

Aug. 4, 1925.

1,548,703

J. BEEBY

CHECK DEVICE

Filed Nov. 26, 1923

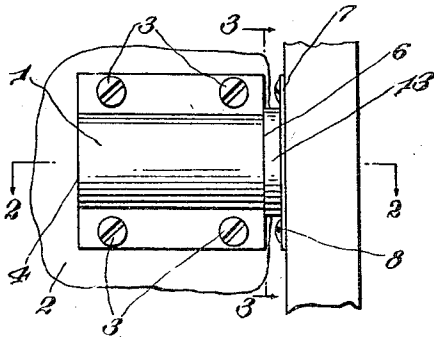


Fig. 1.

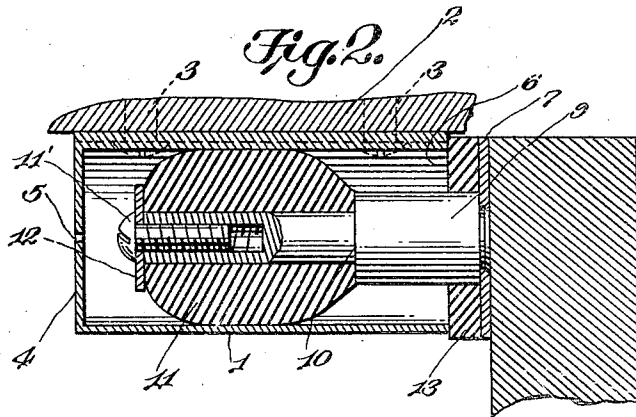


Fig. 2.



Fig. 5.

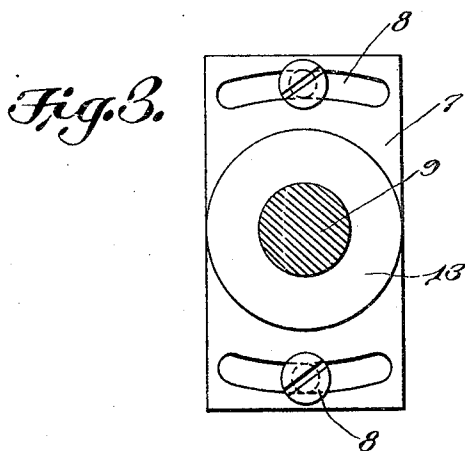


Fig. 3.

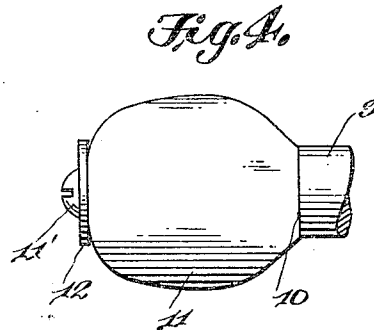


Fig. 4.

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JAMES BEEBY, OF CHICAGO, ILLINOIS.

CHECK DEVICE.

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To all whom it may concern:

Be it known that I, JAMES BEEBY a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Check Devices, of which the following is a specification.

This invention relates to a check device and has for its primary object the construction of a device of few substantial parts arranged in a manner as to frictionally check the movement of an object such as a door or any other suitable movable object.

An object of the invention is the novel construction of a plunger so that frictional engagement thereof with the cylinder may be changed at will to accomplish the best results.

Besides the above my invention is distinguished in the arrangement of two retarding elements one coming into action after travel of the other a predetermined distance.

With these and other objects in view the invention will be better understood from the following detailed description taken in connection with the accompanying drawing wherein:

Fig. 1 is a side elevation of the device.

Fig. 2 is a sectional view on the line 2—2 of Fig. 1.

Fig. 3 is a sectional view on the line 3—3 of Fig. 1.

Fig. 4 is a side elevation of the plunger showing how same is bulged by pressing the screw.

Fig. 5 is a detailed sectional view showing the open end of the cylinder flared.

Again referring to the drawing illustrating one of the many constructions of my invention the numeral 1 designates a cylinder secured to a support as indicated at 2 by the screw 3. This cylinder is closed at the end 4 which closed end is provided with an airhole 5. The cylinder is further provided with an open end 6. A plate 7 is adapted to have adjustable connection with the movable object such as a door by the screw and slot connection 8 and projecting from this plate is the stem 9 shaped to provide a shoulder 10. A plunger 11, of resilient material such as rubber, is arranged on the stem and one end abuts the shoulder 10 so that upon operation of the screw 11 that is threaded in one end of the stem against the

disc 12 the exterior of the surface of the yieldable plunger 11 will be bulged to any desired degree to increase frictional engagement of the plunger with the wall of the cylinder. Thus it will be seen in a very simple manner frictional action may be changed at will and wear easily taken care of. An extra retarding device is provided consisting of the bumper ring 13 arranged around the stem and adapted to come into engagement with one end of the cylinder after the plunger has traveled a predetermined distance in the cylinder. From this construction it will be seen the closing of a door will be frictionally checked and in such a manner that no metal or rigid elements come in contact with one another thereby preventing any noise and providing an absolutely silent device.

In Figure 5 I have shown the open end flared as indicated at 14 so as to facilitate the insertion of the plunger into the cylinder.

It is, of course, to be understood the various parts may be constructed in various other ways and associated in other relations and may be used for checking various objects and in fact the cylinder may be held stationary as illustrated in the drawing and the plunger movable or vice versa, i. e., the plunger may be stationary and the cylinder movable; therefore, I do not desire to be limited in any manner except as set forth in the claims hereunto appended.

Having thus described my invention what I claim is:

1. A check device comprising a cylinder, a plunger for movement into and out of said cylinder, means for changing the frictional action of the plunger when moving within the cylinder, and a separate bumper device arranged to engage the cylinder when the plunger has moved a predetermined distance within the cylinder.

2. A check device comprising a cylinder having one end open and the other end closed and provided with an airhole, a plate adapted to have adjustable connection with a support, a stem projecting therefrom, a resilient plunger mounted on the stem for engagement into and out of said cylinder, a screw device for adjusting the shape of said plunger and regulating frictional engagement with the cylinder, and a bumper ring mounted around the stem for engage-

ment with the end of the cylinder when the plunger has traveled a predetermined distance within the cylinder.

3. A check device comprising a cylinder,
5 means supporting the cylinder on a stationary object, a plate adapted to have adjustable connection with a movable object, a
stem projecting from the plate, a plunger
10 mounted on the stem for engagement into and out of the cylinder, means for expand-

ing the plunger circumferentially to regulate frictional engagement with the interior of the cylinder and a yieldable bumper ring
mounted upon the stem against a plate for
engagement with the open end of the cylinder
15 when the plunger has travelled a predetermined distance within the cylinder.

In testimony whereof I affix my signature.

JAMES BEEBY.