

L. E. HANSON.
DOOR CHECK.
APPLICATION FILED JUNE 7, 1910.

982,136.

Patented Jan. 17, 1911.

Fig. 1.

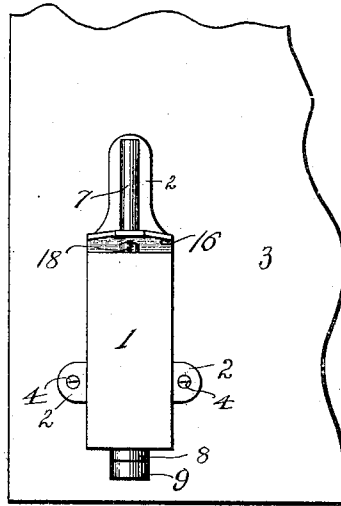


Fig. 2.

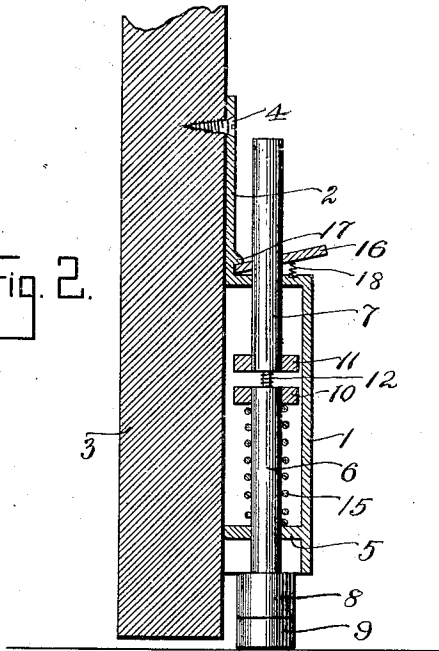
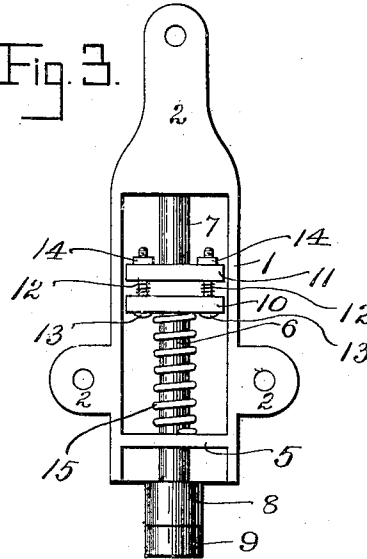


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

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DOOR-CHECK.

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To all whom it may concern:

Be it known that I, LEVI E. HANSON, a citizen of the United States, residing at Galva, in the county of Henry and State of Illinois, have invented certain new and useful Improvements in Door-Checks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to door checks for holding doors open at various angles.

The object of my invention is to provide a simple, inexpensive and efficient device of this character which can be operated and released by the foot thereby obviating the necessity of stooping over to grasp the device by the hand.

Another object is to provide for adjustably cushioning the presser-rod so as to adapt it for use on heavy or light doors.

Other objects will become apparent from the following description.

The invention consists in the features of construction and combinations of parts hereinafter described and specified in the claims.

In the accompanying drawing illustrating the preferred embodiment of my invention: Figure 1 is an elevation of the door check applied to a door. Fig. 2 is a vertical section showing the presser-rod in engagement with the floor, and Fig. 3 is a rear elevation of the door check removed from the door.

The casing or frame 1 of the door check is provided with perforated extensions 2 at its sides and upper end for securing it to the door 3 by screws 4. Said casing has a horizontal partition 5 near the bottom thereof through which the lower section 6 of the presser-rod extends. Said presser-rod is arranged vertically in the casing and is made in two sections, the upper section 7 extending through the top of the casing. The lower end or foot of the presser-rod is enlarged, as at 8, and forms a shoulder which engages the partition 5 and limits the upper movement of said presser-rod. The lower end of said foot is preferably provided with a facing of rubber, leather, or some other resilient material 9 to prevent injury to the carpet or floor, with which it comes into contact.

The two sections 6 and 7 of the presser-rod carry horizontal plates 10 and 11, respectively,

on their adjacent ends. Coiled springs 12 are interposed between said plates and bolts 13 are passed through them and also through said springs. Said bolts 14 are adjustable by means of their nuts 15 whereby the space between said plates may be enlarged or diminished and the tension of said springs correspondingly reduced or increased.

A coiled spring 15 is arranged upon the lower section of the presser-rod and abuts at its opposite ends against the partition 5 and the plate 10 whereby it has a tendency to raise the presser-rod and hold it at its highest position. A clutch in the form of an inclined plate 16 is located on top of the casing, its rear edge being pivotally secured below a transverse rib 17 on the upper extension 2. Said clutch-plate is perforated to surround the upper section of the presser-rod. The outer edge of said clutch-plate is supported upon a spring 18 which normally holds the plate in its inclined position and presses the outer wall of the perforation therein against the presser-rod for clamping the latter against upward movement. It will be understood, of course, that the presser-rod may be lowered by pressing the foot on its upper end and that said rod may be released and permitted to rise under the influence of the spring 15 by pressing the foot on the outer edge of the clutch-plate.

It is sometimes desirable to have the pressure of the door check on the floor resilient or cushioned. This is especially important on heavy doors which are difficult to hold with a rigid check. In such instances, my construction, in which the presser-rod is made in two sections, with interposed springs, arranged below the clamp, will be found very advantageous. My provision of the adjustable bolts connecting the two sections of the presser-rod, whereby the tension of the interposed springs may be regulated is also very important for the reason that it permits fine adjustments to be made in the cushioned pressure of the check upon the floor to correspond with the weight of the door on which the check is to be used.

I claim:

1. In a door check, the combination, with a casing adapted to be secured to a door, of a longitudinally movable presser rod made in two sections mounted in said casing, a clamp engaging the upper section of the rod

for holding it in a lowered position, the lower section of the presser rod extending upwardly into said casing, resilient means mounted around said lower section and housed in the casing for automatically raising said rod when said clamp is released, cushioning means interposed between the sections of said rod, and means for varying the space between said sections whereby the tension of said cushioning means is adjustable, said cushioning means and tension-varying means being also housed in said casing.

2. In a door check, the combination, with a casing adapted to be secured to a door, of a longitudinally movable presser-rod made in two sections mounted in said casing, plates carried by the adjacent ends of said sections, cushioning means interposed between said plates, adjustable bolts connecting said plates, a clamp engaging the upper section of the rod for holding it in a

lowered position, and means to automatically raise said rod when the clamp is released.

3. In a door check, the combination, with a casing adapted to be secured to a door, of a longitudinally movable presser-rod made in two sections mounted in said casing, plates carried by the adjacent ends of said sections, coiled springs interposed between said plates, adjustable bolts connecting said plates and arranged within said springs, a clamp engaging the upper section of the rod for holding it in a lowered position, and means to automatically raise said rod when the clamp is released.

In testimony whereof, I affix my signature, in presence of two witnesses.

LEVI E. HANSON.

Witnesses:

G. A. McCLINTOCK,
JOHN HEADLAND.