

M. CHAMBRE.

DOOR CHECK.

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952,511.

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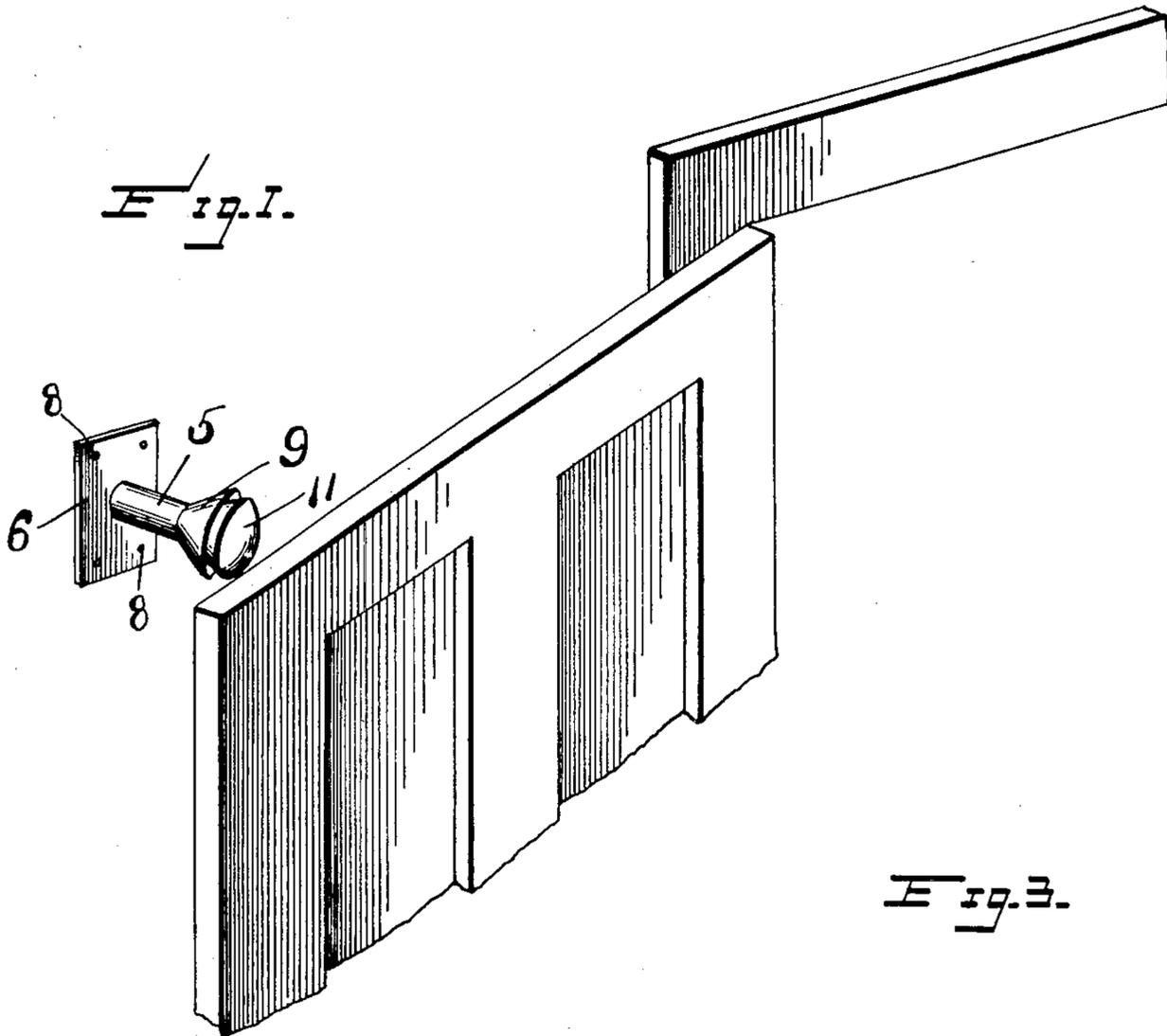


Fig. 1.

Fig. 3.

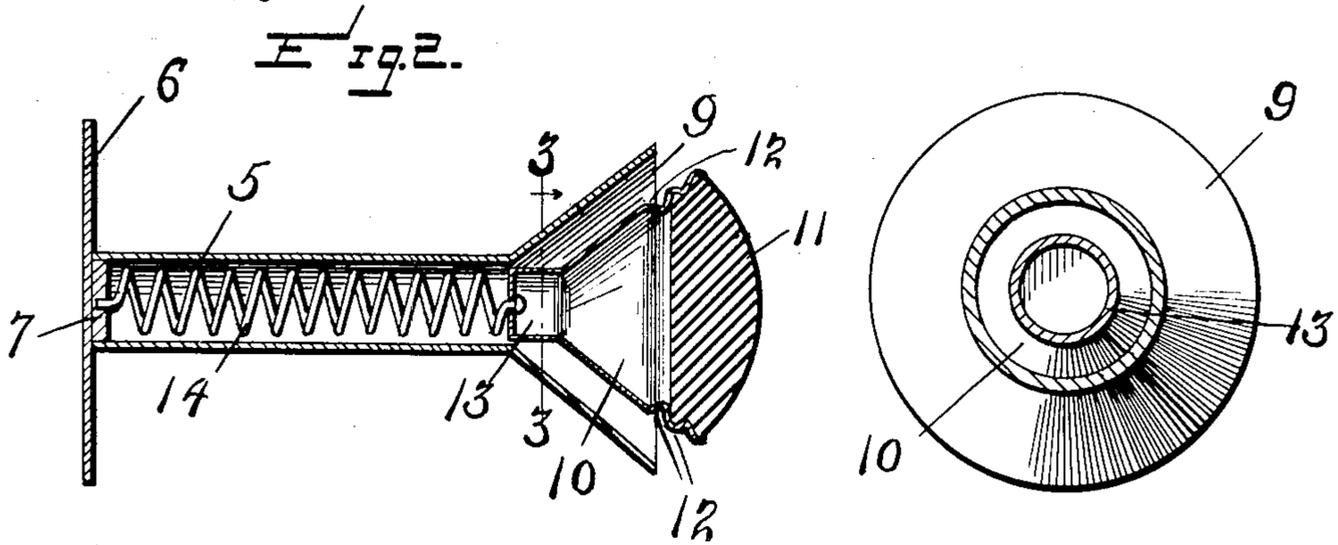
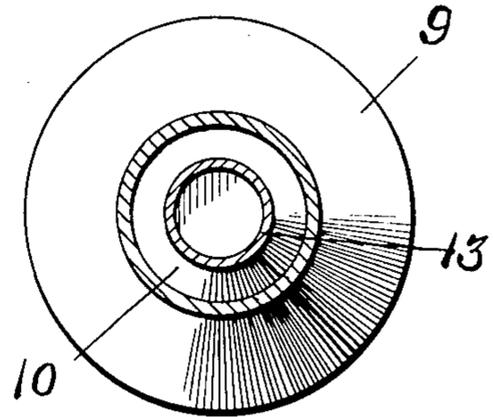


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

MEREDITH CHAMBRE, OF INGLESIDE, NEBRASKA.

DOOR-CHECK.

952,511.

Specification of Letters Patent. Patented Mar. 22, 1910.

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To all whom it may concern:

Be it known that I, MEREDITH CHAMBRE, a citizen of the United States, residing at Ingleside, in the county of Adams and State of Nebraska, have invented certain new and useful Improvements in Door-Checks, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to certain new and useful improvements in door checks and has for its object to provide a simple and inexpensive device of this character which will sustain and cushion the shock or jar of a door when violently slammed or closed, thereby preventing noise and weakening of the hinges or door supports.

Another object is to provide a barrel or cylinder adapted to be attached to the wall adjacent to the door having an enlarged conical outer end, said barrel being adapted to receive a spiral spring, the upper end of which is attached to a buffer adapted to be received in the conical end of said barrel.

25 With these and other objects in view, the invention consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view showing the device secured to the wall; Fig. 2 is an enlarged longitudinal section; and Fig. 3 is a section taken on the line 3—3 of Fig. 2.

35 Referring to the drawings 5 indicates the barrel which is secured to a central stud or boss 7 formed upon the attaching plate 6. The plate 6 is provided with suitable openings to receive the securing screws 8, whereby the device may be attached to the wall or door. The outer end of the barrel 5 is enlarged and conically formed, as shown at 9, to receive a similarly formed buffer 10. The body of the buffer is preferably constructed of sheet metal and in the outer end thereof the resilient head 11 is secured. This head would preferably be formed of rubber and is securely held in the metallic body by bending the material thereof to provide a plurality of annular ridges or beads 12. One of such ridges is embedded in the rubber and the lowermost annular ridge is disposed beneath the head 11, whereby a seat is provided for the same and its accidental release from the metallic body is prevented. The inner end

of the buffer is formed with the short cylindrical extension 13. This extension is of a diameter which will conveniently fit within the barrel 5. In the barrel a spiral spring 14 is disposed. The lower end of this spring is secured in the central boss 7 while the upper end is suitably attached to the inner cylindrical extension 13 of the buffer.

The normal position of the parts is clearly shown in Fig. 2, wherein it will be noted that the periphery of the conical buffer 10 is spaced from the inner wall of the cone-shaped enlargement 9 of the barrel, while the spring 14 is distended to its full extent. Presuming that the device is secured to the wall adjacent to the door, and that the door is opened with considerable force so as to violently contact with the head 11 of the buffer, the buffer will be forced inwardly and seated in the conical end 9 of the barrel, compressing the spiral spring 14. This spring will, of course, be of a strength commensurate with the weight of the door, and together with the resilient buffer head will absorb all shock or jar which would otherwise be imparted thereto. An air cushion is also formed by the chamber which is provided between the body of the buffer and the inner wall of the conical extension 9. This air cushion will also serve to minimize the effects incident to the slamming of the door.

From the foregoing it will be seen that I have provided a door check of comparatively simple construction which is highly effective in use and may be produced at a minimum expense. It will be understood that the device may be secured to the door as well as to the wall and is equally effective in either of said positions. While the form of the device shown and described illustrates what I believe to be the preferred embodiment of the invention, it will be understood that various minor modifications may be resorted to without departing from the spirit or sacrificing any of the advantages thereof.

Having thus described the invention what is claimed is:

1. A door check comprising an attaching plate, a cylindrical barrel secured thereto having an enlarged conical end, a conical buffer disposed in the conical end of said barrel in spaced parallel relation to the inner wall thereof, means connected to the inner end of said buffer and said attaching plate to normally retain the buffer yieldingly in

spaced relation to the conical end of the barrel, the body of said buffer being formed of sheet metal, a resilient buffer head in the outer end of said body, said body being
5 formed with a plurality of corrugations to secure the head therein.

2. A door check comprising an attaching plate having a central boss formed thereon, a cylindrical barrel secured to said boss
10 formed with an enlarged conical end, a conical buffer disposed in the conical end of said barrel in spaced relation to the inner wall thereof, said buffer being formed of sheet metal and having a cylindrical extension on
15 its inner end, a resilient buffer head secured in the outer end of said body, and a spring disposed in said barrel secured to the attaching plate and to the inner cylindrical end of the buffer.

20 3. A door check comprising an attaching plate, a cylindrical barrel secured to said plate formed with an enlarged conical end,

a conical buffer disposed in the end of said barrel normally spaced from the inner wall thereof, the body of said barrel being formed
25 of sheet metal and having its outer end bent to provide a plurality of annular beads, a resilient buffer head disposed in the end of said body, one of the annular beads being
30 embedded therein and another of said beads being disposed beneath the head to provide a seat therefor, said body having a reduced cylindrical extension on its inner end, and a spiral spring disposed in said barrel secured
35 to the attaching plate and to the cylindrical extension of the buffer adapted to yieldingly retain the buffer in its normal position.

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

MEREDITH CHAMBRE.

Witnesses:

P. J. ROBINSON,
M. A. STEPPAN.