

F. STOWE.
Door-Latches.

No. 144,931.

Patented Nov. 25, 1873.

Fig: 1.

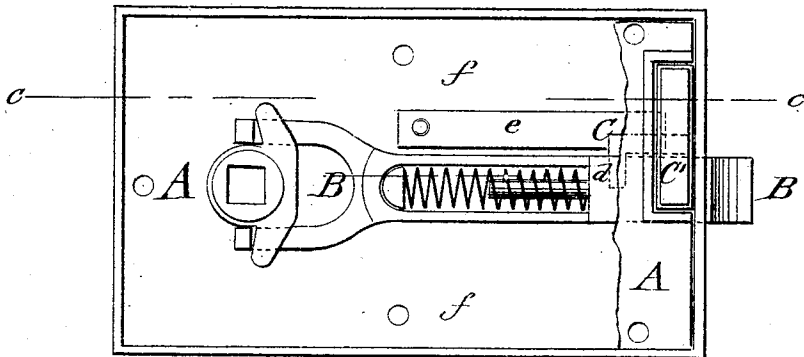
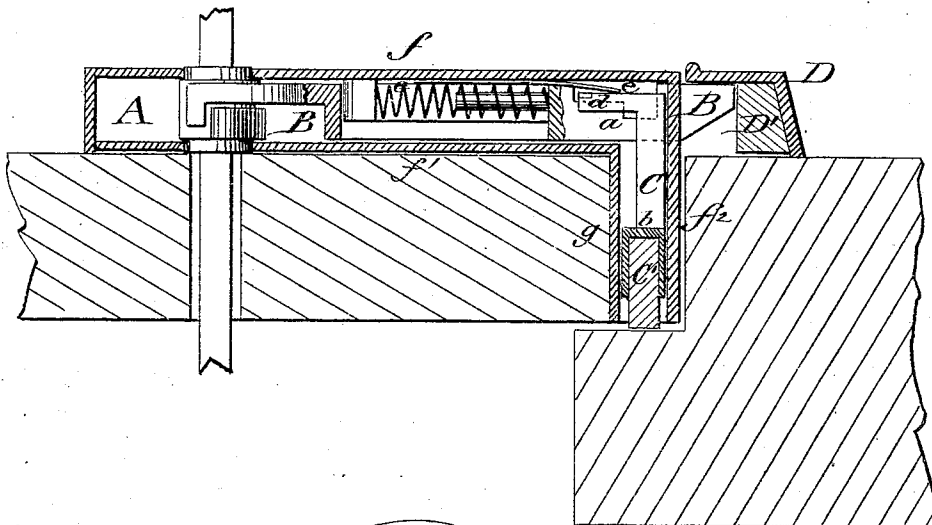


Fig: 2.



Witnesses.

Chas. Nida
Edgwick

Inventor.

F. Stowe
Per *mmu*
Attorneys.

UNITED STATES PATENT OFFICE.

FRANK STOWE, OF HURON, OHIO.

IMPROVEMENT IN DOOR-LATCHES.

Specification forming part of Letters Patent No. **144,931**, dated November 25, 1873; application filed September 27, 1873.

To all whom it may concern:

Be it known that I, FRANK STOWE, of Huron, in the county of Erie and State of Ohio, have invented a new and Improved Door-Latch, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side view of my improved latch with incasing-plate taken off to show the inside construction; and Fig. 2 is a horizontal longitudinal section of the same on line C C, Fig. 1, as applied to the door, in connection with the catch-plate.

Similar letters of reference indicate corresponding parts.

The object of my invention is to so construct a door latch and catch that the grating noise of the bolt against the catch is prevented, and also the noise incident to the slamming of the door diminished.

In the drawing, A represents a door-latch of the usual construction, whose bolt B is opened by turning the knob in either direction, and carried forward again by a coiled spring. A recess, *a*, is cut into the bolt, which is deeper near the projecting part of the same, as indicated in Fig. 2. A dog, C, is provided with a socket, *b*, having a rubber cushion, C', and at its lower end with a lug, *d*, which projects under the bolt, sliding along recess *a* as bolt B is moved in either direction. A band-spring, *e*, is applied, with one end secured to the outer plate *f* of the latch, while its other end presses firmly on dog C and lug *d*. The

socket part *b* of dog C slides between a casing or box *g* of the cover-plate *f*¹ and the side face-plate *f*² of the latch. The rubber cushion C' projects beyond the casing *g* and the door when bolt B is drawn back by the knob, and lug *d* of dog C slides into the wider part of recess *a*, and is retained therein by the action of spring *e*, locking the bolt B in position inside of the face-plate *f*².

On closing the door, the cushion C' strikes noiselessly against the jamb of the door, dog C forces the spring *e* back, releasing lug *d* from the wider part of recess *a*, causing it to slide along its narrower part, and allow thereby bolt B to lock into the catch-plate D without necessitating the forcing back of the bolt by the same. The grating noise incident to the friction of the bolt on the catch-plate, as well as that caused by slamming the door, is almost entirely done away with.

The catch-plate D is further provided with a rubber cushion, D', (shown in Fig. 2,) by which the clicking noise of the bolt is deadened, and the door securely retained till opened by the turning of the knob.

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

The dog C, carrying socket *b*, with rubber cushion C', and having sidewise-projecting lug *d* for engaging the bolt, as described.

Witnesses: FRANK STOWE.

JOHN H. WILBER,
F. F. KROCK.