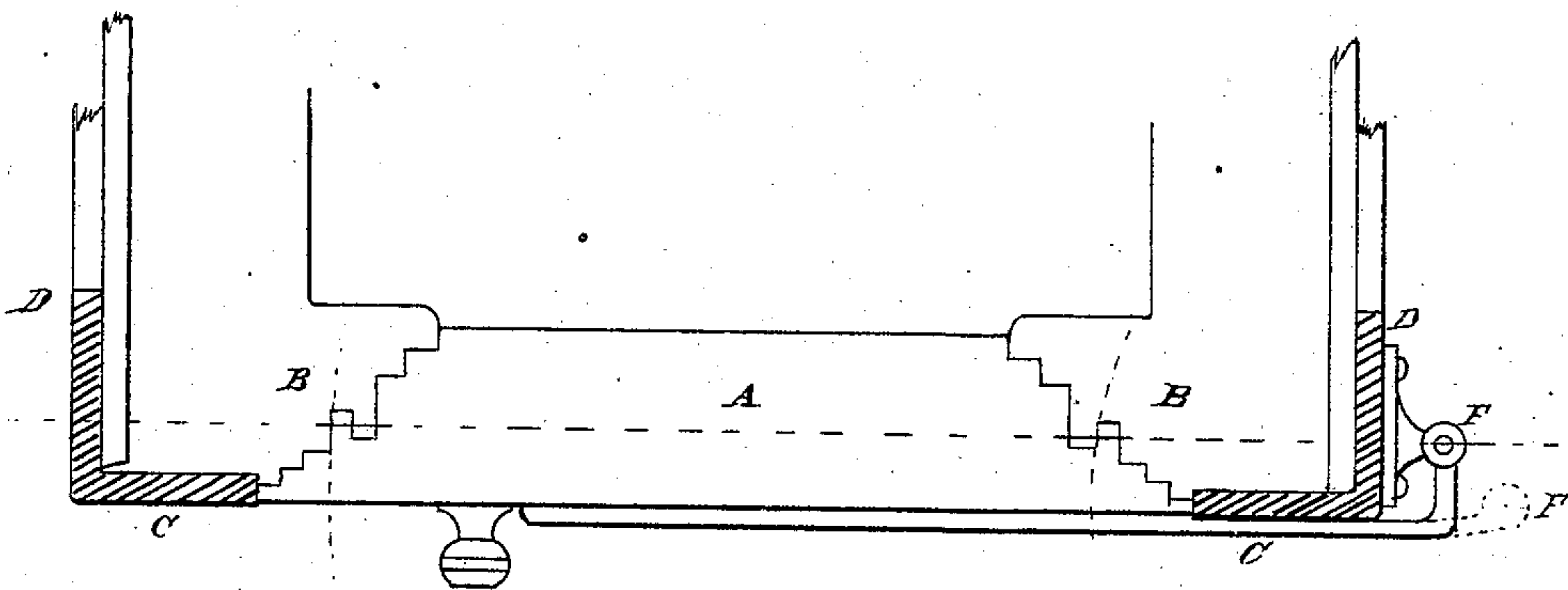
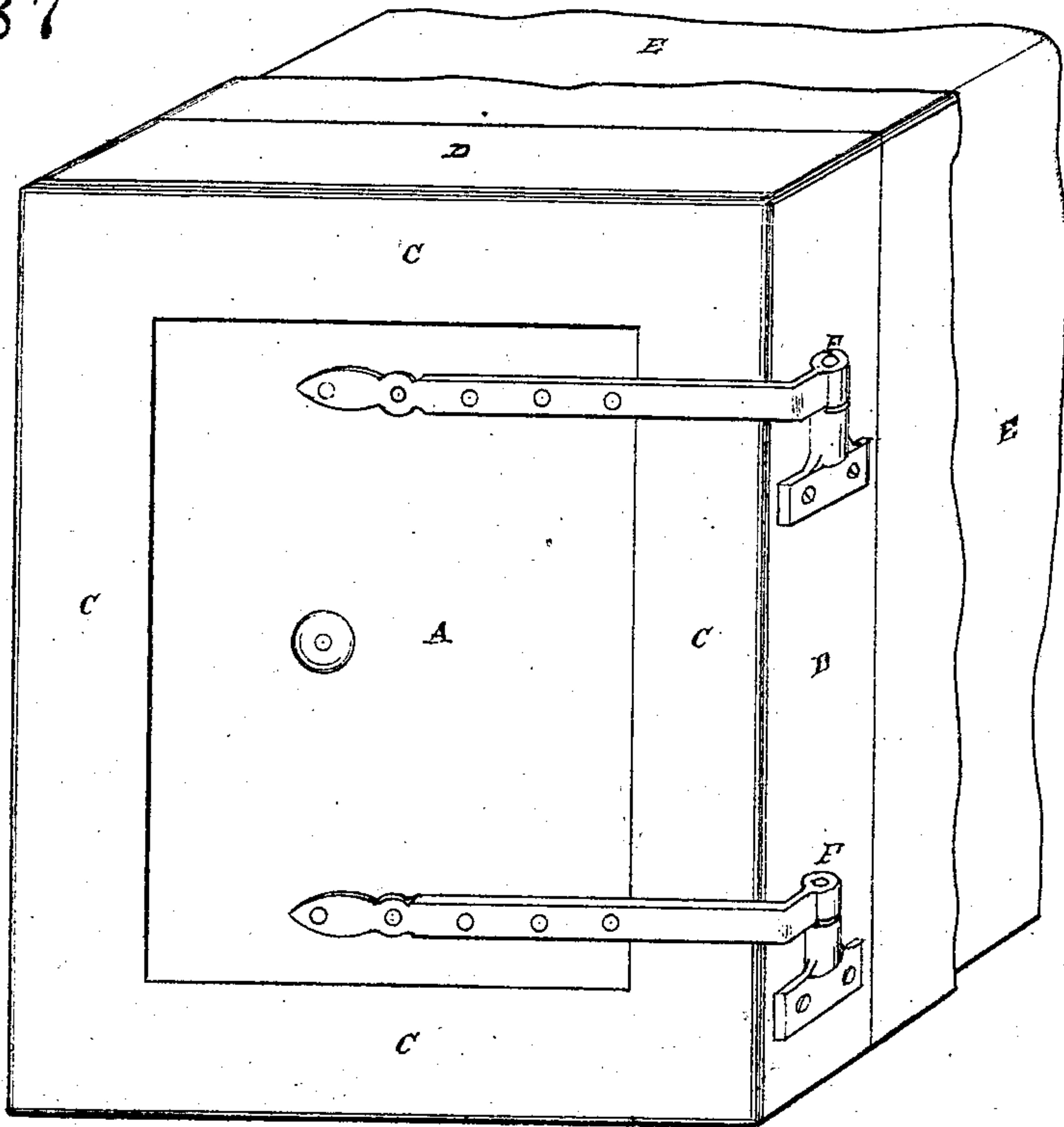


FARREL'S

Improvement in Burglar Proof Safes

PATENTED JUN 27 1871

116287



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN FARREL, OF NEW YORK, N. Y.

IMPROVEMENT IN BURGLAR-PROOF SAFES.

Specification forming part of Letters Patent No. 116,287, dated June 27, 1871.

To all whom it may concern:

Be it known that I, JOHN FARREL, of the city, county, and State of New York, have invented an Improvement in Burglar-Proof Safes, of which the following is a specification:

The object of said improvement is to provide additional security against the opening of safes by the process of "wedging."

In the construction of safes having that object in view it is a method to introduce tongues, grooves, and rabbets, or other recesses in the seams between the door and the door-frame, and these are a chief reliance. But in safes so furnished it is also the practice to make that part of the frame constituting the margin of the face of the safe of one or more flat pieces or strips riveted together, leaving one or more seams wherein wedges can be inserted and driven without obstruction, and which wedges, in consequence of said arrangement of metal and parts, may exert a force flatwise—that is, perpendicular—to the width of such pieces or strips, and can be effectually used to separate the body of the safe and the door-frame the one from the other, and thus render nugatory the tongue and groove or other recesses of the door and frame aforesaid, by removing both the door and frame at once. My invention is intended to render this impossible; and it embraces the frame of the safe with the door-frame, whereby the effective insertion or operation of wedges at the junction of the body of the safe with the door-frame is prevented, in combination with hinges having the capacity, substantially as herein specified, of relieving the door from its jambs in the door-frame when tongued or recessed—that is, to insure a free movement of the door when opening and closing, and without any binding in the recesses.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same, referring to the drawing hereto annexed, wherein—

Figure 1 is a perspective view of the front of the safe, and Fig. 2 is a transverse section of the door-frame and the hinges.

I first provide a tongued-and-grooved or recessed door and frame, A B, which may be constructed in any manner common to the art; but

the face or margin C around the door I make in a continuous piece or frame, which facial frame is also welded fast to or formed in one with a circumambient frame, D, corresponding, but at right angles therewith, these two forming together a solid and seamless frame of a right-angled shape, in cross-section reaching back several inches from the face of the safe on the sides, top, and bottom thereof, and on the face reaching down to the edge of the door. The solid frame B, constituting the grooved or recessed jambs of the door-frame, is secured to this seamless frame C D in front; and at the sides, bottom, and top is secured, by suitable bolts, to the shell E, which forms the inner lamina of the exterior wall of the safe. Such shell underlaps the circumambient portion D of the angled frame and extends forward to the facial angle thereof, C. The edge of the outer lamina of the wall is placed contiguous to the edge of the angled frame at D, Fig. 2, and secured to the shell E.

By this construction and arrangement of parts the effective operation of wedges to separate the door-frame from the safe is prevented, because the force of such operation is necessarily exerted against the edges of the metal and at right angles to the axis of the securing bolts in all cases.

With the solid and seamless angled frame described, and a recessed or tongued-and-grooved door and jambs, I combine a hinge which will allow the door to be opened easily and without binding; and the simplest plan for that purpose is to arrange the swinging pins or center of motion of the hinges in a vertical plane which will intersect the tongues or recesses respectively in the door and jambs, or so that an arc, of which said pin is the center, will pass between such faces.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, with the recessed door and jambs and the seamless angled frame, of hinges, operating as described, for the purposes set forth.

JOHN FARRELL.

Witnesses:

JOHN L. ROBERTS, Jr.,
ELIJAH T. SHERMAN.