(No Model.)

C. FARRELL.

FRAME FOR STOVE DOORS.

No. 333,401. Patented Dec. 29, 1885.

Fig. 1.

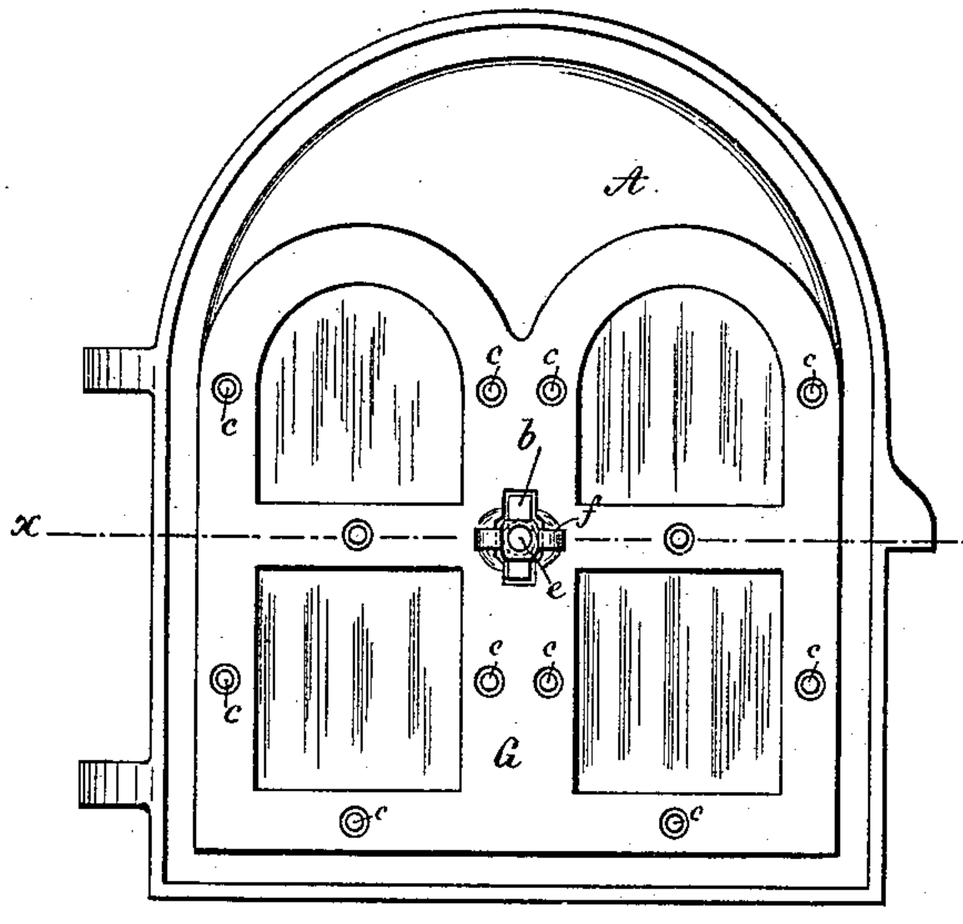

Fig. 4.

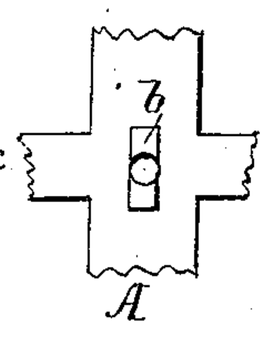

Fig. 3.

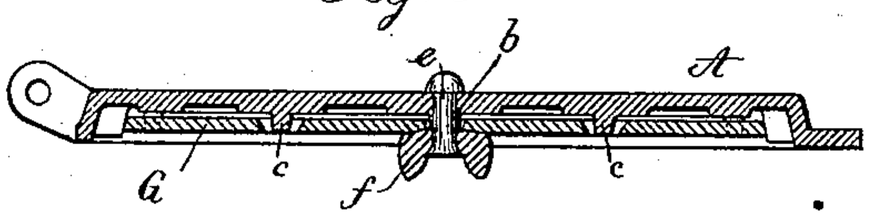

Fig. 2.

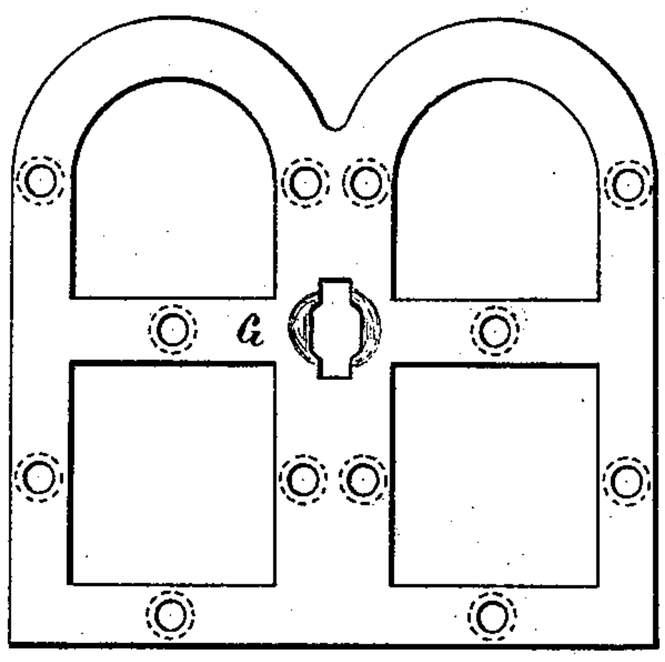

Fig. 5.

Witnesses:
J. Stahl
Chas. H. Smith

Inventor:
Charles Farrell
per Lemuel W. Serrell
atty

UNITED STATES PATENT OFFICE.

CHARLES FARRELL, OF PEEKSKILL, ASSIGNOR TO ELY & RAMSAY, OF NEW YORK, N. Y.

FRAME FOR STOVE-DOORS.

SPECIFICATION forming part of Letters Patent No. 333,401, dated December 29, 1885.

Application filed April 17, 1885. Serial No. 162,545. (No model.)

To all whom it may concern:

Be it known that I, CHARLES FARRELL, of Peekskill, in the county of Westchester and State of New York, have invented an Improvement in Frames for Stove-Doors, of which the following is a specification.

Stove-doors are extensively made with openings for the reception of mica, and with movable inner frames to clamp the sheets of mica into position. These inner frames are usually held in place by a projecting tenon or lug passing through a mortise in the inner frame, and having a hole for the reception of a nail or key. These holes have to be bored, and in consequence of the hard scale upon the surface of the cast-iron the drills are liable to be broken, and the hole is often in the wrong place, and the inner frame does not properly clamp these sheets of mica.

My improvement is made for avoiding these difficulties, and relates to the combination, with the movable inner frame, of an oblong guide cast upon the inner surface of the door-frame, for holding the inner frame in its proper relation to said door-frame, and a clamping turn-button secured by a rivet or bolt that passes through the oblong guide-lug. I also make use of small projecting studs upon the inner face of the door-frame, that serve the purpose of steadying the mica, such projecting studs being received into holes in the inner door-frame, and acting to perforate or to clamp the sheets of mica laid upon or against such studs.

In the drawings, Figure 1 is a rear view of a door-frame with my improvement. Fig. 2 is a separate view of the inner frame, and Fig. 3 is a section at the line *x x*. Fig. 4 is an elevation of part of the door and the lug thereon; and Fig. 5 is a section in larger size through the inner frame at the slot, showing the undulations in the surface of the frame adjacent to the slot.

The door-frame A is to be of any desired size or shape, and it is made with the necessary openings for the reception of the mica sheets, and upon the inner face of this door-frame there are cast one or more oblong guide-lugs, *b*, and also the small studs *c c*, and it is preferable to cast the hole for the rivet *e* of the clamping turn-button *f*. The inner frame, G, is made with openings corresponding to the openings of the door-frame, and it has also a mortise corresponding in shape to the guide-lug *b*, but slightly larger, and there are also holes through the inner frames corresponding in position to but considerably larger than the small studs *c*. The height of the guide-lug *b* is slightly less than the thickness of the inner frame, G, and the inner face of the frame G around the mortise is undulating at opposite sides, so that when the inner frame, G, is put in place the turn-button passes through the mortise in this inner frame, and by turning the button *f* the frame G will be pressed firmly against the door-frame A.

It is to be understood that the sheets of mica are to be laid in place over the opening in the door-frame A previous to laying the inner frame in place, and that the small studs *c* serve as guides to determine the position of the pieces of mica and prevent lateral displacement of the same, and whenever the sheets of mica lap upon or pass over these studs the mica is bent or penetrated by such studs when the inner frame is clamped to place, and thereby the mica is held more firmly in position.

By this improvement the cost of construction is lessened, the mica is held more firmly by the clamping action of the turn-button on the frame, and the door-frame does not become discolored by the heat as rapidly as in the ordinary door-frame, because there is no solid stud or tenon projecting behind the door-frame to act as a conductor of heat to the frame itself.

I claim as my invention—

1. The combination, with the inner frame, G, having openings and a mortise through it, of a door-frame with openings for the mica, and an oblong perforated guide-lug for the mortise in the inner frame, a turn-button, and a rivet passing through the door-frame and perforated guide-lug, and securing the turn-button, substantially as specified.

2. The combination, with the door-frame having openings for the mica, and an oblong guide-lug, *b*, and small studs *c*, of the inner frame, G, having a mortise for the guide-lug and holes corresponding in position to the small studs *c*, but larger, the turn-button *f*,

and rivet *e* for the same, substantially as set forth.

3. The combination, with the door-frame having openings for the mica, and an oblong perforated guide-lug, of an inner frame having openings for the mica and a mortise for the guide-lug, and undulating surfaces adjacent to the mortise, a rivet passing through the perforated guide-lug, and a turn-button to secure the inner frame, substantially as set forth.

Signed by me this 11th day of April, A. D. 1885.

CHARLES FARRELL.

Witnesses:
WM. M. BARLOW,
OWEN T. COFFIN.