

1,100,249.

Patented June 16, 1914.

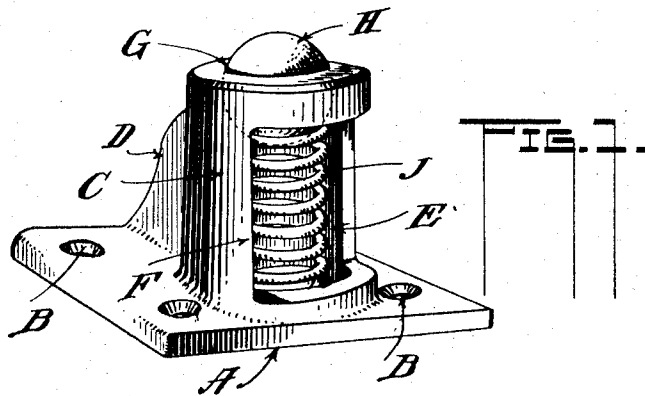


FIG. 2.

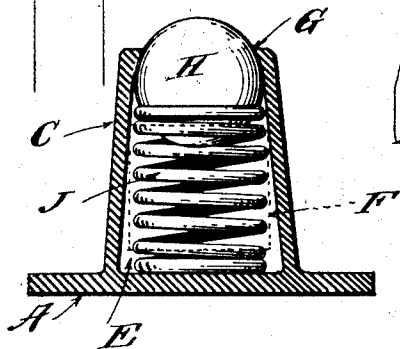
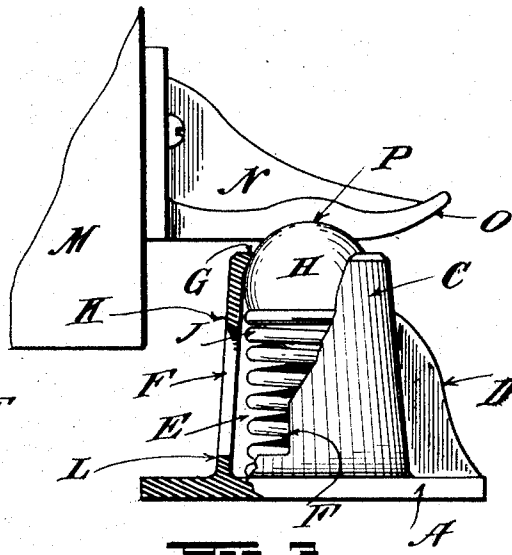


FIG. 3.

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UNITED STATES PATENT OFFICE.

RICHARD NEWSAM, OF PEORIA HEIGHTS, ILLINOIS.

DOOR-CHECK.

1,100,249.

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Application filed June 12, 1913. Serial No. 773,321.

To all whom it may concern:

Be it known that I, RICHARD NEWSAM, citizen of the United States, residing at Peoria Heights, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Door-Checks; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a door check or holder. It relates more particularly however to a new structure in a door holder or check of that type employing a spring held member to lie in the path of and to be engaged by a keeper carried by the door.

The object of the invention is to provide a very simple form of door check or holder of a single part which will require no machine work, or the work of an experienced mechanic; merely the assembling of the various parts necessarily entering into such a structure.

Another object is the provision of a device of this character having an opening or window in its side through which the parts entering into its structure can be introduced so that the device may be assembled in a few moments' time.

To the end that the invention may be understood I have provided the accompanying drawing, in which,

Figure 1 shows the complete device in perspective. Fig. 2 is a transverse section of the same in elevation. Fig. 3 is a side elevation in part section showing a portion of a door and a keeper associated with it.

The device of my invention consists of a single casting comprising a base portion A provided with suitable screw holes B for securing it to the floor, and C is a vertical extension preferably tapered toward its upper end merely to present a pleasing appearance, there being included at the rear of the extension a strengthening fin D.

The extension C is hollow, being cored out at E, and adapted to receive the parts which are employed to hold the door. In the side of the extension is an opening or window F. G is an opening in the top of the extension C, and H is a ball or other similar or suitable member provided with a rounded upper surface which is entered through the window F to seat in said opening G, the said opening being somewhat

smaller than the whole diameter of the ball so that the metal surrounding the said opening constitutes a flange G¹ forming said seat.

J is a spring adapted to bear upwardly against the ball to hold it in place, the lower end of said spring resting upon the base A as clearly shown in Fig. 2.

The window is sufficiently wide to admit the ball and said spring and preferably there is a depending lip K left above the window as a part of the casting to prevent lateral displacement of the spring, there also being preferably a portion L of the part C below the window to prevent lateral displacement of the lower end of the spring. That is to say, should there be any tendency of the spring to slip laterally it might do so if the window extended entirely to the top and bottom but the portions K L of the casting will prevent this.

In constructing a door stop it is important that the structure should be of very low cost both as to its manufacture and the work required in assembling it. The devices of which I am aware have usually consisted of more than one part which must be assembled and secured before the spring and other parts are put in place and then riveted or otherwise secured to one another. This, of course, means expense and a resulting greater cost than one that may consist of but a single part or casting as herein requiring no machine work or the expert work of a mechanic.

From the fact that the body of my door check or door stop is made of and requires but one piece which can be a simple casting, it differs from any device of this type of which I am aware.

In assembling the device the spring J being necessarily a strong one, by means of a suitable tool such as a pair of suitably constructed pincers, for example, can be compressed after the ball has been introduced and placed in its seat through the window and when introduced is permitted to expand to engage the ball and rest upon the base A. The act of assembling thus requires but a moment, the device being complete and ready for use.

M indicates a door and N a keeper secured thereto in any suitable manner and provided with an upturned point O to engage and depress the ball and having a socket P to receive the latter. When the

keeper is moved against the ball the point engages and depresses it, the latter springing up into the socket P holding the door securely.

5 Having thus described my invention what I desire to secure by Letters Patent is:

1. A door holder including in its construction a body of a single part adapted to be secured to a support and provided with an internal bore closed at one end and open at the other, the bore being reduced in diameter at its open end, there being an opening in the side of the member communicating with the bore, a member seated upon the part within the bore at the said open end of the latter and projecting outside the said part in position to be engaged by the door, and a spring seated in the bore and bearing upon the member and holding it elastically in its seat, the opening in the side of the body being provided for the introduction of the member and the spring into said bore.

2. A door holder including in its construction a body of a single part adapted to be secured to a support and having an interior cavity which opens through one of its walls, a member lying within the cavity and being larger in diameter than the opening whereby to seat in said opening and projecting through and outside the same in position to receive a part attached to a door, and a spring lying in said cavity and bearing upon the member to hold it elastically upon its seat, the body including an opening in one of its side walls through which to introduce the said member and said spring.

3. A door holder including in its construction a body of a single part adapted to be secured to a support and having an interior cavity and including an opening in one of its walls communicating with the said cavity, said body having a seat at said opening overhanging said interior, a ball seated in said opening and projecting through and outside of the same in position to be engaged by a part carried by the door,

and a spring engaging and holding the ball elastically in its seat, the body having an opening through one of its side walls through which to introduce said member and said spring.

4. A door holder including in its construction a body of a single part adapted to be secured to a support and having an interior cavity and including an opening at one end communicating with the said cavity, said body including a seat at said opening smaller in diameter than the shortest diameter of said cavity, a ball resting upon the seat within the cavity and projecting partially through and outside of the opening and adapted to engage a part carried by a door, and a spring to hold the ball elastically upon its seat, there being an opening in the side wall of said part through which to introduce the ball and the spring, the last named opening nearest the base of the spring terminating outward from the part of the body upon which said spring rests.

5. As an article of manufacture, a single casting consisting of a base portion and a hollow portion extending therefrom, said base forming a bottom for and closing the lower end of said hollow portion, the latter having an opening at its other end, and further provided with an opening or window in its side communicating with its interior.

6. As an article of manufacture a single casting comprising a hollow portion or shell and a base portion, the latter closing one end of the shell, a member seated within the hollow portion or shell in the open end of the same opposite the base portion, and a spring interposed between the member and the base, there being an opening or window in the side of said shell for the introduction of the member and spring.

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

RICHARD NEWSAM.

Witnesses:

L. E. SUTHERLAND.

L. M. THURLOW.