R. R. SNOWDEN.

DOOR STOP.

APPLICATION FILED DEC. 17, 1908.

915,708. Patented Mar. 16, 1909.

Fig. 1.

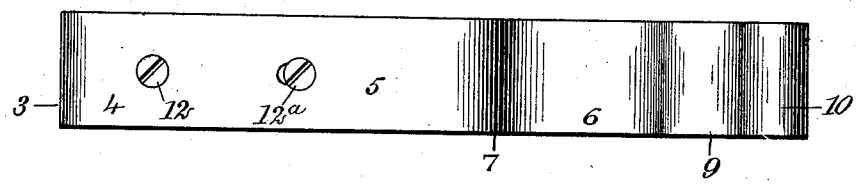


Fig. 2.

Fig. 3.

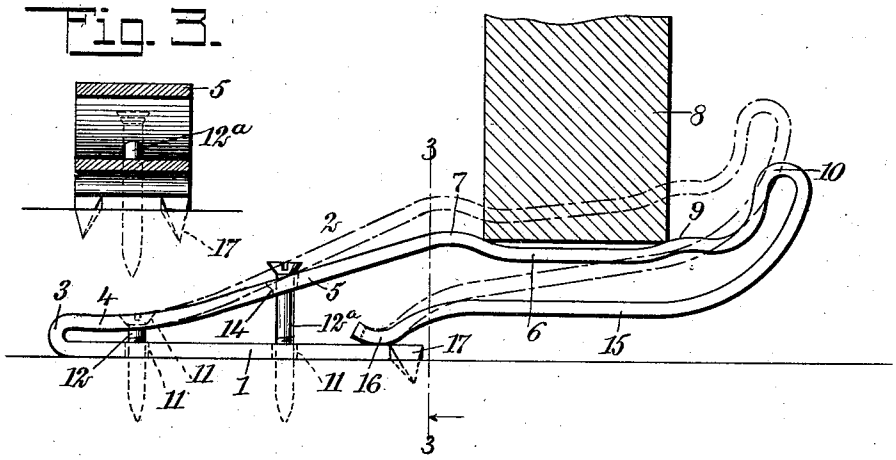


Fig. 4.

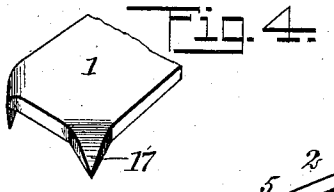


Fig. 5.

WITNESSES

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DOOR-STOP.

No. 915,708. Specification of Letters Patent. Patented March 16, 1909.

Application filed December 17, 1908. Serial No. 467,924.

To all whom it may concern:

Be it known that I, RENÉ R. SNOWDEN, a citizen of the United States, and a resident of Houston, in the county of Harris and State of Texas, have invented a new and Improved Door-Stop, of which the following is a full, clear, and exact description.

This invention relates to door stops, such as are attached to the floor to hold a swinging door in an open position.

The object of the invention is to produce a door stop of simple construction, which will operate efficiently to hold the door against closing, and which is constructed in such a way as to facilitate the adjustment of the device to the edge of the door.

A further object is to construct the device in such a way that in case the door is moved beyond the usual position on the stop, the stop will then operate as a resilient buffer to limit the further movement of the door.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan of a door stop constructed in accordance with my invention; Fig. 2 is a side elevation of the door stop shown in Fig. 1, and showing the lower edge of a door in cross section and held by the stop, in this view the dotted lines represent the position of the stop when not engaging the door; Fig. 3 is a vertical section on the line 3—3 of Fig. 2; Fig. 4 is a perspective of a part of the base plate of the preferred form; and Fig. 5 is a side elevation of the device showing a modified form.

Referring more particularly to the parts, the door stop is preferably formed of a strap or flat piece of resilient metal, such as spring steel or spring brass. It is formed with a foot 1, adapted to rest upon the floor, as indicated. This foot is formed integrally upon the body 2 or leaf of the device, being connected to said leaf by a curved bend or small bow 3. Adjacent to the bend 3, the leaf 2 is formed with a substantially horizontal head 4, and beyond this head the leaf is formed with an inclined extension 5, extending upwardly from the floor. Near the outer or free end of the leaf 2, a depressed extension or offset 6 is formed, which is connected with the extension 5 through a rounded shoulder 7, the extension 6 forming a rudimentary socket which receives the lower edge of the door 8 in the manner indicated in Fig. 2. Beyond the offset 6, the end of the leaf is formed into a shoulder 9 opposite the shoulder 7, and the extreme end of the leaf is curled up, so as to form a buffer or toe 10, as indicated. This buffer is disposed upon the upper side of the leaf, so that it will be engaged by the face of the door in case the door is swung sufficiently beyond the usual stop position, that is, beyond the position in which it is shown in Fig. 2. The leaf 2 and the foot 1 are provided with openings 11, through which fastenings in the form of screws 12 and 12^a are passed, said fastenings being secured in the floor 13, as indicated. The screw 12^a is longer than the screw 12 and passes downwardly through a slightly enlarged opening or slot 14 in the inclined extension 5. When the door is not in engagement with the stop, the resiliency of the leaf holds the inclined extension 5 in engagement with the head of the screw 12^a, so that the stop will normally occupy the position indicated by the dotted lines in Fig. 2.

When the door is opened, it strikes the inclined extension 5 and depresses the leaf until the door passes over the shoulder 7 and into the rudimentary socket formed over the offset extension 6. In this way, the door is held resiliently between the shoulders 7 and 9. If it is desired to adjust the inclined extension 5, this may be done by screwing up or unscrewing the screw 12^a, as will be readily understood. If the door should be thrown violently open in such a way as to pass the shoulder 9, it will strike against the resilient buffer 10, which will absorb the shock. It will be evident that on account of the fact that two fastening devices are provided, the stop is held securely to the floor and cannot shift its angular position in respect to the door in a horizontal plane, and it will be seen that the fastening device 12^a performs the double function of securing the device against this lateral shifting and also operates as an adjusting device for regulating the position of the leaf 2.

In the form of the invention shown in Fig. 2, beyond the upwardly projecting toe or buffer 10, the material is bent downwardly so as to form an integral tongue 15, the end of which is bent so as to form a rounded shoe 16 which seats upon the upper face of the foot 1, as indicated. The resiliency of this tongue 15 assists in keeping the device in its normal elevated position, that is, it tends to hold the device in the position in which it is indicated in dotted lines in Fig. 2. In order to assist in securing the base plate or foot 1 to the floor, the corners of this plate adjacent to the tongue 15, are formed with downwardly projecting spurs 17 which are integral with the plate, as indicated. When the device is placed in position, these are driven into the floor, as will be readily understood.

In Fig. 5, I illustrate a modified form of the invention, in which the base plate 18 is made plain; that is, the spurs 17 are omitted. In addition to this, the tongue 19 which corresponds to the tongue 15 is not turned upwardly so as to form a shoe, but is turned downwardly so as to present a tip 20, the end of which rests against the upper side of the base plate or foot plate 18. In other respects this device has the same form as the preferred form.

Having thus described my invention, I claim as new and desire to secure by Letters Patent,—

1. A door stop having a foot adapted to be attached to the floor and having a leaf with an inclined extension and an offset extension therein, forming a rudimentary socket receiving the edge of the door, and a fastening device securing said stop to the floor, said fastening device affording means for limiting the upward movement of said leaf.

2. A stop having a foot and a leaf integral therewith, said leaf having an inclined extension and being adapted to engage the edge of the door to limit the movement thereof, said leaf having a resilient toe at the extremity thereof adapted to be engaged by the edge of the door, a fastening device for securing said stop to the floor, and means for adjusting the position of said leaf.

3. A door stop having a foot adapted to rest upon the floor and having a resilient leaf connected therewith, said leaf having an inclined extension adapted to be struck by the door when swung open, and having a rudimentary socket therein adapted to engage the edge of the door, a fastening device passing downwardly through said foot and securing the same to the floor, and a second fastening device engaging said leaf and adapted to adjust the position thereof.

4. A stop having a foot with integral spurs formed thereupon adapted to engage the floor, said stop having a leaf with an inclined extension and adapted to engage the edge of the door to limit the movement thereof, said leaf having a resilient toe projecting back from the extremity and resting upon said foot.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

RENÉ RAVENEL SNOWDEN.

Witnesses:

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