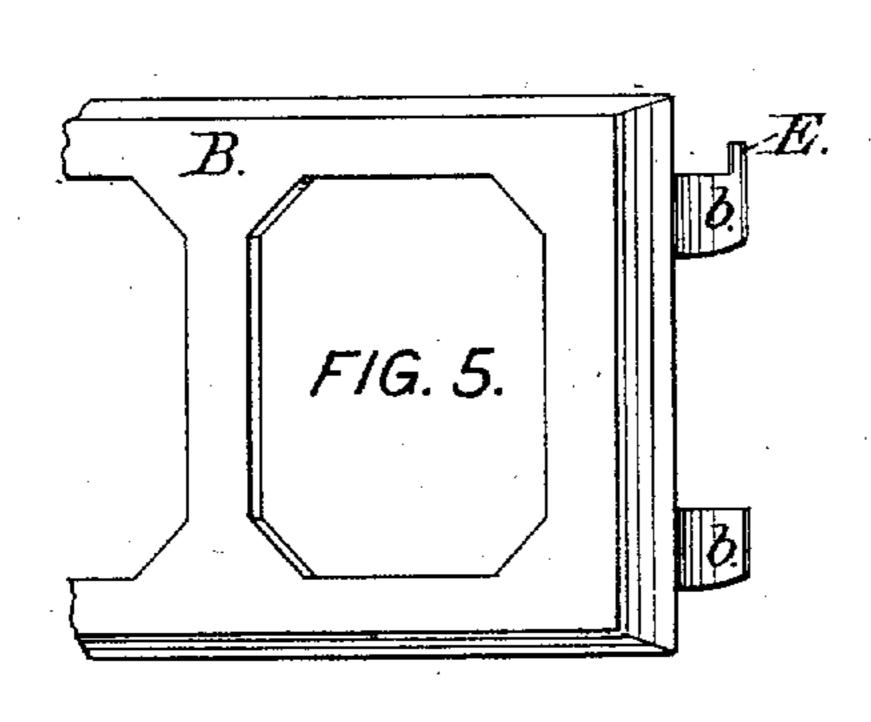
I. MAGUIRE.

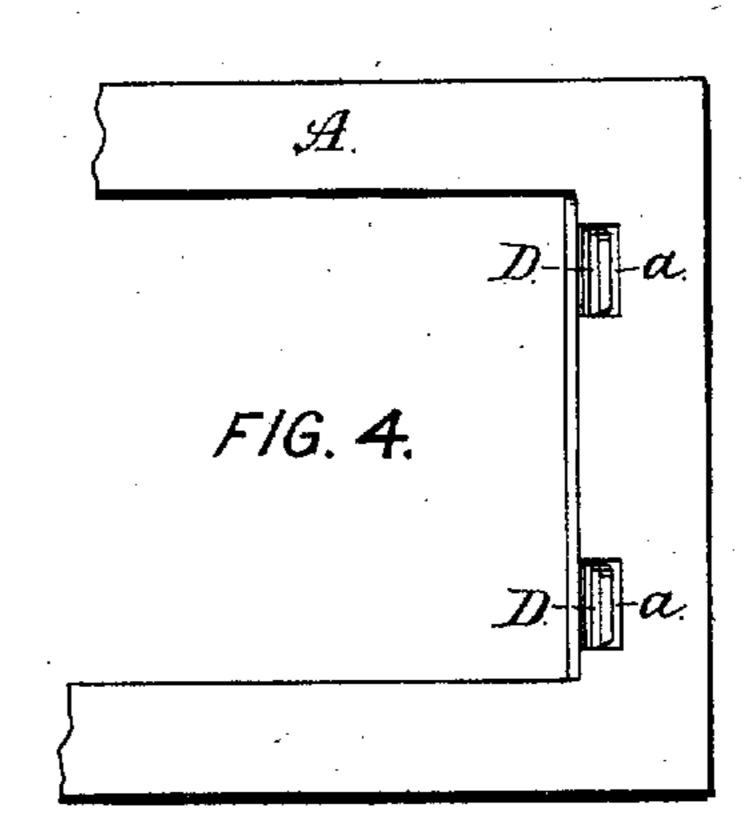
Hinge for Stove Doors.

No. 231,184.

Patented Aug. 17, 1880.







Witnesses,

E. B. Benhamp, DBLaron.

United States Patent Office.

ISAAC MAGUIRE, OF ALBANY, NEW YORK, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO JOHN MAGUIRE, OF SAME PLACE.

HINGE FOR STOVE-DOORS.

SPECIFICATION forming part of Letters Patent No. 231,184, dated August 17, 1880.

Application filed November 20, 1879.

To all whom it may concern:

Be it known that I, ISAAC MAGUIRE, of the city and county of Albany, and State of New York, have invented certain new and useful Improvements in Hinges for Stove-Doors, of which the following is a full and exact description.

The object of my invention is to provide a cheap and reliable mode of hinging stove-doors, re so as to dispense with the present expensive mode of doing it. As at present generally practiced, the ears for forming the hinges on the door and door-frame are drilled for the hinge-pin, while the door is held to its place 15 on the door-frame. This, from the difficulty of drilling two sets precisely alike, involves the necessity of placing the two parts that are drilled together in precisely the same relation in the stove, and if a hinge is broken on either 20 the door or frame after the stove is mounted it is necessary to take the stove apart to drill the hinge while the door and frame are together, so as to produce an exact coincidence of the hinge-pin holes.

To remedy the defects above referred to my invention consists of the construction herein shown and described, whereby the parts constituting the hinge are entirely concealed from view when the door is closed, and are cast so that they fit together without being drilled, and so that all the parts that are cast from the same patterns will be perfectly interchangeable, and the door, which is horizontal, is effectually guarded against displacement without being drilled.

In the accompanying drawings, which form a part of this specification, and to which reference is herein made, Figure 1 is a front elevation of a door and door-frame of a stove; Fig. 2, a horizontal section at the line x x of the hinge end of same, showing the position of the parts of the hinge when the door is closed; Fig. 3, the same with the door open; Fig. 4, a front elevation of the hinge end of the door-frame, and Fig. 5 a front elevation of the hinge

end of the door.

As shown in the drawings, A is the doorframe of a stove, which may be made of any
of desired form and size. Said frame is provided

at its hinge end with one or more openings, a, for receiving the hooks formed on the door, as hereinafter described.

B is the stove-door, provided with one or more curved hooks, b, which enter the open—55 ings a, as shown in Figs. 2 and 3, in such manner that the concave parts of said hooks will engage with the convex swells C on the back of the door-frame close to the rear side of the openings a.

D are guards or lugs for guiding the hooks b. Said guards are cast upon the door-frame, beside each opening a, at the opposite side of the opening from the swell C. These guards extend partially over the convex parts of the 65 hooks b, so as to govern the movement of said hooks and retain the door B in place during its opening and closing movements.

E is a stop formed on the top edge of the uppermost hook, b, for the purpose of preventing 70 the door from swinging far enough to carry the hooks out of the openings. On small doors, where only one wide hook will be needed, the stop E will be placed on the top edge of it, in the position shown in the drawings.

The door is hung in its place by slightly raising the outer end of it, so that the upper hook, b, bearing the stop E, can pass through its proper opening a in the door-frame. When this is accomplished the door readily slips into 80 its place. The hooks b should slide and move with perfect ease in opening and closing the door, and for the purpose of insuring this ease sufficient clearance should be allowed in the opening a to permit the hooks b to move freely 85 therein.

It will be seen that with properly-fitted patterns, and with castings made therefrom with sufficient care, the parts constituting the hinges for the door will fit together without requiring 90 any drilling or other machine-work to adapt them, and that by my invention a saving will be effected in time, labor, and material. It will also be readily seen that by this construction I produce an effective hinge that is 95 entirely concealed from view when the door is closed, and which leaves the exterior surface free from obstruction, and renders the operation of polishing the stove much easier.

I am aware that it is not new to hinge a 100

stove-door to lugs on the inside of a stove-front by means of pintles, the hinge being so constructed as to be flush with the front of the stove when the door is closed, but said hinge 5 not being covered or shielded. This construction is shown in the patent granted to A. Wemyss, March 28, 1876, No. 175,312.

I am also aware that it is not new to hinge a vertical door to a stove-front by means of 10 interlocking parts, the construction having nothing to correspond to my device D, and being apparently incapable of use with a horizontal door. This construction is covered by patent of T. J. Coulston, November 9, 1869, 15 No. 96,551.

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

Letters Patent, is—

In combination with door B, arranged to overlap and shield the hinge when closed, the 20 curved hooks bb, attached to said door, one of which is provided with a stop, E, and the frame A, having openings a a, internal convex swells, C C, and guard-lugs D D, arranged to prevent the displacement of the horizontal 25 door, substantially as set forth.

ISAAC MAGUIRE.

Witnesses:

D. B. CARVER.