

No. 885,576.

PATENTED APR. 21, 1908.

W. T. BLOUNT, JR.
COMBINED LATCH AND LOCK.
APPLICATION FILED JAN. 16, 1906.

Fig. 1.

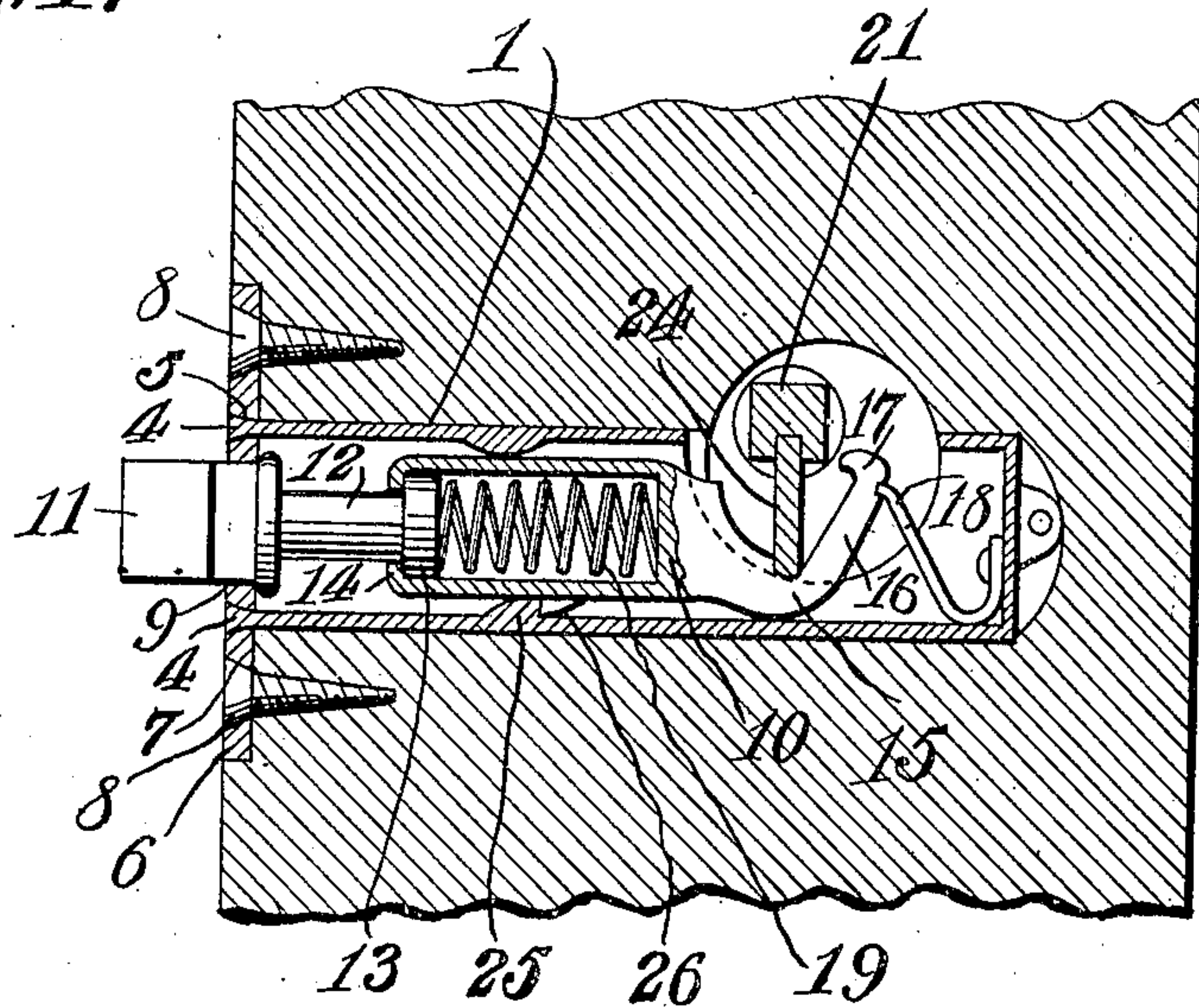
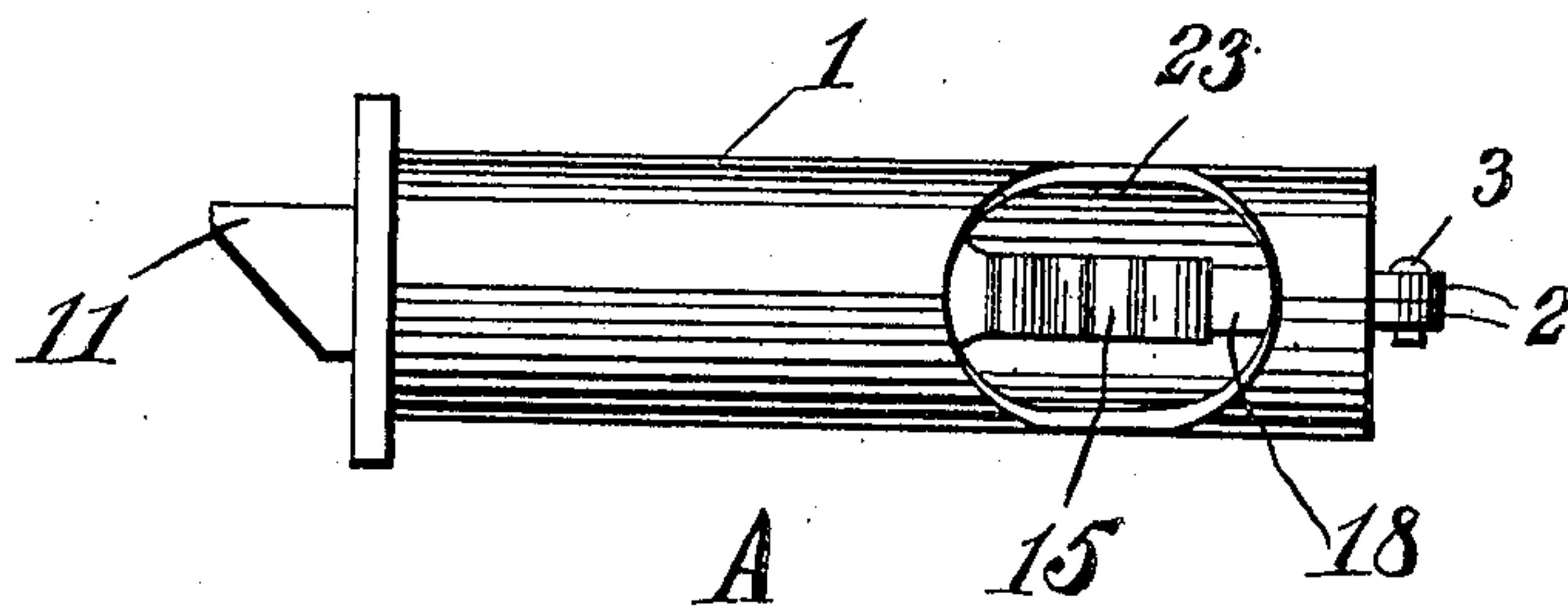


Fig. 2.



Witnesses

Joe. P. Waller.
Jul. Garner

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UNITED STATES PATENT OFFICE.

WILLIAM T. BLOUNT, JR., OF THUNDERBOLT, GEORGIA.

COMBINED LATCH AND LOCK.

No. 885,576.

Specification of Letters Patent.

Patented April 21, 1908.

Application filed January 16, 1906. Serial No. 296,361.

To all whom it may concern:

Be it known that I, WILLIAM T. BLOUNT, Jr., a citizen of the United States, residing at Thunderbolt, in the county of Chatham and State of Georgia, have invented new and useful Improvements in Combined Latches and Locks, of which the following is a specification.

My invention relates to combined locks and latches, and its primary object is to provide a device of this character which is comparatively simple of construction, one which is durable and efficient, and one which can be manufactured and sold at a low cost.

With the above and other objects in view, the invention consists in the construction, combination and arrangement of parts hereinafter fully described, claimed and illustrated in the accompanying drawings, wherein:

Figure 1 is a central longitudinal sectional view of the latch, and Fig. 2 is a detail top plan view of the latch.

Referring to the drawings by reference characters, A designates the latch casing which is made preferably of two semicircular sections 1—1, the rear ends of the sections being provided with perforated lugs 2 through which passes a bolt 3, or other suitable fastening means, which unites the rear ends of the sections. The front ends of the sections are provided with downwardly extending and integrally formed projections 4, said projections extending through openings 5 in a face plate 6, and are upset to firmly secure the sections thereto. The projections 4 serve not only to secure the face plate to the casing A, but also serve to unite the forward ends of the casing. The face plate is provided with openings 7 through which extend screws 8 to secure the casing and face plate in applied position to a door, said face plate being also provided with a latch bolt opening 9 registering and communicating with the interior of the casing A. Inasmuch as the casing A is circular in cross-section, it is only necessary to drill a small opening in the door to receive the same, whereby the cost of mounting the latch in applied position is reduced to the minimum, as the time and labor necessary to provide the usual mortise is avoided.

A latch bolt carrying or operating member 10 is slidably mounted within the casing A, and is of tubular formation, as is fully illustrated in Fig. 1 of the drawings. The

latch bolt 11 is provided with a rearwardly projected shank or stem 12, said shank or stem being provided with a head 13 mounted within the member 10. The forward end of the member 10 is bent downwardly, as at 14, to engage over the head 13 to prevent its being withdrawn therefrom. The rear end of the member 10 is provided with a rearwardly disposed arm 15, said arm being cut away to provide an upwardly inclined working face 16, and the extremity thereof being curved inwardly over said face 16 to provide a stop 17. The member 10 is adapted to be moved rearwardly within the casing A by means hereinafter set forth, and the same is retained normally projected by means of a spring 18, said spring having one end secured to the rear of the casing A, and its free end disposed in engagement with the rear end of the arm 15. The rearward movement of the member 10 withdraws the latch bolt 11 within the casing A, while its forward movement projects the latch bolt 11. In order to retain the latch bolt 11 projected yieldingly through the opening 9 to permit the closing of the door without moving the said member 10, I mount within said member behind the head 13 an expansion spring 19.

The knob spindle 21 which is mounted in bearings in suitable escutcheon plates (not shown) carries suitable knobs and is preferably rectangular in cross-section. Secured to the knob spindle 21 and projecting into the casing A through an opening 23 therein, and disposed in the cut-away portion of the arm 15, is a lever 24. The turning of either knob in one direction will cause the lower end of the lever 24 to move over the working face 16 of the arm 15 and thereby withdraw the latch bolt 11 within the casing A. When the knob is released the spring 18 will project the latch bolt 11, and the forward movement of the member 10 is limited by the engagement of a lug 26 secured to said member with a stop 25 formed on the interior of the casing A. The stop 25 is annular, and also causes the member 10 to move in a direct line within the casing A, whereby all liability of its failure to properly work is obviated. The yielding connection between the latch bolt 11 and the member 10 permits the former to move within the casing A when its forward end strikes a keeper plate when the door is closed without turning the knob spindle 21, whereby the closing of the door is rendered easy and practically noiseless.

The latch bolt 11 is revolubly mounted within the member 10 so as to permit of its being reversed to adapt the latch for application to doors swinging in either direction, 5 the manner in which the latch bolt may be reversed being obvious.

From the foregoing description, taken in connection with the accompanying drawings, the construction and mode of operation of 10 the invention will be understood without a further extended description.

Changes in the form, proportions and minor details of construction may be made within the scope of the invention without 15 departing from the spirit or sacrificing any of the advantages thereof.

Having fully described and illustrated my invention, what I claim is:

1. A device of the character set forth, 20 comprising a cylindrical casing, a tubular member movably mounted within the casing and provided with a rearwardly and upwardly inclined arm, a latch bolt slidably mounted within the casing and movably con- 25 nected with the tubular member, a spring mounted within the tubular member behind the latch bolt, and means for engaging the arm of the tubular member for withdrawing the latch bolt.

30 2. A device of the character set forth, comprising a cylindrical casing provided on

its interior with an annular shoulder, a tubular member movably mounted within the casing and provided with a lug adapted to engage said shoulder, means for retaining 35 the tubular member normally projected, a latch bolt slidably mounted within the casing and movably connected with the tubular member, and a spring mounted within the tubular member behind the latch bolt. 40

3. A device of the character set forth, comprising a cylindrical casing provided on its interior with an annular shoulder, a tubular member movably mounted within the casing and provided with a lug adapted to engage 45 said shoulder, said tubular member being provided with a rearwardly disposed arm cut-away to provide an upwardly inclined working face, means for retaining the tubular member normally projected, means for re- 50 tracting the tubular member, a latch bolt provided with a shank portion having a head, said head being slidably mounted within the tubular member, and a spring mounted within the tubular member behind said 55 head.

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

WILLIAM T. BLOUNT, JR.

Witnesses:

GORDON SAUSSY,
E. M. McDONELL.