

U. H. HILL.
 AUTO DOOR STOP.
 APPLICATION FILED JULY 24, 1908.

Patented Nov. 3, 1908.

902,730.

Fig. 1.

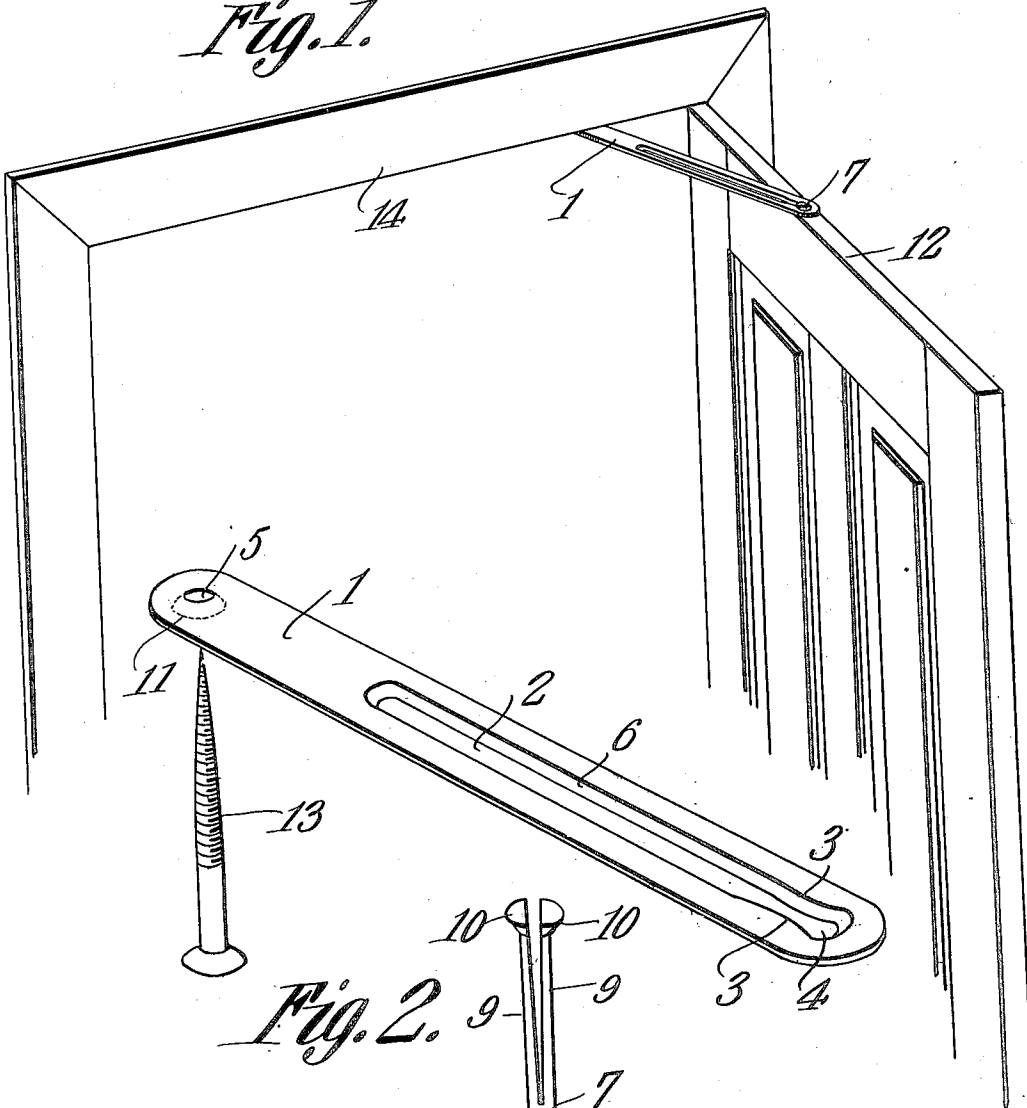
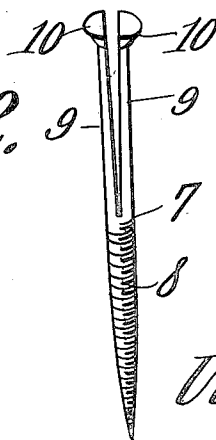


Fig. 2.



Witnesses

E. J. Hawton
 Mason B. Hawton.

Inventor
Ulysses H. Hill.

By *C. A. Snow & Co.*
 Attorneys

UNITED STATES PATENT OFFICE.

ULYSSES H. HILL, OF EL PASO, TEXAS.

AUTO-DOOR STOP.

Patented Nov. 3, 1908.

No. 902,730.

Specification of Letters Patent.

Application filed July 24, 1908. Serial No. 445,217.

To all whom it may concern:

Be it known that I, ULYSSES H. HILL, a citizen of the United States, residing at 405 Santafee street, El Paso, in the county of El Paso and State of Texas, have invented a new and useful Auto-Door Stop, of which the following is a specification.

This invention relates to door-stops.

The objects of the invention are, the provision in a merchantable form, of a device of the above mentioned class, which shall be inexpensive to manufacture, facile in operation, and devoid of complicated parts; a device which shall hold a door positively and firmly; a device which may be readily attached to and removed from a door; a device which shall not impede the passage of persons through the door-way; and finally, a device which shall be inconspicuous, and detract nothing from the appearance of the apartment within which it is employed.

With these and other objects in view, as will hereinafter more fully appear, the invention consists in the novel construction and arrangement of parts hereinafter described, delineated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportions, size and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

In the accompanying drawings, Figure 1 shows in perspective, my invention attached to a door; Fig. 2 is a perspective, showing in detail upon an enlarged scale, the plate 1, the catch-pin 7 and the screw 13 with which the plate 1 is pivotally attached to the lintel 14 of the door-way.

In carrying out my invention, I provide primarily a thin and relatively narrow plate 1, having a longitudinally disposed slot 2 near one of its terminals. From the inner edges of the slot 2, near the end of the plate 1, project inward, the shoulders 3, so disposed as to cause the slot 2 to terminate in a substantially circular opening 4. Near the opposite end of the plate 1, I provide means for mounting the said plate pivotally upon the under surface of the lintel of a door way, the opening 5, adapted to receive an ordinary

screw 13, serving the purpose in the embodiment of the invention shown. The opening 5 should be countersunk from the under side of the plate 1 as shown in dotted line at 11, and the edges of the slot 2 beveled inward, upon the upper side of the plate 1 as shown at 6.

In connection with the plate 1 is employed the catch-pin 7. The catch-pin 7 forms the connection between the plate 1 and the door 12 and comprises a shank 8 adapted to enter the upper edge of the door. The shank 8 may be variously fashioned; I have shown it as threaded, but obviously it may be of any other form adapted to enter and retain a hold upon, the door 12. The catch-pin 7 is slotted longitudinally to form the resilient arms 9 and these arms 9 terminate at their upper ends in like, symmetrically disposed heads 10, their under surface adapted to conform to the bevel 6.

In applying my invention, a common screw 13 is passed upward through the opening 5 and inserted into the lower surface of the lintel 14 of a doorway, the under side of the screw-head seating well into the countersunk edge 11 of the opening 5. The plate 1 is then swung out with the slot 2 across the upper edge of the door 12 and through the slot 2 the catch-pin 7 is introduced into the door 12, the under side of the heads 10, seating in the bevel 6, maintaining a sliding contact with the upper surface of the plate 1 and holding the plate 1 to the upper edge of the door 12. The position of the plate 1 upon the lintel 14 and the point of attachment to the door 12 may be ascertained by experiment, bearing in mind the angle which it is desired that the door 12 shall take when retained in an open position; and it is obvious that the angle may be varied through a wide range by changing the position of the plate 1.

In operation, as the door 12 is swung open, the catch pin 7 will travel in the slot 2 until the shoulders 3 are reached, when the resilient arms 9 will be forced together. As the door moves on to the limit of its travel, the resilient arms 9 will pass the shoulders 3, enter the circular opening 4, assume their normal position and then retain the door in an open position until a force sufficient to overcome their resiliency causes them again to engage the shoulders 3 and pass into the slot 2. When the door is thus closed, the plate 1

will turn pivotally upon the lintel 14 and pass out of sight between the lintel 14 and the door 12.

Having thus described my invention, my claims are as follows;

1. In a device of the class described, a thin and relatively narrow plate having a longitudinal slot; shoulders projecting inward from the edges of the slot; means for mounting the plate pivotally upon the lintel of a door-way; means adapted to enter the upper edge of a door and engage yieldingly the inwardly projecting shoulders.

2. In a device of the class described, a thin and relatively narrow plate longitudinally slotted near one of its terminals and provided with a circular opening near the other terminal; shoulders projecting inward from the edges of the slot; slidably mounted in the slot,

a headed screw, longitudinally slotted, having the under side of its head in sliding contact with the upper surface of the plate.

3. In a device of the class described, a thin and relatively narrow plate longitudinally slotted near one of its terminals and provided with a circular opening near the other terminal; shoulders projecting inward from the edges of the slot, slidably mounted in the slot, a catch-pin having resilient arms adapted to engage yieldingly the inwardly projecting shoulders.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ULYSSES H. HILL.

Witnesses:

G. W. SMITZ.

T. J. STAFFORD.