June 9, 1931. W. D. FERRIS 1,809,406

DOOR CATCH

Filed Aug. 6, 1926

Fig. 1

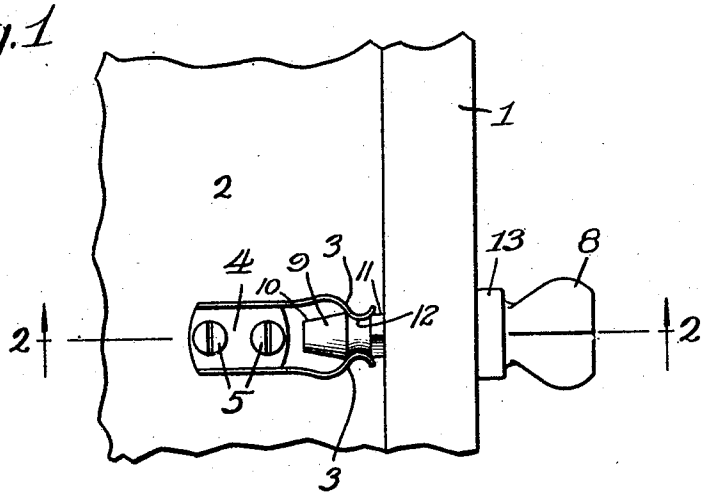
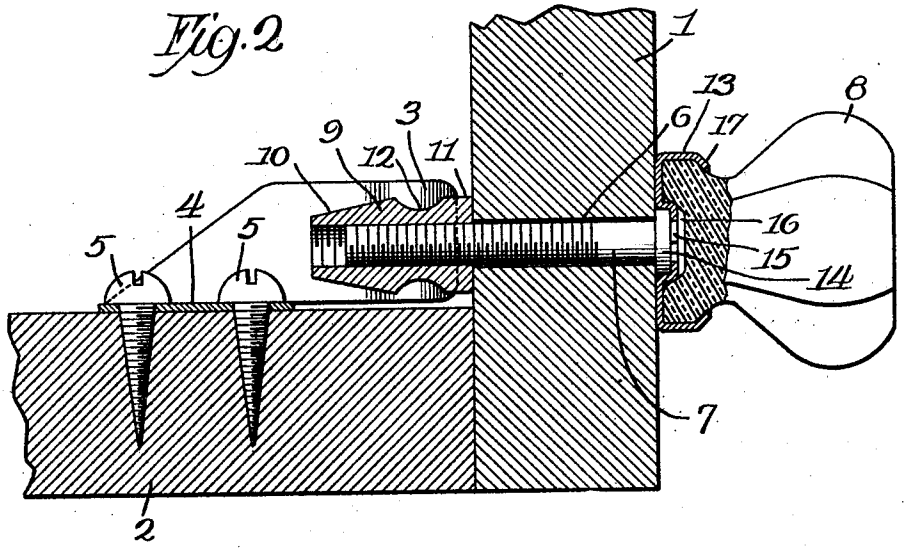


Fig. 2



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UNITED STATES PATENT OFFICE

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DOOR CATCH

Application filed August 6, 1928. Serial No. 297,670.

This invention relates to spring catches in general, but more specifically to those employed on cabinets and cupboards.

Generally stated, the object of the invention is to provide a simple and inexpensive form of spring catch for doors or other closures, having spring means for frictionally holding the door or other closure in closed position, adapted to release the door or closure by a slight outward pull.

It is also an object to provide certain details and features of construction and combinations tending to increase the general efficiency and the desirability of a spring catch of this particular character.

To the foregoing and other useful ends, the invention consists in the matters hereinafter set forth and claimed, and shown in the accompanying drawings, in which,—

Fig. 1 is a fragmentary view of a portion of a cupboard or cabinet, showing a spring catch embodying the principles of the invention, applied to the door and adjacent wall of the cabinet or cupboard.

Fig. 2 is an enlarged section on line 2—2 in Fig. 1.

As thus illustrated, the door 1 of the cabinet or cupboard may be of any suitable character, and may be hinged to swing in the usual or any desired manner, and the wall 2 may be either a side wall or a horizontal wall, as the catch can be applied to various parts of the cabinet or cupboard, adjacent the door, as may be found necessary or desirable.

As shown, the catch comprises a pair of spring jaws 3, which are integral with a base portion 4 that is secured in place by screws 5 or any suitable means, upon some stationary portion of the cabinet or cupboard. A hole 6 is formed in the door 1, and the threaded stem 7 of the knob 8 is passed through this hole, and at its inner end the stem has a threaded sleeve or nut 9 thereon. This sleeve or nut has a tapered portion 10, and has a polygonal portion 11, as shown. Between the portions 10 and 11, there is a circumferentially grooved portion 12 for engaging the curved spring jaws 3 previously mentioned. When the door is closed, the tapered portion 10 will spread the jaws 3 apart, and the jaws will then snap into the grooved portion 12, thus frictionally holding the door in closed position. As the stem 7 is of substantial length, the catch can be used on doors of different thicknesses, by adjusting the sleeve or nut 9 on the stem.

The knob 8 is preferably of glass, and is held in place by the sheet-metal base portion 13, which is secured to the stem 7 previously mentioned. Preferably, the said stem has a flange 14 that is set in a recess in the bottom of the base 13, so that the base 13 may bear against the door 1, as shown. The stem 7 also has a polygonal portion 15 inserted through a similarly shaped opening in the base 13, to prevent rotation of the knob on the stem, and the end 16 of the portion 15 is then riveted over to solidly mount the base 13 on the stem 7, as shown. This is all done first, of course, and the knob 8 is then inserted in the base 13, while the sides of the latter are still straight or cylindrical, and the edge portion 17 of the base is then spun over upon the adjacent portion of the knob to solidly hold the latter in place.

In this way, a very simple and comparatively inexpensive spring catch is provided, which is attractive in appearance, which is easy to operate, as only a slight push is necessary to close the door, and only a slight pull is necessary to open the door. The catch serves also to prevent the door from rattling. The catch is easily installed and is easily removed.

It will be seen that the member 2 of the structure serves as a means to positively limit the closing of the door 1, and thereby to positively limit the insertion of the tapered member 9 between the jaws 3, whereby said jaws and said tapered member do not form a stop to limit the closing movement of the door, but function only to yieldingly hold the door in closed position.

Without disclaiming anything, and without prejudice to any novelty disclosed, what I claim as my invention is:

A spring catch for doors or other closures, comprising a pair of opposed spring jaws, means for attaching the jaws to a stationary support adjacent the door, a rotatable catch

member tapered to be pushed between said jaws, said member having a polygonal nut portion and a circumferential groove to receive the jaws, so that said member is operative in any rotated adjustment thereof, means for mounting said member on the door in position to engage the jaws, having screw provisions whereby rotation of said member alone tightens the member against one side of the door, whereby the member is adjustable within limit for any thickness of door, a handle for pushing the door closed in latched position and for pulling the door open, said member serving also to retain said handle in position on the door, and means other than said member for positively limiting the closing of the door.

Specification signed this second day of August, 1928.

WILLIAM D. FERRIS.