No. 848,674. PATENTED APR. 2, 1907.

M. MOSLER.

ROUND DOOR SAFE.

APPLICATION FILED JAN. 23, 1907.

2 SHEETS—SHEET 1.

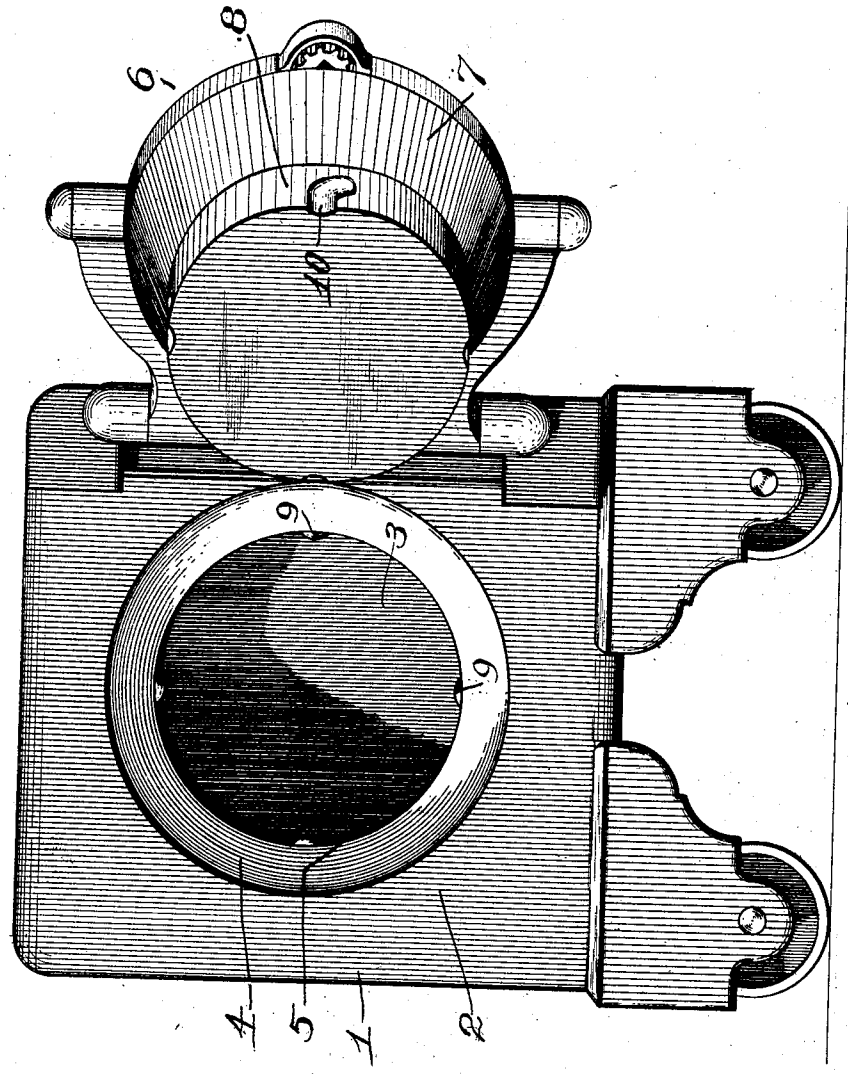


Fig. 1.

Witnesses:
Elmer R. Shipley
M. S. Belden.

Moses Mosler
Inventor
by James W. See
Attorney

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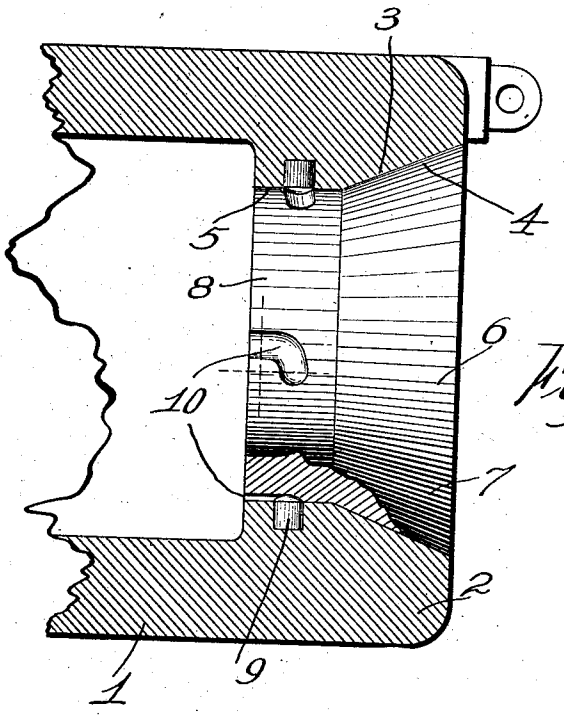


Fig. 2.

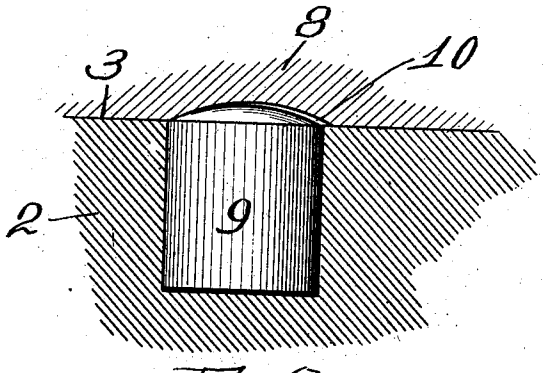


Fig. 3.

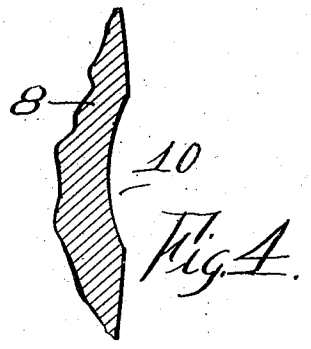


Fig. 4.

Witnesses:
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UNITED STATES PATENT OFFICE.

MOSES MOSLER, OF NEW YORK, N. Y., ASSIGNOR TO MOSLER SAFE COMPANY, OF HAMILTON, OHIO.

ROUND-DOOR SAFE.

No. 848,674. Specification of Letters Patent. Patented April 2, 1907.

Application filed January 23, 1907. Serial No. 353,593.

To all whom it may concern:

Be it known that I, MOSES MOSLER, a citizen of the United States, residing at New York, New York county, New York, have invented certain new and useful Improvements in Round-Door Safes, of which the following is a specification.

In my Patent No. 788,325, of April 25, 1905, I set forth a safe with tapering round door held in the door-opening by studs projecting inwardly from the door-jamb and engaging locking-recesses in the periphery of the door.

My present invention, while following my former patent in a general way, provides important improvements.

My present invention will be readily understood from the following description, taken in connection with the accompanying drawings, in which—

Figure 1 is a front elevation of a round-door safe exemplifying my present invention; Fig. 2, a horizontal section through the front wall thereof, the door appearing partly in horizontal section; Fig. 3, a horizontal section, on an enlarged scale, through a portion of the door and door-jamb at one of the locking-studs; and Fig. 4, a vertical section, on an enlarged scale, through a portion of the door in a plane parallel with its face.

In the drawings, 1 indicates the general body of the safe; 2, its front wall; 3, the circular door-opening therein; 4, the outer portion of the door-opening, the same being tapering, with its smaller part inward; 5, the inner portion of the door-opening, the same being straight or without taper; 6, the door considered as a whole; 7, the outer portion of the door, the same being tapering and fitting the tapering portion of the door-jamb with accuracy, as by having been ground to place; 8, the inner portion of the door, the same being cylindrical and adapted to the inner portion of the door-jamb with perfect freedom of fitting; 9, studs, of which there may be one or more, four being shown in the example, these studs being rigidly held in the door-jamb and projecting inwardly therefrom, the projecting portion of the studs being convex and the bodies of the studs where they are held in the door-jamb being perfectly cylindrical, these studs being illustrated as projecting inwardly from the non-tapering portion of the door-opening, and 10 shallow recesses, one for each stud, formed in the periphery of the door, the recesses being concave in cross-section and leading forwardly and then circumferentially with a helical trend, so that by turning the door when the studs are in engagement with the recesses the door will be drawn inwardly.

As the devices for supporting and operating the door may be of any usual or suitable construction, I do not herein consider it necessary to refer to their details.

By reason of the combined tapering and non-tapering features of door and door-jamb a good thickness is secured, while at the same time the necessary accuracy of fitting may be concentrated upon a portion only of the thickness, and the perfection of the accurately-fitting surfaces is not interrupted or interfered with either in original construction or in subsequent use by the studs or recesses.

The slightly-projecting convex studs, in conjunction with the shallow concave recesses, provide in a most admirable degree for satisfactory locking and at the same time provide practically continuous surfaces at door rim and jamb free from corners or angles, thus permitting not only of ready cleaning, but avoiding the possibility of the lodgment of foreign matters to interfere with the proper coaction of the studs and recesses.

I have employed the terms "lock" and "locking" in connection with the studs and recesses; but it is to be understood that this applies to the function of these parts in preventing the outward movement of the door after it has been seated and turned. The actual locking of the door to prevent its being opened by being turned in the reverse direction will of course be taken care of by the usual locking accessories.

I claim—

1. A round-door safe having a circular door-jamb cylindrical in its rear portion and tapering in its front portion and having practically continuous jamb-surfaces, a door having corresponding cylindrical and tapering portions, and a coöperating recess and projecting stud in the joint between the door and jamb, combined substantially as set forth.

2. A round-door safe having a circular door-jamb cylindrical in its rear portion and tapering in its front portion and having

practically continuous jamb-surfaces, a door having corresponding cylindrical and tapering portions, and a coöperating recess and projecting stud in the cylindrical portion of the joint between the door and jamb, combined substantially as set forth.

3. A round-door safe comprising a circular door and door-jamb with practically continuous surfaces, and a coöperating stud and recess in the joint between the door and jamb, the active portion of the stud being convex, and the recess being concave in cross-section and having an entering portion leading into a circumferential portion having a helical trend, combined substantially as set forth.

MOSES MOSLER.

Witnesses:
C. J. CLARK,
L. BAUERLE.