(No Model.)

L. SCHOEN & S. FRIEDENSTEIN.

BOLT.

No. 412,986. Patented Oct. 15, 1889.

Fig. 1.

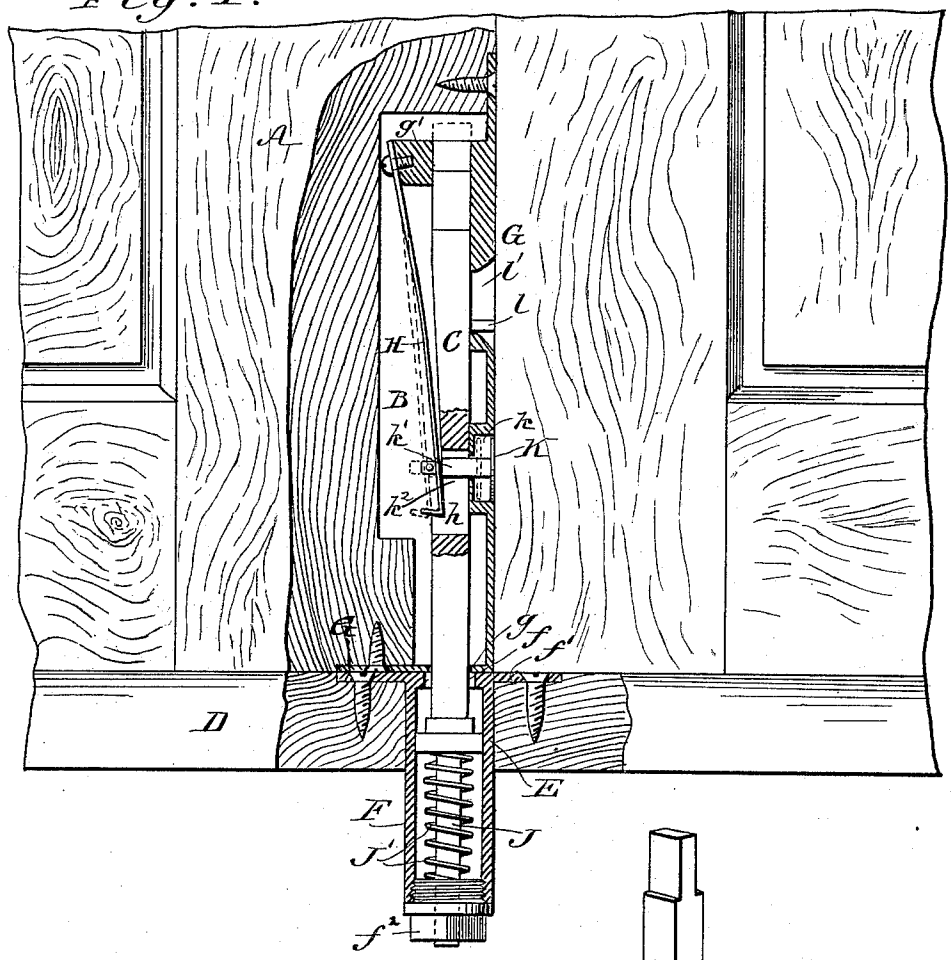
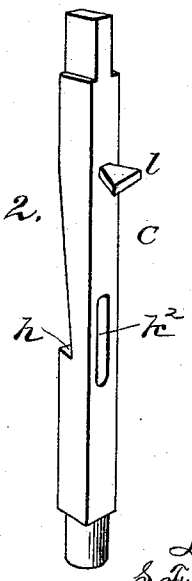


Fig. 2.



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UNITED STATES PATENT OFFICE.

LOUIS SCHOEN AND SIMON FRIEDENSTEIN, OF NEW YORK, N. Y.

BOLT.

SPECIFICATION forming part of Letters Patent No. 412,986, dated October 15, 1889.

Application filed March 30, 1889. Serial No. 305,339. (No model.)

To all whom it may concern:

Be it known that we, LOUIS SCHOEN and SIMON FRIEDENSTEIN, both of New York city, in the county and State of New York, have invented a new and Improved Door-Bolt, of which the following is a full, clear, and exact description.

Our invention relates to door-bolts designed to engage with a socket in the door-sill; and the invention consists in the construction, arrangement, and combination of parts, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a broken front elevation of a door and door-sill having our invention applied thereto, and Fig. 2 is a perspective view of the bolt removed from the door.

A represents a door chambered at B to receive the bolt C. The door-sill D is apertured at E to receive the socket F, the aperture *f* of which registers with the bolt C when the door is closed. The lower corner of the door is faced with the angle-plate G, which closes in the chamber B, and the foot of the angle-plate is apertured at *g* for the passage of the lower end of the bolt C. Near its upper end the said angle-plate is formed upon its inner surface with the guide-lug *g'*, which is apertured to receive the upper end of the bolt C, and to this lug is secured the spring-catch H, the lower end of which is adapted to engage with the notch *h* at the back of the bolt C to hold the bolt when thrust down into the socket F. When so thrust down into the socket F to lock the door, the bolt C forces down the plug or follower J in the said socket. This follower or plug is acted upon by a coiled spring J', which normally holds the plug lifted to close the aperture *f*—that is, holds the plug lifted when the bolt C is lifted out of the said aperture, so that the plug prevents the clogging of the aperture by snow, ice, or dirt. The spring J' will usually be strong enough to force upward the bolt C when the spring-catch H is disengaged from the notch *h*, so that said spring serves the double purpose of lifting the plug or follower and also lifting the bolt C.

The spring-catch H may be disengaged from the notch *h* by a push-button K or other suitable device. The head of the said push-button is inclosed in a socket *k*, made in the face of the plate G, and the stem *k'* thereof reaches through a slot k^2 in the bolt C, and connects with the lower end of the spring-catch, as clearly shown, so that a slight pressure on the head of the button will disengage the catch from the bolt and permit the spring J' to force the bolt C upward out of the socket F, thus unlocking the door and at the same time closing the aperture *f*. When the bolt is lifted so that the notch *h* stands above the lower end of the spring-catch and there is no pressure on the button K, the spring H reacts upon the inner face of the bolt and serves to retain it in elevated position.

The bolt C is forced down to lock the door by the finger-piece *l*, fastened to the bolt and projecting through slot *l'* in the angle-plate G, as shown clearly in Fig. 1.

The upper end of the socket F is formed with the escutcheon-plate *f'*, to be set in the door-sill, and the lower end of the socket is closed by a screw-plug f^2, which may be removed for the insertion of the follower J and spring J', and this plug is centrally apertured to form a bearing and guide for the lower end of the follower.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The plate G, having bearings for the door-bolt C, in combination with said bolt, spring H, and push-button K, attached to the spring and held in a recess in the plate G, substantially as described.

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Witnesses:
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