(No Model.)

F. W. BORN, Dec'd..

M. BORN, Administratrix.

OVEN OR CLOSET DOOR FOR RANGES.

No. 481,924. Patented Sept. 6, 1892.

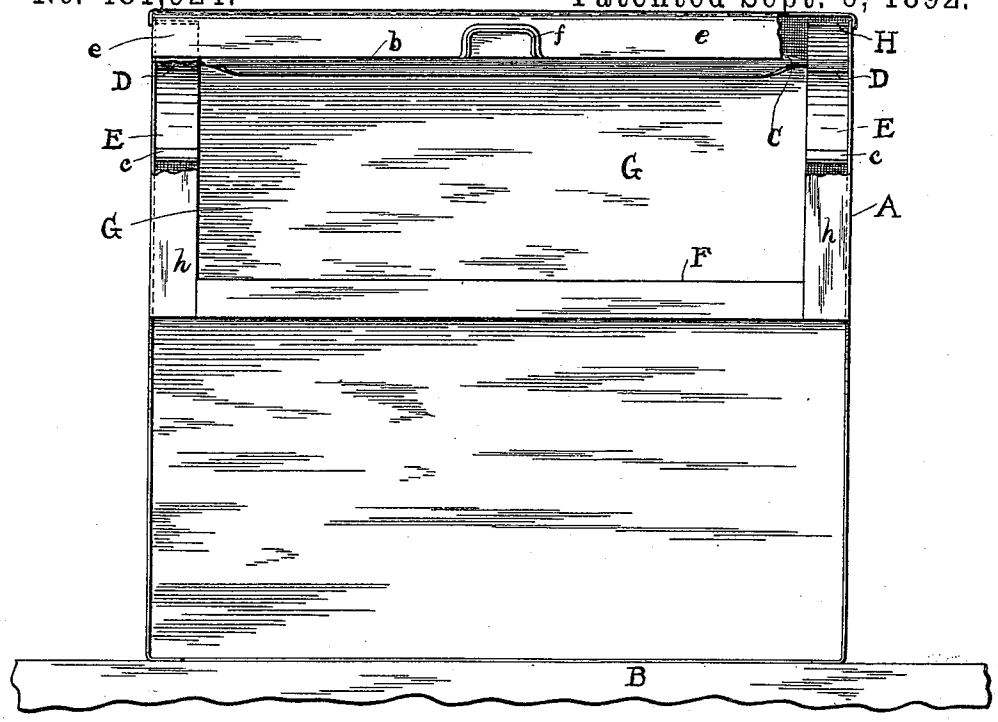

FIG. 1.

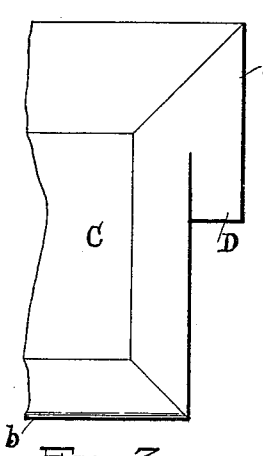

FIG. 3.

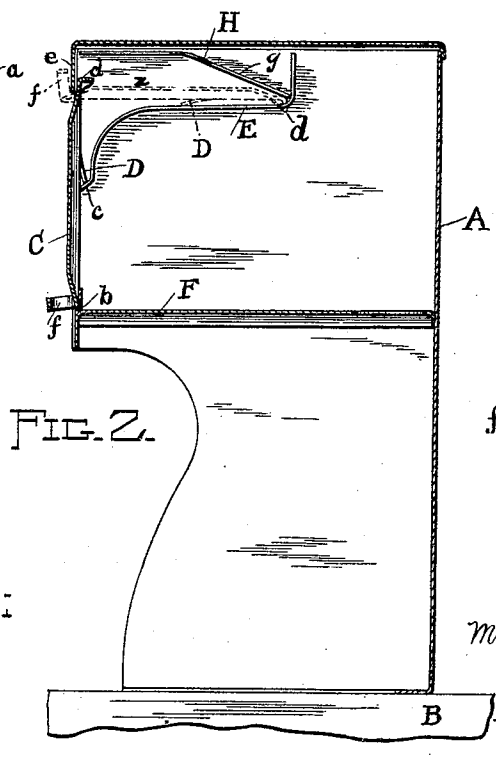

FIG. 2.

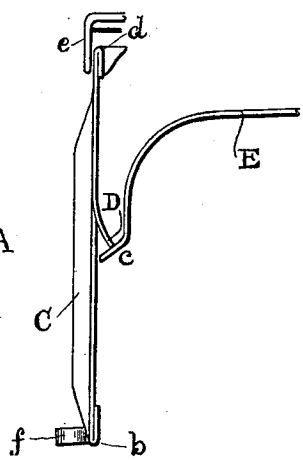

FIG. 4.

WITNESSES:
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Atty.

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UNITED STATES PATENT OFFICE.

MARY BORN, OF CLEVELAND, OHIO, ADMINISTRATRIX OF F. W. BORN, DECEASED.

OVEN AND CLOSET DOOR FOR RANGES.

SPECIFICATION forming part of Letters Patent No. 481,924, dated September 6, 1892.

Application filed November 9, 1891. Serial No. 411,381. (No model.)

To all whom it may concern:

Be it known that FREDERICK W. BORN, deceased, late a citizen of the United States, and who resided in Cleveland, in the county of Cuyahoga and State of Ohio, during his lifetime invented a certain Improvement in Oven and Closet Doors for Ranges and Stoves, as hereinafter fully shown and described in the following specification and drawings annexed.

The said invention relates to improvements in oven and closet doors for ranges and stoves, in which is a door having projections at both ends shaped to form springs to aid in the support of the door, on the opening and closing of which it is made to slide upward and downward upon metal ways or guides attached to the inside ends of the oven or closet.

The object of the invention is to provide an oven or closet door which shall not require a fastening to cause it to remain in a closed or open position and which when open will be confined within the compass of the inside of the oven or closet and out of the way of the person cooking. Said F. W. BORN attained this object by the method illustrated in the accompanying drawings, and described in the following specification, in which—

Figure 1 is a front view of an oven or closet the front of which is partially broken away, showing the door open; Fig. 2, a transverse section through the oven or closet, showing the door closed in full lines and open in dotted lines Z; Fig. 3, an enlarged front view of one end of the door, and Fig. 4 an enlarged end view of the door.

Similar letters refer to similar parts in the drawings and specification.

The oven or closet A is mounted on a range or stove (indicated at B, Figs. 1 and 2) by means of suitable supports and is provided with the door C, having projecting ends *a*, bent at their lower extremities to form the spring-like bearings D D, Fig. 1, which slide upon the ways E E and allow the door C to be drawn forward and downward until its lower edge *b* rests upon the base F of the closet, thereby completely closing the opening G of the closet or to be pushed upward and backward until it assumes a horizontal position at the upper part of the interior of the oven A, as indicated by the dotted lines Z, Fig. 2, where it is entirely out of the way. When the door C is open, it is supported on the ways E E, (shown by line Z in Fig. 2,) and when the door is closed the bearings D rest on the angles *c c* formed at the lower terminals of the ways E E. (Best seen in Figs. 2 and 4.) At each end of the closet A is a guide H, one of which is shown in Figs. 1 and 2. These guides admit of raising the door C and by their angular inclination *g* cause the door to pass over the curve of the ways E E and rest in the position seen at Z, which opens the closet. The bearings D are above the center of gravity of the door C and, by reason of their relative position in relation to said door, bring the bearings then on the inside of the closed door, thereby causing the perpendicular inside face of the door C to be in close contact with the inside face of the closet-jambs *h*, Fig. 1. When the door C is closed, the bearings D rest upon the terminal supports *c* of the ways E. The lower portion of the door C, having a tendency, therefore, when closed, to fall in line with the interior face of the door-jamb *h*, presses the top *d* against the depending flange *e* of the oven A, while the lower edge *b* rests upon the base F of the closet A, the supports *c*, preferably on an angle, to cause the door C by its own weight to fall forward in contact with the said jambs *h* and flange *e*, thereby securely closing the opening G without other means of fastening than that automatically applied, as described. When the door C is pushed upward, the top *d* comes in contact with the guides H and is forced downward, while the bearings D, sliding on the ways E, force the front upward until the door C assumes the horizontal position indicated by the dotted lines Z, Fig. 2, and the angle formed by the handle *f* with the door receives the projection or flange *e* of the closet A. The elasticity of the bearings D serves to keep the door C firmly in place when in this position.

What I do claim as the said FREDERICK W. BORN'S invention, and desire to secure by Letters Patent, is—

1. In an oven or closet door for ranges or

stoves, the combination of the door having the projecting ends *a* and spring-bearings D, with the ways E and the guides H, arranged substantially as and for the purpose specified.

2. In an oven or closet for ranges or stoves, a door C, having a spring-bearing at each end, in combination with the ways E and guides H, said bearings resting on the lower terminals of the ways when the door is closed, arranged as described, whereby the closet may be opened or closed by the automatic movement of the door, in the manner substantially as set forth.

In testimony whereof I affix my signature in the presence of two witnesses.

MARY BORN,
Widow of said F. W. Born and Administratrix.

Witnesses:
HENRY BORN,
W. H. BURRIDGE.