Jan. 17, 1928. 1,656,394

M. J. SASGEN

DOORSTOP

Filed Sept. 4, 1925

Fig. 1

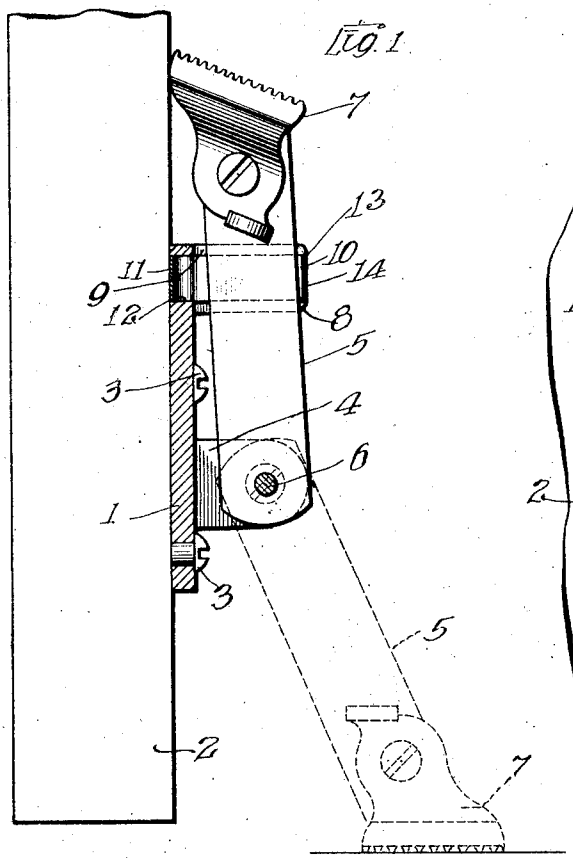


Fig. 2

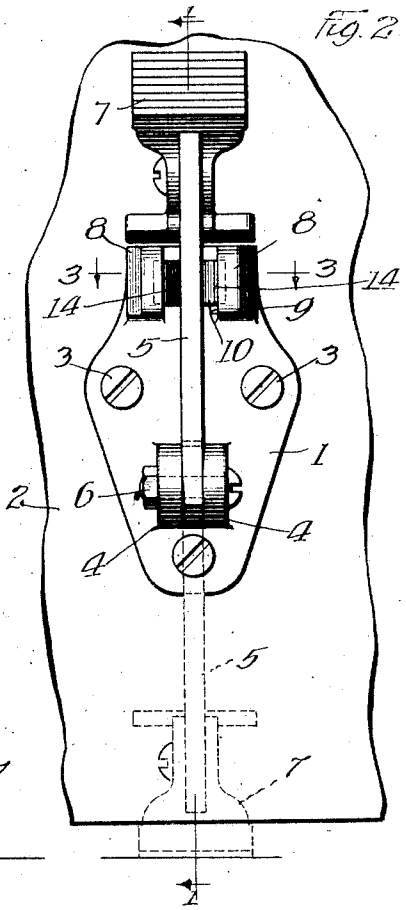
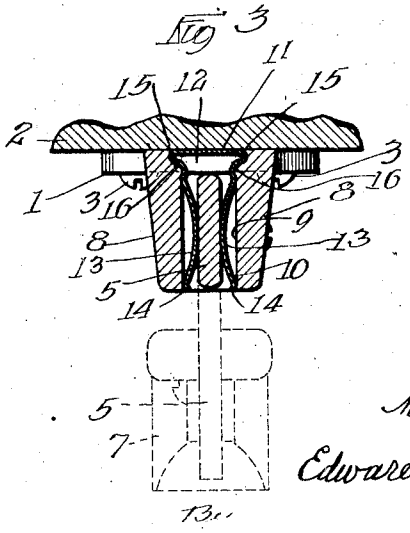


Fig. 3



Witnesses
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UNITED STATES PATENT OFFICE.

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DOORSTOP.

Application filed September 4, 1925. Serial No. 54,511.

My invention relates to improvements in door stops of the swinging lever kind and has special reference to improved means for holding the lever in upper or inoperative position.

My object is to provide a door stop of this type which shall have a rigid base adapted to be secured to a door, a lever pivoted to the base to swing up and down and a simple spring on the base for engaging the lever with a frictional engagement and yieldingly retaining the spring in raised or inoperative position.

My invention will be clearly understood from the following description and the accompanying drawings in which:

Fig. 1, is a vertical sectional view on the line 1—1 of Fig. 2 of a door stop made in accordance with my invention and shown in position on a door;

Fig. 2, is a front elevational view of the stop with the lever in inoperative position in full lines and in operative position in dotted lines; and

Fig. 3, is a horizontal sectional view on the line 3—3 of Fig. 2.

In said drawings 1 is a base adapted to be secured to a door 2, near its lower end by screws 3 two near the upper end of the base and one centrally arranged at the lower end of the base. Near the lower end of the base are a pair of lugs 4 projecting out from the base and spread apart to receive one end of a flat lever 5 between them. The lever is pivotally mounted between the projections 4 on a bolt pivot 6.

The opposite or free end of the lever 5 carries a foot piece 7 adapted for contact with the floor when the lever is in downwardly inclined position, and adapted to frictionally engage the floor to prevent the door swinging in one direction.

At the upper end of the base 1 are two opposed and outwardly extending projections 8 between which there is provided a slot or opening 9 and into which the body of the lever can readily enter as it is swung up to vertical position.

Preferably the base comprises a casting or similar non yielding device and in order to retain the lever in raised or non-operative position I provide spring means arranged between the upper projections 8 for yieldingly engaging the lever.

This spring means, in the form shown, consists of a simple U-shaped spring 10 located in the slot or opening 9 and having a base 11 which is wider than the opening 9, as best shown in Fig. 3.

The base 1 is provided with an opening 12 between the projections 8 through which the prongs 13 of the U-shaped spring can be entered from the back and the opening 12 is widened at its rear end to receive the wide base of the spring. The widened part of the opening 12 is formed to receive the wide base part of the spring and hold the spring with its base flush with the back of the base 1, so that the spring cannot move back when engaged by the lever 5. The prongs 13 are bowed inwardly between their ends so that the lever 5 can be readily entered between. As the lever is pushed in between the prongs 13 it flattens them slightly and the prongs engage the flat sides of the lever with a yielding pressure that is they frictionally engage the lever and retain it in raised position. The extreme ends 14 of the prongs 13 are curved slightly toward each other to avoid any sharp corners or edges which might engage the inner faces of the projections 8 and thus prevent the easy movement of the ends on these surfaces as the prongs are flattened down by the forcing of the lever 5 between them.

To prevent the spring dropping out of its position before the device is secured in place, that is during storage and shipping, each prong near its base end is formed with a small rounded groove 15 and the side walls of the opening 12 is formed with cooperating ribs 16 which enter the grooves 15 when the spring is entered into its normal position. The prongs of the spring are yielding enough to permit them to be pressed together sufficiently to pass the ribs 16 as the spring is pushed into place.

As many modifications of my invention will readily suggest themselves to one skilled in the art to which it appertains I do not limit or confine my invention to the specific details of construction herein shown and described.

I claim:

1. A door stop, comprising a base, a floor engaging lever pivoted to the base to swing up and down, a pair of rigid projections on the base between which the lever is received at its upper position, and a U-shaped spring arranged between said projections for yield-

ingly engaging the lever to retain it in raised position the base having an opening between said projections through which the spring can be entered into place from the rear.

2. A door stop comprising a base, a floor engaging lever pivotally mounted on the lower end of the base to swing up and down, a pair of rigid projections at the upper end of the base between which the lever is received as it is swung up, a U-shaped spring arranged between and protected by said projections and adapted to receive the lever between its prongs as it is entered between said projections, and yieldingly retain the lever in raised position the base having an opening between said projections through which the spring can be entered into place from the rear, the opening being enlarged at the rear side of the base and the spring formed to fit therein to prevent the spring moving forward between said projections beyond its operative position.

3. In a door stop of the kind described, a base, a lever pivoted to the base to swing up and down, a pair of rigid projections arranged to receive the free end portion of the lever between them as it is swung up to its upper position, a U-shaped spring having its prongs between said projections the base provided with an opening between said prongs through the spring can be entered from the back, the spring and base having interengaging parts adapted to retain the spring with its base end flush with the back of the base.

In testimony whereof, I have hereunto set my hand, this 6th day of Aug., 1925.

MICHAEL J. SASGEN.