H. M. DALY.

DOOR HOLDER.

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942,310. Patented Dec. 7, 1909.

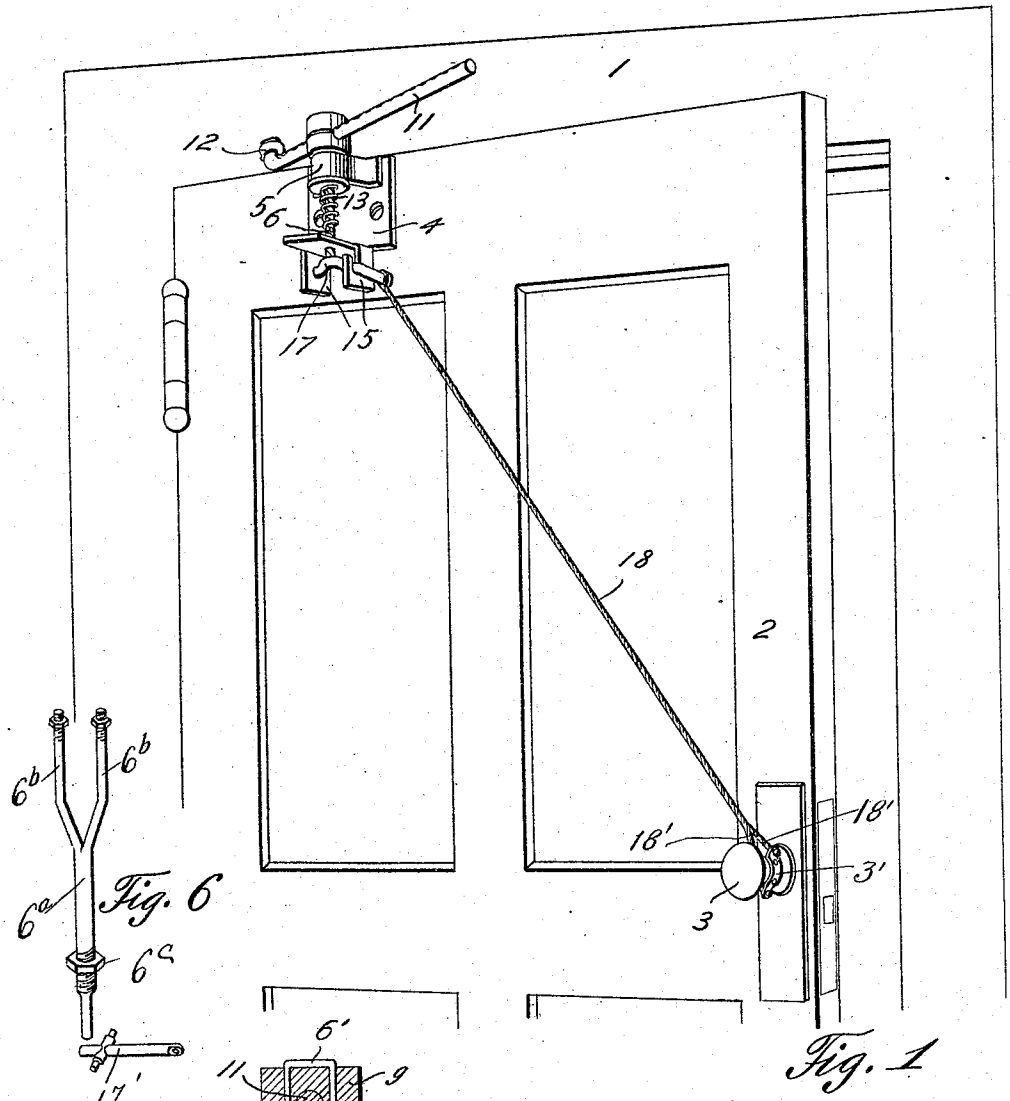

Fig. 1

Fig. 6

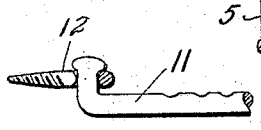

Fig. 5

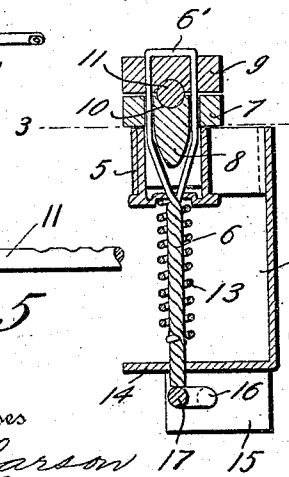

Fig. 2

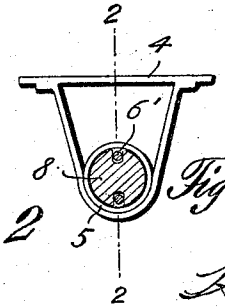

Fig. 3

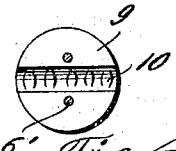

Fig. 4

Witnesses

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HENRY M. DALY, OF PRESIDIO, TEXAS.

DOOR-HOLDER.

942,310. Specification of Letters Patent. Patented Dec. 7, 1909.

Application filed September 1, 1909. Serial No. 515,679.

To all whom it may concern:

Be it known that I, HENRY M. DALY, citizen of the United States of America, residing at Presidio, in the county of Presidio and State of Texas, have invented certain new and useful Improvements in Door-Holders, of which the following is a specification.

This invention embodies certain novel improvements in that type of door holders in which certain locking means is provided on the upper portion of the door and the frame in which it is mounted, said locking means being operable from and by turning the door knob. The object of the invention is to simplify and improve the construction of door holders of this class.

For a full understanding of the present invention, reference is to be had to the following detail description and to the accompanying drawings, in which—

Figure 1 is a perspective view showing a device embodying the invention applied to a door; Fig. 2 is a vertical sectional view taken on the line 2—2 of Fig. 3, and showing particularly the locking means carried by the door and frame; Fig. 3 is a horizontal section on the line 3—3 of Fig. 2; Fig. 4 is a detail view showing more clearly the formation of the groove provided in each of the clutch members, Fig. 5 is a fragmentary view of the pivoted locking rod carried by the door frame, and Fig. 6 is a perspective view of certain modified parts of the invention.

Throughout the following description and on the several figures of the drawings, similar parts are referred to by like reference characters.

Specifically describing the invention it will be observed that the door holder shown in the drawings is applied to an ordinary construction of door frame 1 and door 2 hinged to open and close in the common manner. The door 2 has the usual lock operable by a suitable door knob 3, and on the upper end portion of the door is mounted certain means comprising the essential feature of the invention and adapted to hold the door in an adjusted position at any point in its opening and closing movement.

The mechanism carried by the door consists of a base plate 4 provided at its upper portion with a tubular member 5 closed at the lower end thereof, and through which member a vertically movable tension member 6 is adapted to operate. Just above the member 5 is disposed a clutch member 7 having a central projection 8 extending into the member 5, and the clutch member 7 cooperates with a similar clutch member 9 arranged above the same. In their adjacent faces the clutch members 7 and 9 are provided with grooves 10 roughened as shown in Fig. 4, and said grooves receive therein a locking rod 11 that is pivotally connected at 12 with the upper portion of the door frame, said locking rod being movable between the members 7 and 9.

The tension member 6 comprises a stem at the upper portion of which is formed a loop 6′, and said loop is so arranged that its sides pass through vertical openings in the clutch members 7 and 9, the top of the loop 6′ bearing against the upper side of the member 9. A coiled spring 13 surrounds the stem of the tension member 6, and is secured at its lower end to said member while its upper end bears against the bottom of the part 5, the spring thus normally exerting a tension on the member 6 to hold the clutch members 7 and 9 in firm locking engagement with respect to the rod 11. The lower end of the stem of the member 6 passes through an aperture in a bracket 14 which projects outwardly from the base plate 4, said bracket having downwardly extending spaced flanges 15 in which is mounted a short shaft 16, said shaft having a central crank 17 engageable with the lower end of the member 6, an arm at one end of the shaft 16 being connected by a cord, rope, or flexible connection 18, with the door knob 3.

It will be evident from the foregoing that when the door knob 3 is turned in one direction the connection 18 is pulled upon turning the shaft 16 and raising the crank 17 of said shaft. Since the crank 17 engages the member 6, when said crank is turned the member 6 is raised slightly compressing the spring 13 and such action releases the pressure on the clutch 9 and permits the door 2 to be moved into any suitable position, and the rod 11 freely sliding between the members 7 and 9 in such operation. When the door knob 3 is released the tension member 6 is forced downwardly by the spring 13 and the two clutch members 7 and 9 are again caused to engage with the rod 11 in such a manner as to prevent movement of the door.

The rod 11 may be serrated or roughened so as to facilitate the gripping of the clutch members 7 and 9 with respect thereto.

Fig. 6 of the drawings illustrates a modification in the construction of the member 6. As shown the member 6^a is bifurcated at its upper end to provide spaced parts 6^b that pass through the clutch members 7 and 9 when used in connection therewith. Nuts are screwed on the upper ends of the parts 6^b and the coiled spring 13 when mounted on the member 6^a bears at its lower end against an adjusting nut 6^c. The member 17′ is employed to actuate the member 6^a in the modified form. Applied to the door-knob is a plate 3′ the ends of which are attached to the lower bifurcated end portions 18′ of the connection 18, whereby turning of the knob in either direction will actuate the parts 17 or 17′, as the case may be.

Having thus described the preferred embodiment of the invention, what is claimed as new is:

In combination, a door frame, a door mounted therein, a door lock embodying a door knob and carried by the door, a locking rod pivotally connected with the door frame above the door, and door holding means on the door consisting of a base plate, a supporting member carried by said base plate, a pair of clutch members above said supporting member, a tension member consisting of a stem having a loop at its upper end passing through the supporting member, the sides of the loop passing through the clutch members to the top of the loop bearing against the top of the uppermost clutch member, a spring connected with the lower portion of the tension member and bearing against the lower portion of the supporting member to normally hold the clutch members in engagement with the locking rod which passes therebetween, a bracket at the lower end of said base, a crank shaft mounted on the bracket, and having its crank engaging the lower end of the tension member, and a connection between the crank shaft and the door knob.

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

HENRY M. DALY.

Witnesses:

WILLIAM E. RUSSELL,

MIGUEL NIETO.