H. J. CLINE.

DOOR STOP.

APPLICATION FILED APR. 10, 1911.

1,015,424.

Patented Jan. 23, 1912.

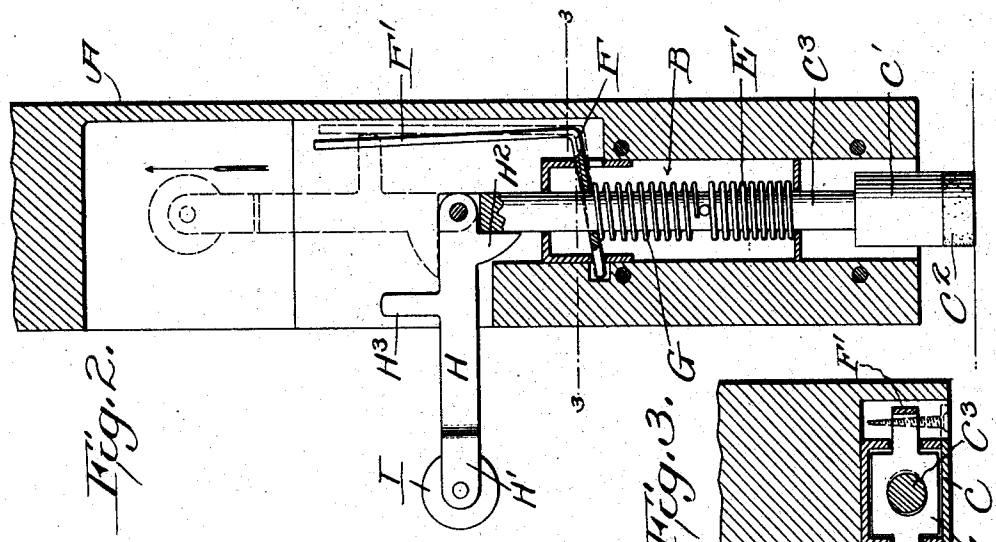

Fig. 2.

Fig. 3.

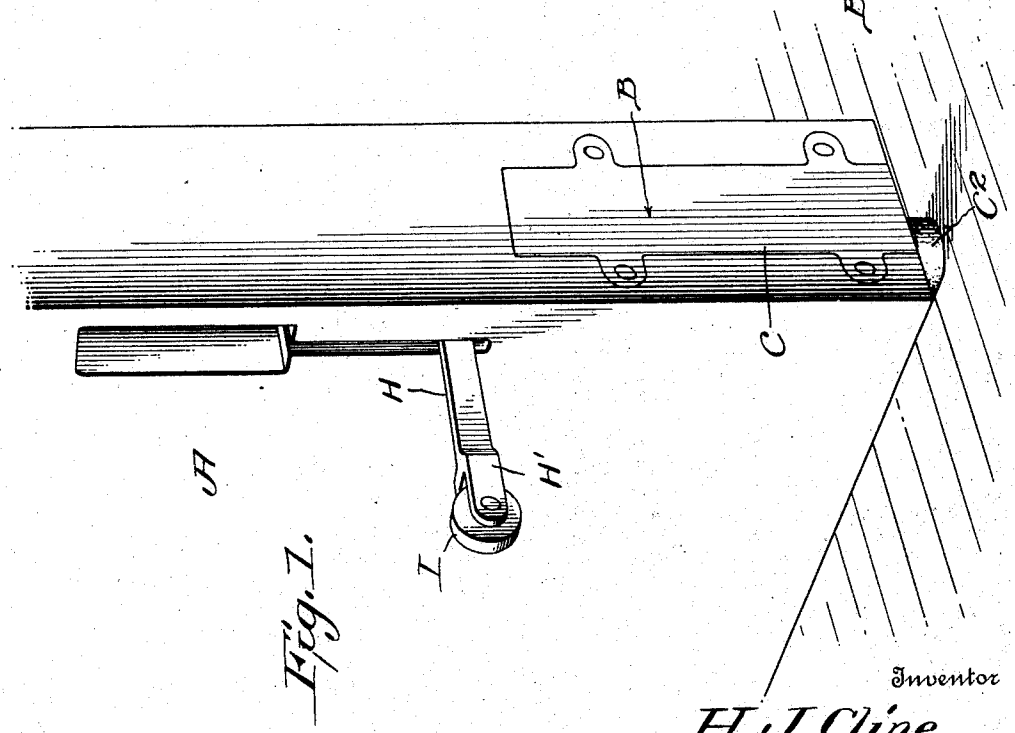

Fig. 1.

Witnesses

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DOOR-STOP.

1,015,424. Specification of Letters Patent. Patented Jan. 23, 1912.

Application filed April 10, 1911. Serial No. 620,228.

To all whom it may concern:

Be it known that I, HUGH J. CLINE, a citizen of the United States, residing at Arkansas City, in the county of Cowley and State of Kansas, have invented a new and useful Improvement in Door-Stops, of which the following is a specification.

This invention relates to certain new and useful improvements in door stops, the object being to provide a door stop which is mortised within the door in such a manner that when not in use it can be moved into such a position that the stop will be invisible.

Another object of my invention is to provide a bumper in connection with the stop, whereby the door will be prevented from engaging the wall when thrown into an open position.

Another object of my invention is to provide means for locking the stop in an extended position, which is so constructed that the same can be released by moving the bumper into a vertical position.

A still further object of my invention is to provide a door stop which is exceedingly simple and cheap in construction, and one which is composed of a very few parts which are so arranged and connected together, that all danger of the parts getting out of order when in use is prevented.

With these objects in view, the invention consists in the novel features of construction, combination and arrangements of parts hereinafter fully described and pointed out in the claims.

In the drawing forming a part of this specification:—Figure 1 is a perspective view of the door showing the application of my improved door stop. Fig. 2 is a vertical section through the same. And Fig. 3 is a section taken on line 3—3 of Fig. 2.

Referring to the drawing, A indicates the door and B my improved stop which is mortised within the edge of the door at the lower corner as clearly shown, said door having a slot in its side which communicates with a recess formed in the door above the stop as will be later described. The stop comprises a casing having a face plate C provided with apertured ears, through which screws are adapted to pass for securing the same in position within the door. Slidably mounted within the casing in suitable bearings, is a bolt C^3 which is provided with a head C′ carrying a rubber disk C^2 which is adapted to be forced down into engagement with the floor in order to hold the door in its adjusted position. A pin extends transversely through the bolt and forms a stop for a coil spring E′ surrounding the same, which acts upon the bolt so as to raise the bolt out of engagement with the floor and to hold the same in that position.

The upper end of the casing is provided with a housing in which is mounted a clutch member F through which the bolt passes, said clutch member being held in a locked position in respect to the bolt by a coiled spring G surrounding the bolt above the pin. The clutch member F is provided with an upwardly extending arm F′ for operating the same, and it will be seen that the arrangement of the spring is such that when the bolt is forced downwardly it is free to move through the clutch member, by means of which the bolt is held against the tension of the spring in order to maintain the door in its adjusted position.

The upper end of the bolt C is bifurcated, in which is pivotally mounted a bumper arm H which is provided with a harp H′ at its outer end carrying a roller bumper I which is adapted to engage the wash board when the door is swung into an open position in order to prevent the door from engaging the wall. The bumper arm is held in a horizontal position by a stop lug H^2, and is provided with a tripping finger H^3 which is adapted to engage the arm F′ of the clutch member F when swung into a vertical position in order to relase the clutch member from the bolt, whereby said bolt will be drawn upwardly within the door out of engagement with the floor. It will also be seen that the bumper arm forms a handle or means for forcing the bolt downwardly.

From a foregoing description, it will be seen that I have provided a door stop with a bumper arm for operating the same, and releasing the clutch member used for holding the stop in a set position.

What I claim is:—

1. A door stop comprising a casing adapted to be mortised within a door, a spring actuated stop member mounted in said casing, a spring frictional clutch member for holding said stop member, and a bumper member carried by said stop member carrying a finger for releasing said clutch member.

2. In a door stop, the combination with a spring actuated stop member, a clutch member for holding said stop member, and a pivoted member carried by said stop member carrying a finger for throwing said clutch member out of engagement with said stop member.

3. A door stop comprising a spring actuated stop member, a spring frictional clutch member for locking said stop member against the tension of the spring of the stop member, a pivoted bumper member carried by the stop member, and a member carried by the bumper member for engaging the clutch member.

4. The combination with a door provided with a recess in its edge and a slot in its side, of a casing secured within said recess, a spring actuated stop member carried by said casing, a bumper member pivotally mounted in said stop member extending out through the slot of said door, a clutch member for engaging said stop member, said clutch member being actuated by the bumper member when swung into a vertical position.

5. In a door stop, the combination with a casing, of a spring actuated stop member mounted in said casing, a spring actuated frictional clutch member arranged in said casing through which said stop member extends, said clutch member being provided with a vertical extending arm, a pivoted bumper member carried by said stop member, means for holding said bumper member at right-angles to the stop member, a roller bumper carried by the bumper member, and a finger carried by said bumper member for throwing the clutch member out of engagement with the stop member when said bumper member is thrown into a vertical position.

HUGH JEFFERSON CLINE.

Witnesses:
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