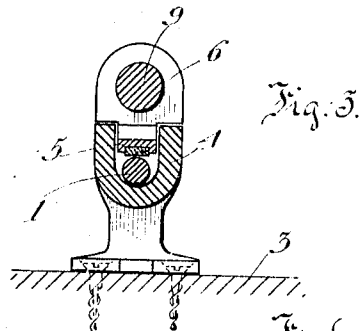
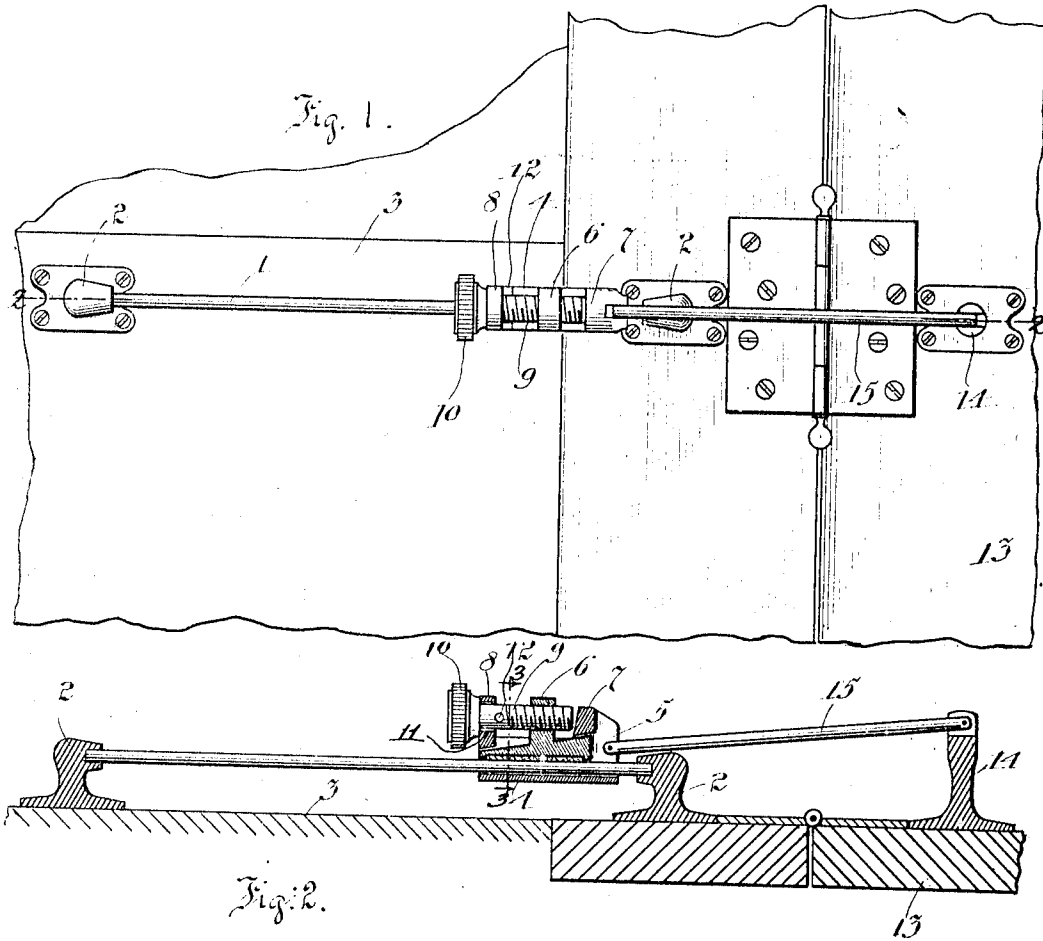


F. W. STANTON.
DOOR STOP.
APPLICATION FILED JULY 11, 1912.

1,039,461.

Patented Sept. 24, 1912.



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UNITED STATES PATENT OFFICE.

FREDERICK W. STANTON, OF CHICAGO, ILLINOIS.

DOOR-STOP.

1,039,461.

Specification of Letters Patent.

Patented Sept. 24, 1912.

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To all whom it may concern:

Be it known that I, FREDERICK W. STANTON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Door-Stops; and I do hereby 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.

This invention relates to improvements in door stops, the object being to provide a device of this character which may be secured to the door and the door frame and rendered adjustable so as to permit the door to swing freely on its hinges, or retard its movement, or entirely prevent movement thereof, as desired.

It consists in the features of construction and combinations of parts hereinafter fully described and claimed.

In the accompanying drawings illustrating the invention: Figure —1— is a fragmentary view in elevation of a door stop embodying my invention. Fig. —2— is a central longitudinal section of the same on the line 2—2 of Fig. —1—. Fig. —3— is a transverse section of the same on the line 3—3 of Fig. —2—.

My invention has for its primary object to provide an adjustable door stop which does not engage the floor and which, furthermore, may be so adjusted as to enable the door to be swung more or less freely as desired thus enabling it to act in the manner of a door check whereby the door may be held in any position to which it may be swung.

The stop comprises the rod 1 horizontally disposed and secured at its ends in standards 2 mounted upon the door 3, preferably between the upper and lower ends thereof, and at an elevation so that it may be easily accessible. On the said rod 1 there is longitudinally movable a carriage 4. The latter comprises a casting having a longitudinal opening therethrough for the passage of said rod 1, said opening being further adapted to receive a wedge 5 having a projection 6 extending upwardly through a longitudinal slot in said casting which is bridged by the parts 7 and 8 of the latter, said projection 6 extending between said parts 7 and 8, as shown. The upper or inclined face of said

wedge 5 contacts with the lower faces of said parts 7 and 8 so that as said wedge is moved toward the part 8 it will be forced into contact with said rod 1 and when moved in the opposite direction will be moved out of frictional engaging relation to the latter. The projection 6 is provided with a threaded opening to receive the threaded shank 9 of the set screw 10, said shank passing through a slot 11 in the part 8 of said carriage 4. The said slot 11 is of a width substantially equal to the diameter of the shank 9 of said screw 10 and of a length greater than said diameter so that the same may move slightly toward and from the rod 1 with which said shank 9 is substantially parallel. The head 10 of said screw is of greater diameter than the shank 9 thereof and is adapted to bear upon one face of said part 8, said set screw being held against longitudinal movement relatively to the latter by means of the pin 12 extending diametrically through said shank 9 and projecting from the same at diametrically opposite points, so that, by turning said screw 10 longitudinal movement will be imparted to the wedge 4 relatively to the carriage 4 to throw said wedge into frictional contact with the rod 1 to any desired degree. In the face of the wedge adapted to frictionally engage the rod 1, I provide a piece of a relatively soft material, such for example as leather, which projects from said face and contacts with said rod 1, said piece of leather or other material being adapted to be soaked in oil or other lubricant so as to prevent screeching thereof upon the rod during travel.

Secured to the door frame 13 is a projection 14 having a bifurcated end portion in which one end of a connecting rod 15 is pivotally secured, said rod being pivotally secured at its other end to said carriage 4 and being adapted to cause said carriage to travel on the rod 1 as the door is swung in either direction. The slot 11 in the part 8 permits the screw 10 to be maintained always parallel with the rod 1 and to travel toward and away from the latter as said wedge 5 moves. The position of the wedge 5 and the pressure exerted thereby upon the rod 1 may be nicely adjusted by giving said screw 10 a partial or entire turn, as a slight movement of said wedge toward the part 8 of the carriage will obviously serve to cause the same to bear more or less strongly

upon said rod. Thus it is possible for the operator to adjust the position of said wedge so that the door may swing freely and without resistance or the same may be adjusted to slightly resist free swinging of the door so that the same may not be slammed by a draft and when so adjusted the movement of the door is checked in opening and closing the same. If it is desired to fix the door in a partially open position the wedge may be drawn up very firmly by giving said screw 10 one or two turns so that excessive force will be necessary to move the carriage 4 on the rod 1.

15 The device is extremely simple, easily applied and easily operated, as will be obvious. I claim as my invention:

1. The combination with a swinging door and its frame, of a guide member mounted on one of said parts, a carriage having an opening therethrough for the passage of said guide member, and longitudinally movable on the latter, said opening having diverging walls, a wedge within said opening having one face bearing on said guide-member and its opposite face bearing on a wall of said opening, a set-screw rotatably mounted in said carriage, means preventing longitudinal movement of said set-screw relatively to said carriage, said set-screw having threaded engagement with said wedge for imparting longitudinal movement thereto relatively to said carriage, and a connecting rod pivotally secured at one end to the other of said parts and at its other

end to said carriage to move the latter relatively to its guide as said door is swung.

2. The combination with a swinging door and its frame, of a guide member mounted on one of said parts, a carriage having an opening therethrough for the passage of said guide member, and longitudinally movable on the latter, said opening having two opposed divergent walls one of which contacts with said guide member, a wedge within said opening having one of its divergent faces bearing on said guide-member and the other on one of said divergent walls of said opening, a projection on the last-named face of said wedge projecting through a longitudinal slot in a wall of said carriage, and having a threaded opening, a set-screw engaged in said opening and rotatably engaged with a part of said carriage and adapted when rotated in either direction to impart movement to said wedge relatively to said carriage to regulate the pressure exerted by said wedge upon said guide member, and a connecting rod pivotally secured at one end to the other of said parts and at its other end to said carriage to move the latter relatively to its guide as said door is swung.

In testimony whereof I have signed my name in presence of two subscribing witnesses.

FREDERICK W. STANTON.

Witnesses:

RUDOLPH Wm. Lotz,
M. M. Boyle.

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