

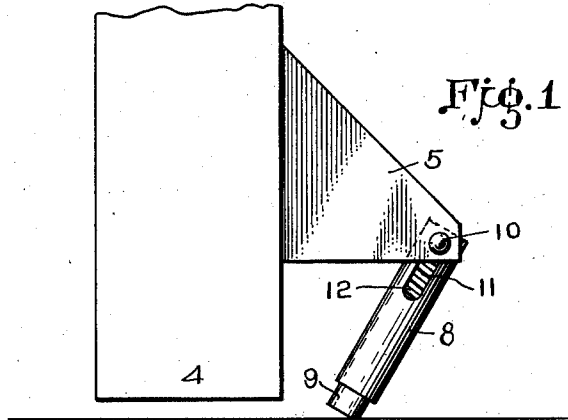
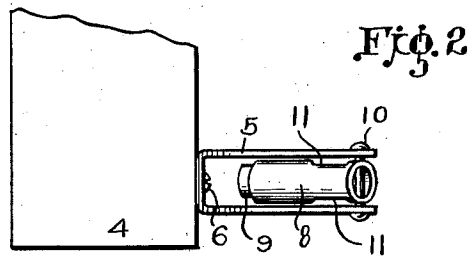
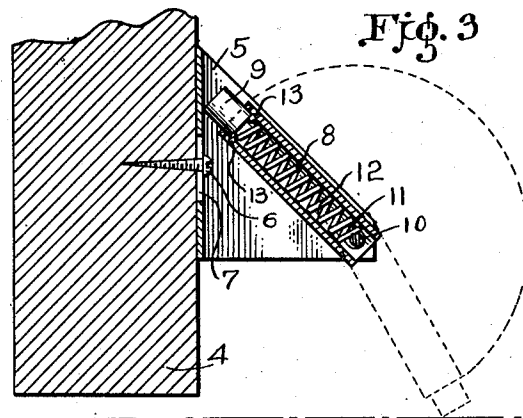
Sept. 15, 1925.

1,553,341

F. P. VAVRA

DOORSTOP

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Inventor.

Frank P. Vavra

by Chas. P. Soper
att'y.

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UNITED STATES PATENT OFFICE.

FRANK P. VAVRA, OF LA GRANGE, ILLINOIS.

DOORSTOP.

Application filed July 18, 1921. Serial No. 485,426.

To all whom it may concern:

Be it known that I, FRANK P. VAVRA, a citizen of the United States, residing in La Grange, Cook County, State of Illinois, have invented certain new and useful Improvements in Doorstops, of which the following is a specification.

My invention relates to door stops or checks, which, when properly secured to a door will prevent it from slamming or closing, and has for its object the production of a device of the class described which will be of simple construction, economical to manufacture, and effective for the purpose contemplated.

A further object of my invention is the construction of a door stop which will automatically and without manual adjustment hold a door by temporary resistance against movement in either direction desired.

A further object of my invention is a door stop wherein the floor engaging member may be readily placed in such position that the device will not function, and may be easily returned to operative engagement with the floor.

Other objects and advantages will appear hereinafter.

In the accompanying drawings I have illustrated an embodiment of what I now consider the preferred form of my invention and I wish to be understood as contemplating such modifications and alterations as can be made, without departing from the spirit thereof, and in these drawings—

Fig. 1 is a side elevation of my invention, attached to a door,

Fig. 2 is a top plan view of same,

Fig. 3 is a central longitudinal section showing the stop member in inoperative position.

Referring to the drawings, 4 is a portion of an ordinary swinging door, to which the stop is shown attached near the lower extremity thereof.

5 is a supporting frame, preferably formed of metal, which can be of various shapes, preferably substantially triangular and U-shaped in cross section, as shown. The supporting frame 5 is rigidly secured to the door 4 by a screw 6, or any other suitable means. The screw 6 passes through a slot 7 in the supporting frame 5, which slot renders the height of the device from the floor adjustable by first loosening the screw 6.

Pivotally mounted near the outer extremity of the frame 5 is the stop member 8, which, together with the resilient tip 9, formed preferably of rubber or other suitable material, is slightly greater in length than the perpendicular distance from the pivot 10 to the floor.

The stop member 8 is preferably tubular in form. The pivot 10 passes through oppositely positioned slots 11 in the stop member 8, which slots permit a vertical movement of the stop member, in addition to its oscillating movement.

12 is a coil spring positioned inside the tubular stop member 8, one extremity of said spring being seated against the pivot 11 as shown in Figure 3. The opposite extremity of the spring is seated against the tongues 13, which are cut out inwardly, also forming a seat for the resilient tip 9, which is retained in position by frictional engagement with the side of the stop member 8.

When the door to which the stop is attached has been closed, the position of the stop member 8 is as indicated in dotted lines in Figure 3. When the door is opened the spring 12 yields and permits the stop member to be pushed over to the position illustrated in Figure 1, whereupon no further resistance is offered to the opening of the door. It will, however, offer resistance, equal to the strength of the spring 12, to the closing of the door. The strength of said spring should be sufficient to prevent accidental closing or slamming of the door, without being so great as to make intentional closing thereof difficult.

The resistance offered by the device can be increased or lessened by the vertical adjustment of the supporting frame 5 with relation to the door.

When it is desired to close the door, sufficient pressure is brought to bear thereon to cause the spring 12 to yield, whereupon the stop member shifts into a trailing position as shown in dotted lines in Figure 3 and offers no further resistance against the movement of the door in this direction.

Should it be desired, after the door is partially opened, to check further opening, the position of the stop member is shifted to that indicated in dotted lines in Fig. 3 by movement of the door.

If desired to eliminate the functioning of the device, the stop member 8 is swung into

the position illustrated in Fig. 3, from which, as is obvious it can easily be returned to operative engagement with the floor.

I also wish to be understood as contemplating the application of my device to windows.

I claim:—

1. A door stop comprising a supporting frame adapted to be adjustably secured to a door, a tubular stop member having a floor engaging tip movably secured to said frame, said stop member being inclined either toward or away from the door, and offering yieldable resistance against movement of the door in the direction opposite to the inclination of the stop member until the pivot passes the vertical plane of said stop member.

2. In a door stop, the combination of a supporting frame adapted to be adjustably secured to a door, a tubular stop member having a pivot passing through oppositely positioned slots, said stop having an oscillating and vertical movement, tongues cut in the wall of the tubular member and bent inwardly, a spring positioned inside of said tubular stop member, one end of said spring being seated against the farthest pivot, the opposite end of said spring being seated against the aforesaid tongue, a resilient tip positioned in the end of said tubular member and retained in place by frictional engagement therein, substantially as described. In testimony whereof I have signed this specification.

FRANK P. VAVRA.