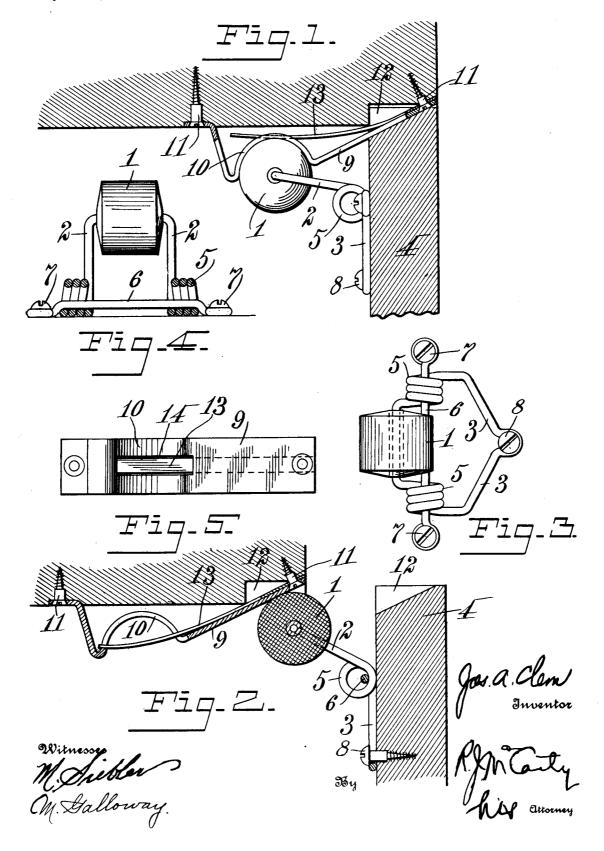
J. A. CLEM.
DOOR CHECK AND HOLDER.
APPLICATION FILED NOV. 22, 1913.

1,105,963.

Patented Aug. 4, 1914.



UNITED STATES PATENT OFFICE.

JOSEPH A. CLEM, OF SIDNEY, OHIO.

DOOR CHECK AND HOLDER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOSEPH A. CLEM, a citizen of the United States, residing at Sidney, in the county of Shelby and State of Ohio, have invented certain new and useful Improvements in Door Checks and Holders; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in door checks and holders and has for its object to provide an efficient and otherwise satisfactory device for preventing the slamming of doors and for holding them closed, as will hereinafter more fully appear

from the description to follow.

In the accompanying drawings, Figure 1 is a sectional view of adjacent portions of a door frame and door showing in top plan 25 view my improved door check and holder, the door in this view being shown in a closed position; Fig. 2 is a similar view showing the door in the act of closing; Fig. 3 is a detached view of the roller frame and roller; 30 Fig. 4 is an elevation of the roller with the spring portions or coils of the frame shown in section; and Fig. 5 is a detached elevation of the roller track or plate.

In a detail description of the invention, so similar reference characters indicate corresponding parts in the drawings and specification.

My improved door check and holder consists of two primary co-acting members, one consisting of a suitable anti-friction roller 1 which is suitably mounted upon the transverse part of two integral arms 2 which are integral parts of a frame 3 that is attachable to a door 4 in suitable position as shown in 45 Figs. 1 and 2. It is desirable that the roller be mounted as near the vertical edge of the door as practicable. The frame 3 and arms 2 are provided with an intermediate spring consisting of coils 5 which transmit a force 50 to the roller through said arms. A bar 6 passes through said spring coils 5 having eyes in its ends through which screws 7 pass to secure the roller frame to the door. There is also a third screw 8 which passes 55 through an eye in one terminal of the frame

and by means of which three points of attachment are provided for securely fixing said roller frame to the door. The spring portions 5 have the requisite strength to maintain the door in a closed position as is 60 shown in Fig. 1 against any resistance less than that which is required to open the door for the purpose of ingress or egress. Constituting the other member and cooperating with the roller 1 is the buffer plate hav- 65 ing an incline track portion 9 and a pocket or recess portion 10 to receive the roller after it travels over said incline track portion. This cooperating buffer plate is secured to the door frame at both ends by means of 70 screws 11 and a portion of the door is suitably recessed as at 12 in order to permit said door to close against the jamb. As before stated, the spring portion of the roller frame is essentially strong in order that the 75 door may be held in a closed position when the roller enters the recess or pocket 10 of the buffer plate. Owing to this necessary strength of said spring, it is desirable that the roller in entering the recess 10 from the 60 incline track portion 9 shall meet with sufficient resistance to prevent a too forcible entrance of said roller into the recess, and owing to the resistance offered by the outer wall of said recess to the passing out of the 85 roller in opening the door, a buffer or spring 13 is provided. This spring 13 may be of any suitable form. In the drawings, I have shown it to be in the form of a plate spring which is attached at one end to the roller 90 track 9 and lies along the under side of said roller track and engages the surface of the roller through a slot 14 in the recess or pocket portion. In Fig. 1, this buffer spring 13 is shown as pressed outwardly by the 95 roller 1 the latter having entered the recess 10 and owing to the strength of the spring portions 5 of the roller frame being greater than the tension of the buffer spring 13 the latter is forced outwardly. In Fig. 2, it will 100 be seen that the roller is traveling up the incline portion 9 of the roller track. This operation takes place as the door is being closed. When the roller arrives at the recess 10, it engages the buffer spring 13 and the 105 latter, yielding, permits said roller to enter said recess with a cushion-like resistance only.

Having described my invention, I claim.

1. A door check and holder, comprising in 110

combination, a roller, a frame upon which said roller is mounted having intermediate portions which provide springs for said roller, means for attaching said roller frame to the door, a buffer plate constituting a track attachable to the door frame and consisting of an inclined portion and a recessed portion over and into which said roller travels, and a spring constructed and artanged to offer resistance to the entrance of the roller into said recessed portion, substantially as specified.

2. In a door check and holder, in combination with a roller, a frame adapted to be attached to a door and upon which said roller is mounted, said frame having resilient portions, a bar extending through said

resilient portions and providing means for the attachment of said frame to a door, a roller track having inclined and recessed 20 portions over and into which the roller passes, the recessed portion of said track having an opening therein, and a resilient member constructed and arranged to engage the roller through said opening and to offer 25 resistance to the entrance of said roller into said recess.

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

JOSEPH A. CLEM.

Witnesses:

R. J. McCarty, Mellie Galloway.