

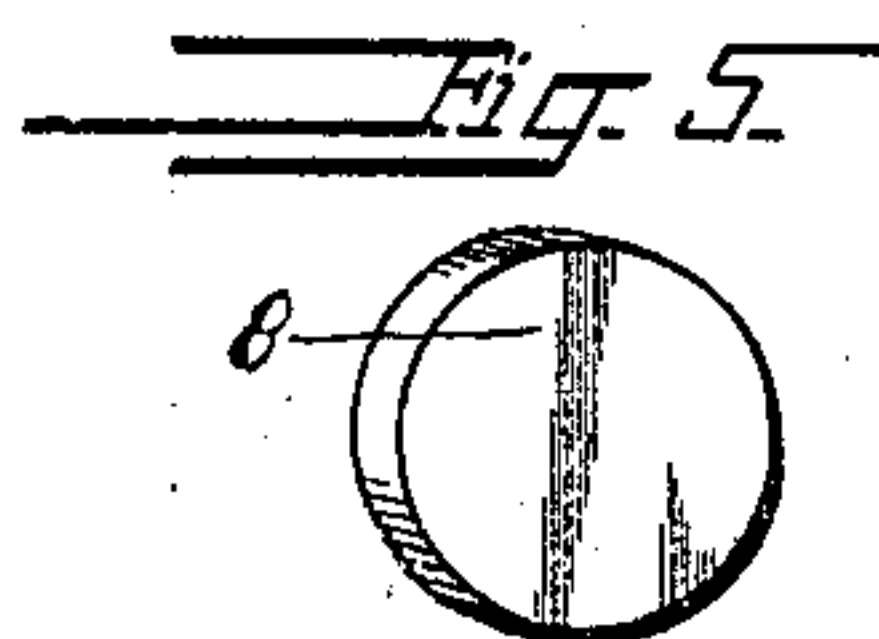
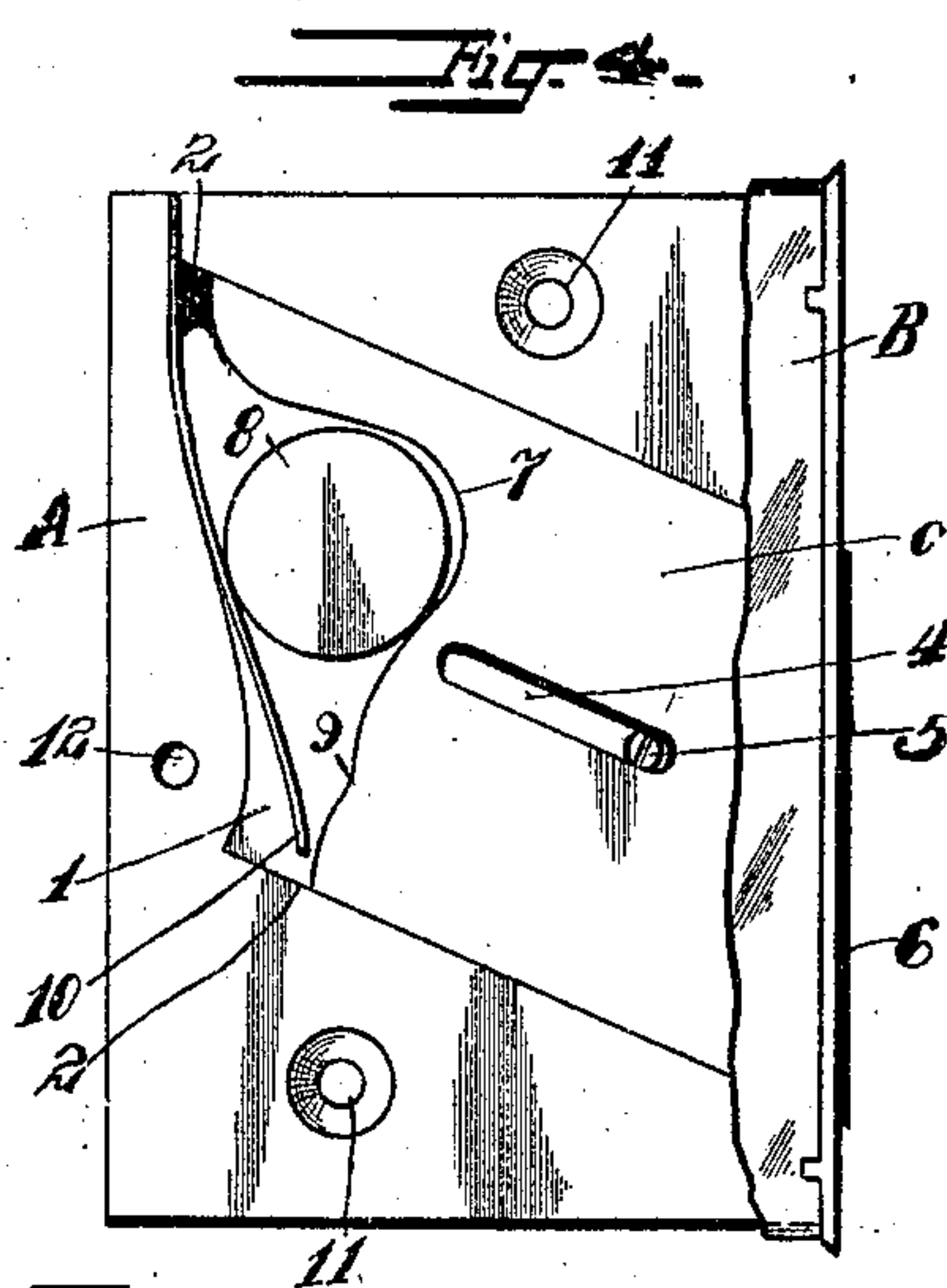
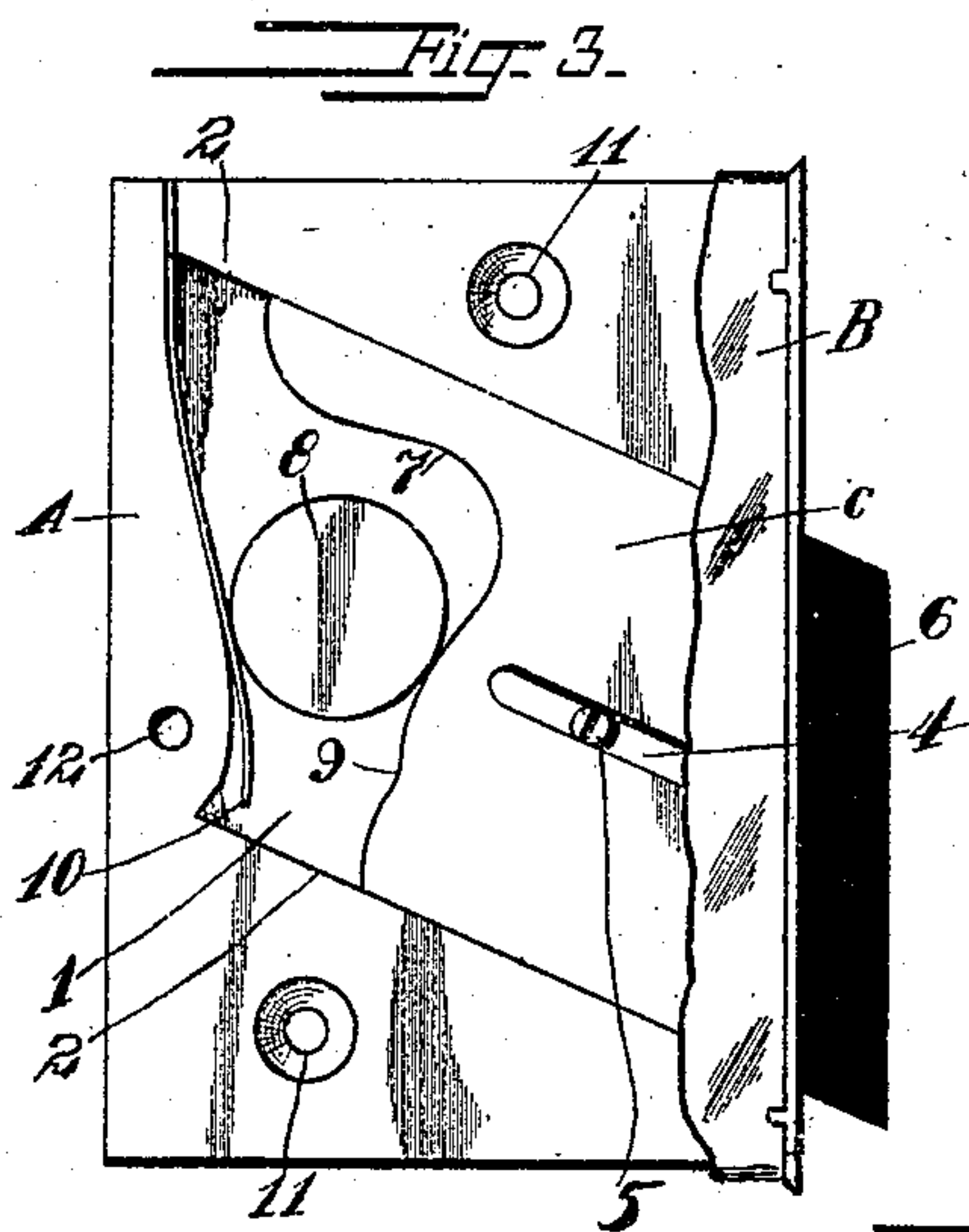
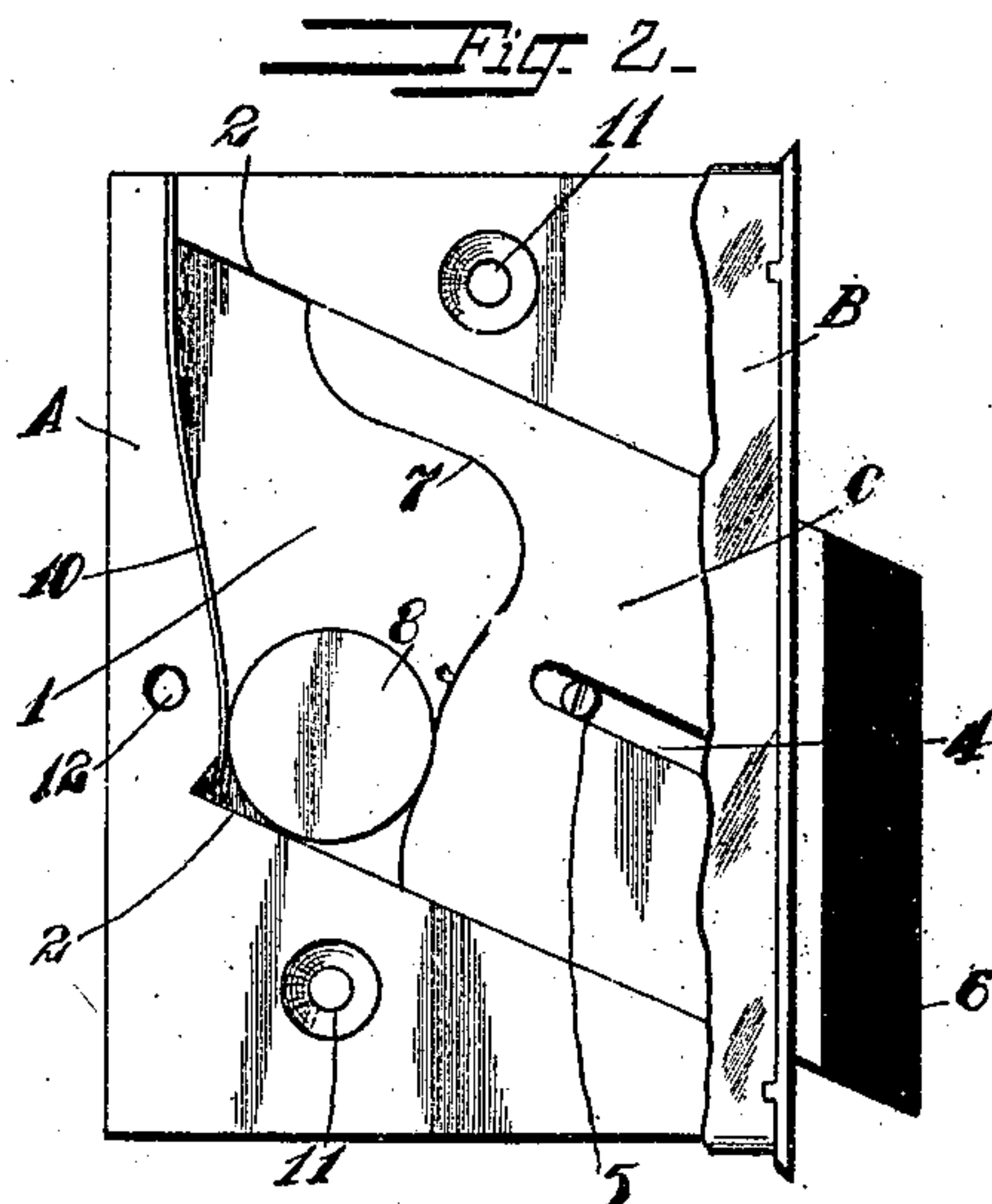
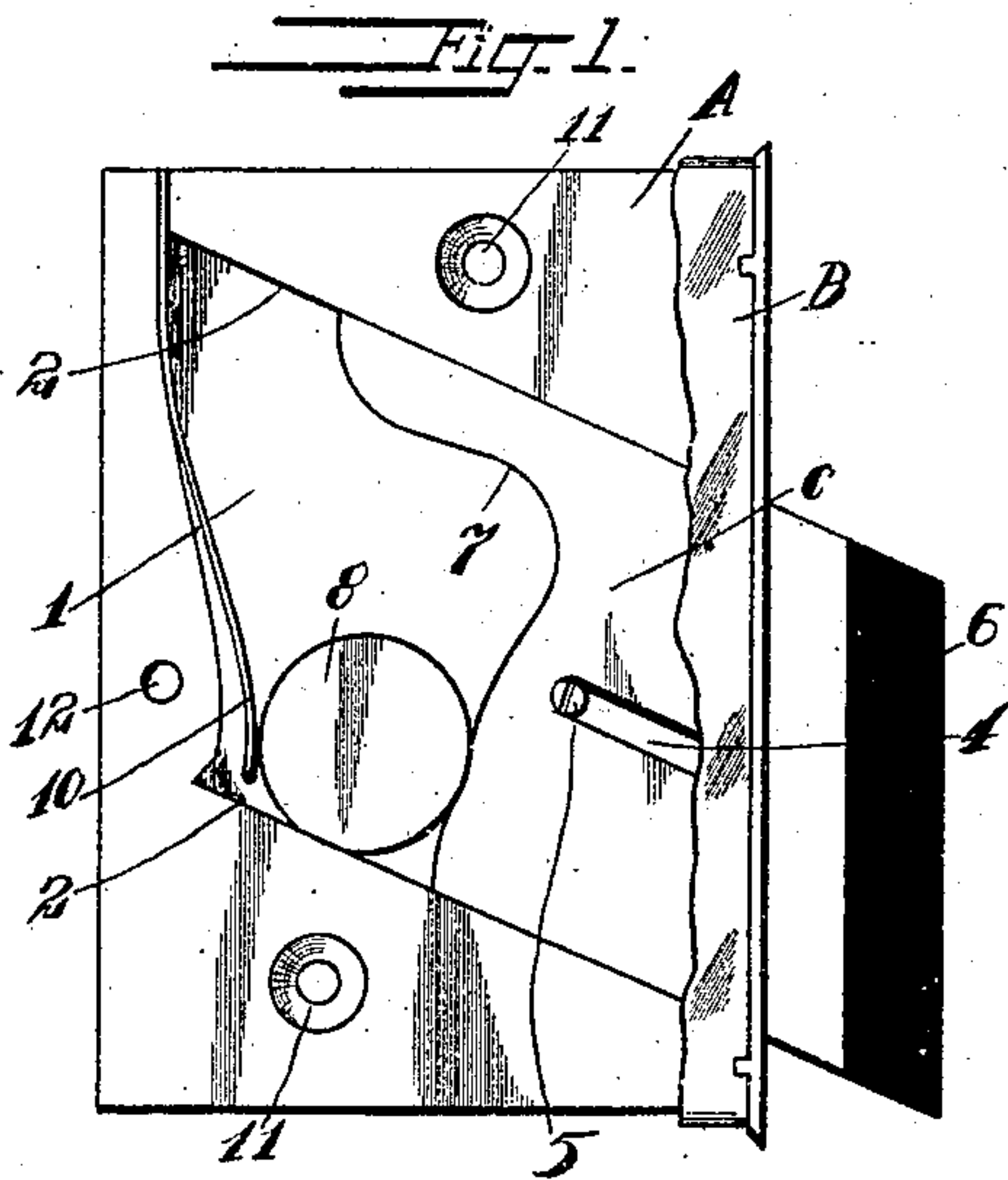
No. 847,113.

PATENTED MAR. 12, 1907.

J. L. RIDGWAY.

DOOR CHECK.

APPLICATION FILED APR. 2, 1906.



Witnesses

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Inventor

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# UNITED STATES PATENT OFFICE.

JOHN L. RIDGWAY, OF CHEVY CHASE, MARYLAND.

## DOOR-CHECK.

No. 847,113.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed April 2, 1906. Serial No. 309,496.

*To all whom it may concern:*

Be it known that I, JOHN L. RIDGWAY, a citizen of the United States, residing at Chevy Chase, in the county of Montgomery and State of Maryland, have invented certain new and useful Improvements in Door-Checks, of which the following is a specification.

My invention relates to an improvement in door-checks; and the object is to afford a cushion for either heavy or light doors in closing or slamming, thus avoiding the noise and jarring incident thereto.

With the foregoing object in view my invention consists in a gravity-bolt which normally assumes a projected position in connection with means for locking it in said position and momentarily holding it when struck by the door and then automatically releasing this bolt with the continued or successive pressure of the door against it.

The invention further consists in certain details of construction and combinations of parts, which will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figures 1, 2, 3, and 4 illustrate the door-check with the main portion of its face-plate removed, in which the bolt is shown in four different positions—in Fig. 1, in its extreme projected position, which it normally assumes; Fig. 4, at its opposite extreme position, and Figs. 2 and 3 two intermediate positions, and Fig. 5 is a view in perspective of the gravity-lock.

This door-check, while capable of being applied to the surface of the door-jamb, is designed more especially to be mortised in the stile or to lie flush with the surface of the latter.

A is a casting constituting the main portion of the door-check, and B is a face-plate removably secured thereto and a portion only of which is shown in the drawings. A cavity 1 is cast or otherwise formed in the casting A and disposed diagonally therein, with its upper and lower edges 2 2 parallel. In this cavity the bolt C is fitted, it normally assuming a projected position by its own gravity, as illustrated in Fig. 1, a slot (not shown) being provided in the edge of the door-check to receive it. The bolt is provided with an elongated slot 4, in which a stud or screw 5 is placed, the function of the latter being to limit the outward movement of the bolt and prevent its sliding from the casting. The outer edge of the bolt is faced

with rubber 6, against which the door strikes, whereby to form a buffer and sustain the shock. The inner edge of the bolt is recessed somewhat, as shown at 7. A gravity-lock in the form of a cylindrical weight 8 is adapted to drop against the bottom 2 of the cavity 1, wedging itself between the inner edge of the bolt, a notch 9 being provided to receive it, and the spring 10, as shown in Figs. 1 and 2. Countersunk holes 11 11 are provided to receive screws by which the door-check is fastened in place, although this might of course be done otherwise, and the face-plate B is provided with a hole (not shown) which registers with the threaded hole 12, whereby it is held in place by a screw screwed into the threads of hole 12.

Now, to briefly explain the action of this simple gravity door-check, the parts normally assume the position shown in Fig. 1, and upon a door striking the rubber facing 6 the first impulse is to force the bolt to the position shown in Fig. 2, the pressure being approximately in a straight horizontal line through the center of the weight and approximately the vertical center of the cushioned end of the bolt. Here the first shock of the closing or slamming door is sustained momentarily. As the recess 9 is very slight, the continued or successive pressure upon the bolt C causes upward displacement of the weight, as is shown in Figs. 3 and 4, Fig. 3 merely illustrating the weight partly raised and the bolt part way in and Fig. 4 showing the position when the bolt has been forced inward as far as it will go.

Of course the proportions and size of the parts may be varied indefinitely, and the length of the cavity and bolt and the diameter of the weight are subject to change in accordance with requirements, and other slight changes in detail might be resorted to without departing from the spirit and scope of my invention, and hence I do not wish to be limited to the exact construction herein set forth; but,

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A door-check comprising a case, a bolt which normally protrudes beyond its case, and means for momentarily retarding the bolt when first struck, after which it automatically releases it and permits it to slide back into the case.

2. A door-check comprising a gravity-



bolt, and a gravity-lock for retarding the bolt with the first pressure upon the bolt and then automatically releasing it.

3. A door-check comprising a gravity-bolt and means for momentarily retarding the bolt after sustaining the first stroke of the door and then automatically permitting the release of the bolt.

4. A door-check comprising a casing having a cavity therein, a gravity slide-bolt fitted to and guided by the edges of the cavity and a gravity-lock, for retarding the bolt.

5. A door-check comprising a suitable casing having a diagonally-disposed cavity therein, a gravity-bolt fitted to and sliding in said cavity, said bolt having a recessed inner edge, and a gravity-lock adapted to normally rest upon the bottom of the cavity and impinge upon the recessed edge of the bolt and be displaced therefrom by the pressure upon the bolt.

6. In a door-check, the combination with a casing having a diagonally-disposed cavity therein with parallel upper and lower edges, of a bolt fitted to slide in the cavity

and drop therein by gravity, and means for automatically locking the bolt in its projected position and for automatically releasing the bolt when the latter is struck or pressed.

7. In a door-check, the combination with a suitable casing having a diagonally-disposed cavity therein and a spring secured at the edge of the cavity, its free end projecting from the wall of the cavity, of a gravity-bolt having a recessed inner edge and a gravity-lock normally resting against the bottom of the cavity, the inner edge of the bolt and the free end of the spring, whereby the initial pressure upon the outer end of the bolt causes the lock to be temporarily wedged between the bolt and the wall of the cavity from which position it is displaced by continued or successive pressure upon the bolt.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN L. RIDGWAY.

Witnesses:

HERBERT C. EMERY,  
VERNON E. HODGES.