J. H. SNOW.

DOOR STOP.

APPLICATION FILED AUG. 1, 1914.

1,163,478.

Patented Dec. 7, 1915.

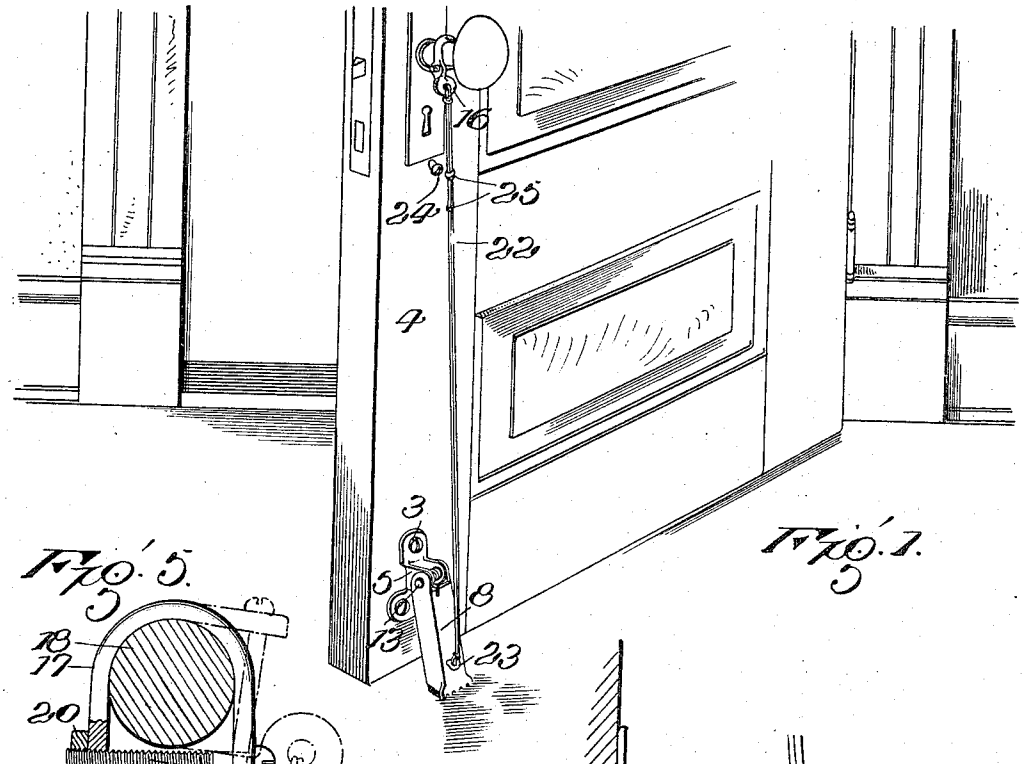


Fig. 1.

Fig. 5.

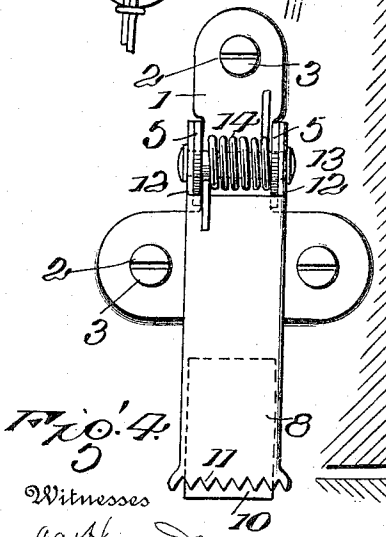


Fig. 4.

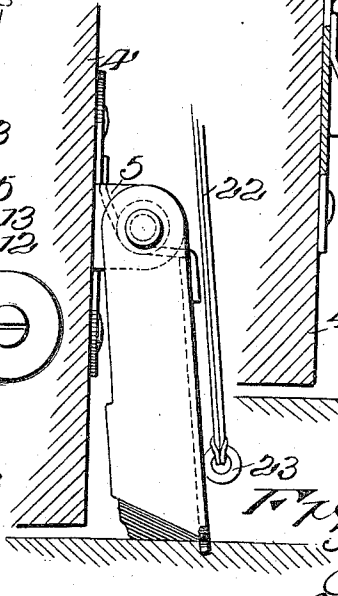


Fig. 3.

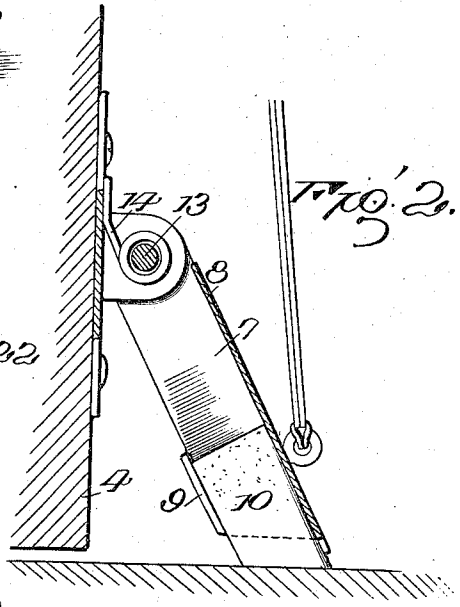


Fig. 2.

Witnesses

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UNITED STATES PATENT OFFICE.

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DOOR-STOP.

1,163,478. Specification of Letters Patent. Patented Dec. 7, 1915.

Application filed August 1, 1914. Serial No. 854,569.

To all whom it may concern:

Be it known that I, JACOB H. SNOW, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Door-Stops, of which the following is a specification.

My invention relates to an improvement in door-stops, and the object is to provide an automatic device for attachment to doors, operable in one direction from the door-knob, and which re-adjusts itself and frictionally engages the door upon the release of the knob.

The invention consists in a tubular sheet-metal body portion having teeth at the lower end and embracing and holding a rubber stop, in connection with a base-plate adapted to be fastened to the door, and to which the body portion has a spring-hinge connection, means for attachment to the door-knob, and a communication extending from said means to the door-stop.

In the accompanying drawings: Figure 1 is a view in perspective showing the application of the device to a door and knob; Fig. 2 is a sectional view showing the stop in raised position; Fig. 3 is a side elevation showing it in its normal engagement with the floor; Fig. 4 is a front elevation; and Fig. 5 is a section through the door-knob showing the attachment applied thereto.

The numeral 1 indicates a base-plate having preferably three holes 2, 2, 2, which receive screws 3, 3, 3, whereby it is fastened to the door 4. Ears 5, 5, are struck upwardly to form hinges.

The body portion 6 is made of sheet-metal bent into angular form in cross-section to form sides 7, 7, back 8, and flanges 9, 9, these several parts being bent around and in rigid contact with an elastic tread 10, preferably tapered at its outer end, which tread is adapted to engage the floor, as shown very clearly in Figs. 1, 3 and 4. Teeth 11, 11, at the lower edge of the back portion 8 are in position to penetrate the floor if the pressure should become so great as to compress the rubber stop until the teeth reach the floor.

The body portion of the stop is provided with ears 12, 12, which embrace the ears 5, 5, and the pin 13 passes through these ears constituting a hinge-pintle therefor, this pin having sleeved thereon a spring 14 which exerts its pressure downward upon the body portion of the stop, keeping its lower end normally in contact with the floor. The strength of this spring is sufficient to keep the stop normally in contact with the floor when not otherwise resisted by the turning of the knob.

A lever 16 has one end curved as at 17 around the shank 18 of the door-knob, where it is held fast by a screw 19, which turns in threads 20 in one end of the clamp as a means for clamping the lever securely to and against turning upon the shank of the knob. A lock-nut 21 turns on the end of the screw. A cord or wire or other flexible connection 22 extends from the lever 16 to the eyelet 23 on the lower end of the body of the stop as a means whereby the stop is raised with the turning of the knob. A pin 24 is placed in position within convenient reach of the knob to have the cord or connection 22 at a point between the knots 25 looped over it when it is desired to hold the stop away from the floor, as shown in Fig. 2.

The device consists of few parts, is easily made of thin sheet-metal, and at a small initial cost, and when applied is most effective in performing the functions for which it is intended, namely of holding the door at any position where it is placed, the stop automatically exerting pressure upon the floor and holding the door the moment the knob is released.

I claim:

1. A door-stop comprising a base, a body portion tubular in form and embracing a rubber tread and having teeth on its lower end, and a spring-hinge connection between the body portion and the base.

2. A door-stop comprising a tubular body portion the lower end of which is beveled and one edge of which is toothed, an elastic tread held in and embraced by the sides of the tube and projecting beyond the body portion and means extending to the knob of the door for operating the stop.

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

JACOB H. SNOW.

Witnesses:
MORRIS PAUL,
W. T. YOUNG.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."