April 14, 1925. 1,533,831

F. J. COLCHIN

DOORCHECK

Filed April 19, 1924

Fig. 1.

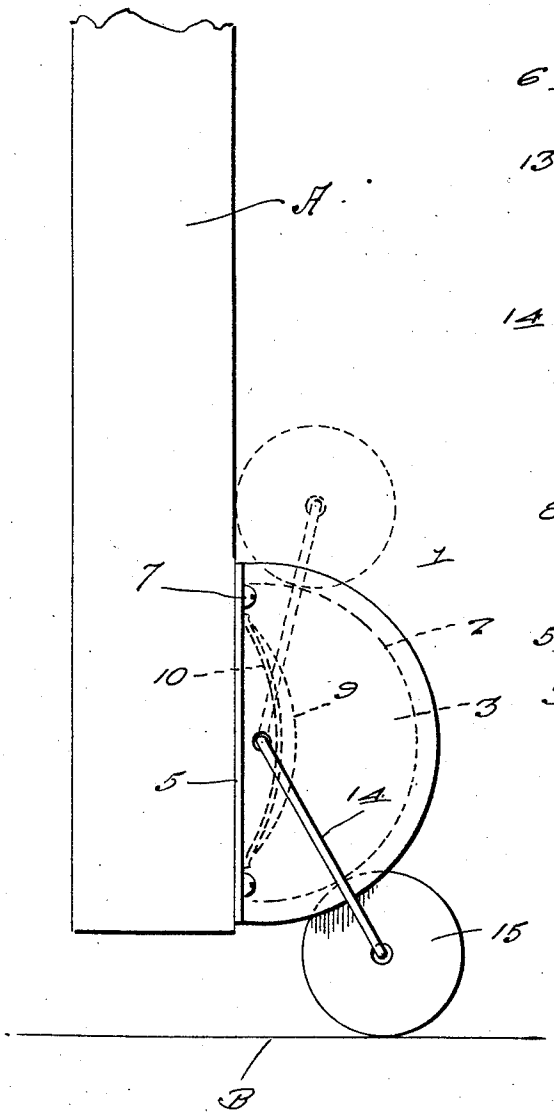


Fig. 2.

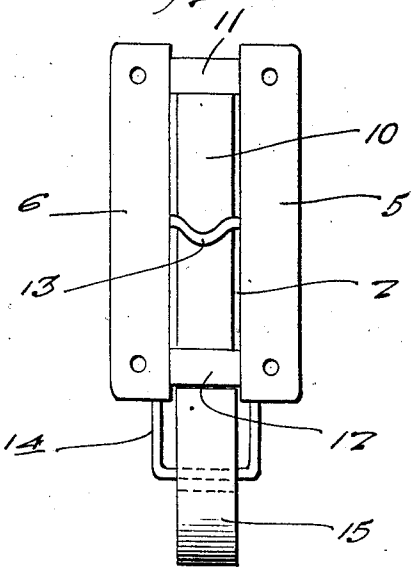
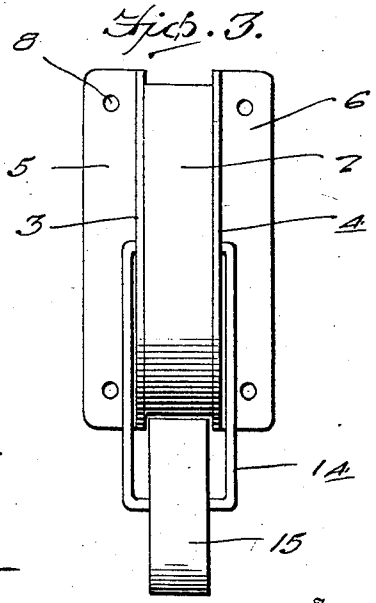


Fig. 3.



Inventor

F. J. Colchin

By Clarence A. O'Brien

Attorney

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UNITED STATES PATENT OFFICE.

FREDERICK J. COLCHIN, OF DECATUR, INDIANA.

DOORCHECK.

Application filed April 19, 1924. Serial No. 707,671.

To all whom it may concern:

Be it known that I, FREDERICK J. COLCHIN, a citizen of the United States, residing at Decatur, in the county of Adams and State of Indiana, have invented certain new and useful Improvements in Doorchecks, of which the following is a specification.

This invention relates to new and useful improvements in door checks and has for its principal object to provide a simple and efficient device which may be secured to the bottom of the door for the purpose of holding the same open in any desired position.

A still further object of the invention is to provide a door check of the above mentioned character, wherein means is provided for holding the door engaging means in an operative or inoperative position as is desired.

A further object is to provide a door check of the above mentioned character, which is simple in construction, inexpensive, strong, and durable, and further well adapted for the purpose for which it is designated.

Other objects and advantages of this invention will be apparent during the course of the following description.

In the accompanying drawing, forming a part of the specification, and in which like numerals designate like parts throughout the same:

Figure 1 is a side elevation of my invention, showing the same in an operative position.

Figure 2 is a rear elevational view thereof, and

Figure 3 is a front elevational view.

In the drawing, wherein for the purpose of illustration is shown the preferred embodiment of my invention, the numeral 1 designates my improved door check, and the same comprises the body portion 2, which is substantially semi-circular in the manner as clearly illustrated in Figure 1 of the drawings. Formed on opposite sides are the side plates 3 and 4 respectively. These plates are also substantially semi-circular in design and are slightly larger than the body portion 1, so as to extend beyond the curved portion of the body member 1, as clearly illustrated, and the same provides a guide means for a purpose to be hereinafter more fully described. The rear ends of the plates 3 and 4 are disposed outwardly in opposite directions to provide the securing flanges 5 and 6 respectively, and these flanges are adapted to fit flush against the face of the door A and any suitable fastening means, such as is shown at 7, may be provided for securing the flanged portions of the plates of the door check to the door, the fastening means 7 being adapted to extend through suitable openings 8 provided in each of the flanges.

The rear face of the body portion 2 has an arcuate recess 9 provided therein, and the recess extends from a point adjacent the upper and lower portions of the body member, in the manner clearly illustrated in Figures 1 and 2 of the drawings. Adapted to be supported in the arcuate recess 9 provided in the rear face of the body portion and between the side plates 2 and 3 adjacent the flanged ends thereof is the flat spring 10. The ends of the spring 10 engage the inner portions of the shoulders 11 and 12 respectively formed by the recess 9, in the manner as clearly illustrated in Figure 1 of the drawing. The purpose of this spring will be hereinafter more fully described.

Extending transversely through suitable registering openings provided in the intermediate portions of the side plates adjacent the flanges formed thereon is the crank portion 13 of the supporting bracket 14, the opposite end of which support thereon the roller 15. The arms of the bracket 14 extend adjacent the outer faces of the side plates 3 and 4 respectively, in a manner as clearly illustrated in Figure 3. The bracket is preferably formed of wire, although any other suitable material may be substituted therefor. The roller 15 which is supported on the outer end of the bracket, is of such size as to operate between the outer edges of the plates and will travel over the curved front face of the body portion 2, the outer curved edges of the plates providing guide means whereby the roller may properly operate over the curved outer face of the body portion.

Normally the roller 15 and supporting bracket 14 therefor are in the position shown in dotted lines in Figure 1 of the drawings, and the door A may be swung open freely. When it is desired to open the door and hold the same in any desired position, the roller 15 and the supporting bracket therefor is swung downwardly so that the roller 15 will travel downwardly over the curved outer face of the body portion 2 between the outer edges of the plates 3 and 4, and as the roller

travels downwardly, the crank portion 13 of the supporting bracket 14 will engage the spring 9 and tend to place the same under tension. When the door has been moved to the desired angle or open position, the roller 15 is further moved downwardly, so that the same will engage the floor B and will frictionally be held between the curved outer portion of the body and the floor and thereby provide a locking means for preventing the accidental opening or closing of the door A after the same has been moved to the desired position. The spring 10 will at all times hold the roller 15 in an operative position when the roller is moved below the center and in engagement with the floor. Furthermore, the spring 10 will hold the roller in an inoperative position when the same is above the center and in the position as shown in dotted lines in Figure 1 of the drawings.

It will thus be seen from the foregoing description that a door check has been provided, which is simple in construction, inexpensive, the parts so arranged as to enable the same to be readily secured to the bottom of the door and easily actuated. The door check may have the body portion and side plates thereof formed of any suitable material, and I do not wish to limit myself to the particular kind of material to be used.

While I have shown the preferred embodiment of my invention, it is to be understood that various changes in the size, shape, and arrangement of parts may be resorted to without departing from the spirit of the invention and the scope of the appended claim.

Having thus described my invention, what I claim as new is:

In a door check, the combination with a body member, the same having a curved outer edge, supporting side plates carried by said body member and having the outer edges thereof curved and extending beyond the curved outer edge of the body member, the inner ends of said plates being disposed outwardly to provide securing flanges, whereby the body member may be supported on a door, the inner face of the body member having an arcuate recess provided therein, a spring supported in said recess, a bracket having its inner end extending transversely through the center of the supporting plate adjacent the flanged ends thereof, the sides of said bracket extending adjacent the outer faces of said side plates and beyond the outer edges thereof, a roller supported on the outer end of said bracket and adapted to travel over the curved outer edge of the body member between the outer edges of said side plates, said roller adapted to engage with a floor when in an operative position, the inner end of the bracket having a crank portion formed therein for engagement with said spring, whereby the roller may be held in an operative or inoperative position.

In testimony whereof I affix my signature.

FREDERICK J. COLCHIN.