

945,461.

Patented Jan. 4, 1910.

Fig. 1.

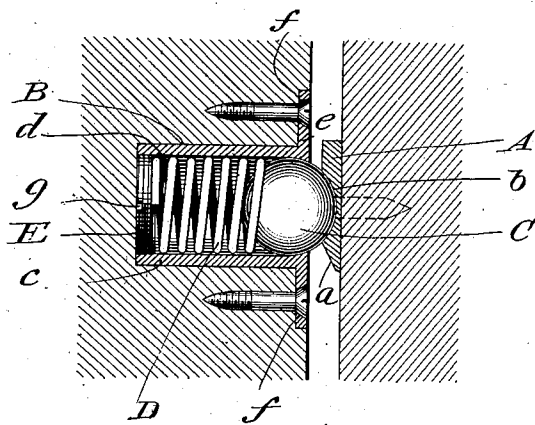
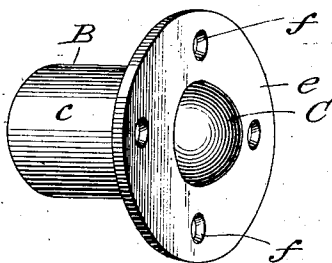


Fig. 2.



Inventor

Witnesses

Phil E. Barnes
J. J. Stealy Jr.

By

R. W. Hubbard
James Shuey Attorney

UNITED STATES PATENT OFFICE.

RICHARD W. HUBBARD, OF ASHTABULA, OHIO.

DOOR-CHECK.

945,461.

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed March 19, 1909. Serial No. 484,446.

To all whom it may concern:

Be it known that I, RICHARD W. HUBBARD, a citizen of the United States, residing at Ashtabula, in the county of Ashtabula and State of Ohio, have invented new and useful Improvements in Door-Checks, of which the following is a specification.

My present invention relates to checks for doors, windows and the like; and it has for one of its objects to provide a check constructed with a view of securely holding doors that should not be locked, against casual opening, and yet adapted to permit opening of the doors when the same are subjected to pressure or pull.

Another object of the invention is the provision of a check which is noiseless and not liable to give rise to jar when it goes into operation, and is, therefore, practically indestructible.

Another object is the provision of a check which because of its construction is adapted to be used to advantage in combination with sliding window sash to adjustably hold the same, and in other applications.

Other objects and advantageous features of the invention will be fully understood from the following description and claim when the same are read in connection with the drawings, accompanying and forming part of this specification, in which:

Figure 1 is a section taken through a door and a door casing equipped with improvements constituting the preferred embodiment of my invention. Fig. 2 is a perspective view illustrating the globular plunger and its casing removed from the door.

Similar letters designate corresponding parts in both figures of the drawings, referring to which:

A is a keeper or striking plate fixed to the inner side of the side stile of a door casing. The said keeper or striking plate is preferably of metal and is provided with a beveled edge *a* and a depression *b*, arranged back of the said beveled edge.

B is the casing of my novel check. This casing comprises a cylindrical portion *c*, interiorly threaded at its rear end, as indicated by *d*, and a face plate *e* having apertures *f* for the passage of attaching screws. In applying the said casing it will be observed that all that is necessary is to bore a large countersink in the edge of the door for the reception of the face plate *e*, and then a

smaller socket to receive the cylindrical portion *c*, after which the casing may be fixed in the door and flush with the edge thereof by passing the screws through the apertures *f* and into the door.

By reference to Fig. 1 it will be noted that the forward end of the bore of the casing B is slightly contracted or reduced in diameter, and it will also be noted that in addition to the casing B, my improvements comprise a globular plunger C movable in the casing in the direction of the length thereof, a coiled spring D backing the said plunger, and a disk E for regulating the tension of the spring, arranged back of said spring. The said disk E is threaded into the rear end of the casing, as shown, and is provided with a kerf *g* for the reception of a screw driver through the medium of which the disk may be turned when it is desired to change the tension of the spring.

In the practical use of the embodiment of my invention described in the foregoing, it will be observed that when the door is swung to a closed position, the globular plunger C will strike the beveled edge *a* of the keeper A and giving rearwardly will ride to and assume a position in the depression *b* of the keeper. In this latter position the globular plunger will effectually prevent casual opening of the door even when the same is subjected to considerable wind pressure. When, however, the door is steadily or suddenly subjected to push or pull, it will be seen that the globular plunger will leave the depression *b* in keeper A and the door may then be freely opened.

The globular, spring-backed plunger C constitutes the chief feature of my present invention for it will be apparent that when said globular plunger engages with the keeper at any point or in any position, the pressing of the plunger against its spring causes the plunger to roll, with the result that jar and noise are eliminated and undue wear of any particular part of the plunger is obviated. From this it follows that the rolling capacity of the globular plunger conduces materially to prolonging the usefulness of the check as a whole.

While I prefer to employ the globular spring-pressed plunger in combination with a keeper or striking plate, I do not desire to be understood as confining myself to the use of a keeper or striking plate, as in some

cases the globular, spring-backed plunger may be made to directly engage the stile of a door casing and serve by frictional contact to retain the door in its closed position and against casual opening.

My improvements are adapted to be used to advantage in many applications other than those described. For instance two of the checks may be arranged in the side stiles of a window casing so that the globular plungers bear against opposite edges of a window sash and serve by frictional contact to adjustably support or hold the sash in the position in which it is placed.

In addition to the practical advantages hereinbefore ascribed to my novel check, it will be observed that the same is simple and inexpensive in construction and is susceptible of quick and easy installation.

Having described my invention, what I

claim and desire to secure by Letters-Patent, is:

In a check, the combination of a casing having an apertured face plate at its forward end and an interior thread in the rear end and also having the forward end of its bore slightly contracted, a threaded disk adjustably arranged in the rear end of the casing body, a globular plunger arranged and movable in the casing body, and a coiled spring disposed in said body and interposed between the disk and the globular plunger.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

RICHARD W. HUBBARD

Witnesses:

JNO. P. HUBBARD,
M. E. KUERINGEN.