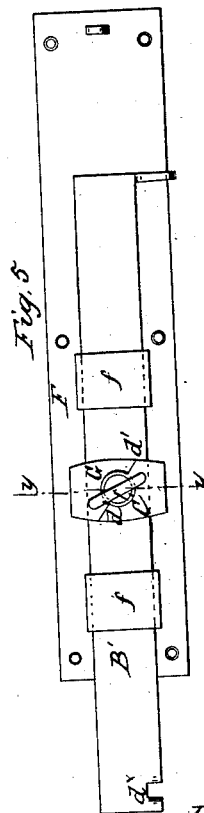
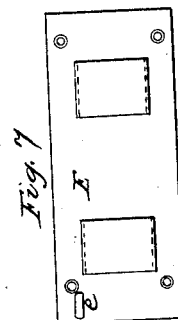
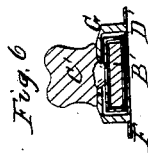
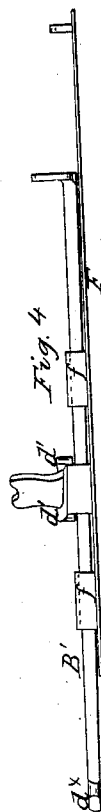
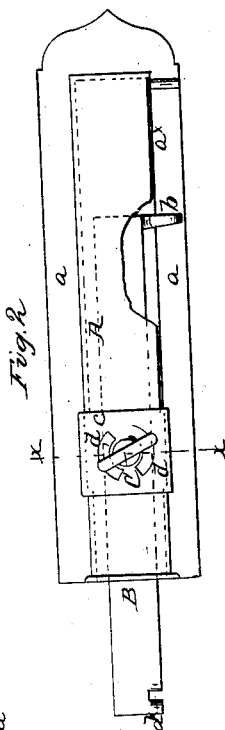
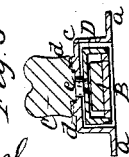


N^o 45,712.

Patented Jan. 3, 1865.



Inventor.

DeHeller
per Munro Co
att
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UNITED STATES PATENT OFFICE.

DANIEL C. HELLER, OF READING, PENNSYLVANIA.

IMPROVED SHUTTER-BOLT.

Specification forming part of Letters Patent No. 45,712, dated January 3, 1865.

To all whom it may concern :

Be it known that I, D. C. HELLER, of Reading, in the county of Berks and State of Pennsylvania, have invented a new and Improved Shutter-Bolt; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is an under or bottom view of my invention; Fig. 2, a front view of the same; Fig. 3, a transverse section of Fig. 2, taken in the line *xx*; Fig. 4, an under view of a modification of my invention; Fig. 5, a front view of Fig. 4; Fig. 6 a transverse section of Fig. 5 taken in the line *yy*; Fig. 7, a front view of the socket of the bolt.

Similar letters of reference indicate like parts.

This invention relates to an improved shutter-bolt of that class which admits of the shutters being secured in a partially open as well as in a closed state. The invention is an improvement on a shutter-bolt for which Letters Patent were granted to me bearing date July 5, 1864.

A, Figs. 1, 2 and 3, represents a cast-metal case provided with flanges *a a*, for the purpose of securing it to one of the shutters of a pair. Within this case A the bolt B is fitted and allowed to slide freely back and forth or in and out. The case A has a slot, *a'*, extending nearly the whole of its bottom for a handle or knob, *b*, of the bolt to pass through and admit of the bolt being moved, or shoved in and out. (See Figs. 1 and 2.) The case A is cast with a raised surface, *c*, having on its front side two inclined planes, *d*, forming portions of a circle, as shown in Fig. 2.

C is a button, the inner edge of which bears or works against the curved inclined planes *d*, said button being provided with a shank or pivot, *e*, which passes through the case A and is riveted in a rectangular sleeve, D, through which the bolt B passes. (See Fig. 3.) By means of this sleeve D, curved inclined planes *d*, and button C, the bolt B may be secured at any desired point, for by turning the button the inclined planes *d* cause the

sleeve D to clamp firmly the bolt B against the inner surface of the outer part of the case A, the inner side or part of the sleeve fitting in a recess admitted by the raised surface *c*. The outer end of the bolt B is notched to form a hook, *d'*, which, when the shutters are partially open, is fitted in a staple, *e*, in the socket E, attached to the shutter opposite to that to which the bolt is secured. When the shutters are closed, the bolt B is fitted in the socket E.

Figs. 4, 5, and 6 represent the same invention adapted to a wrought-iron bolt. In this modification no case is employed, the bolt B' being fitted in guides *f*, which pass through a plate, F, and are clinched at its rear side. The inclined planes *d'* are on a bridge, G, which extends over the bolt B' and has its ends also passing through the plate F and clinched at its rear side. The sleeve D', through which the bolt B' passes is within the bridge G, a button, C', being arranged with the inclined planes *d'* and attached to the sleeve D', as in the first described modification.

This improvement possesses several advantages over the original device patented by me. The revolving button, as formerly used, is dispensed with and the inclined planes are cast in the one modification on the case and in the other on the bridge, and the shank or pivot *e*, which originally was fastened to the sleeve, now revolves in it. The pin formerly used is also dispensed with.

The great merit of the present invention is that it can be applied to the ordinary wrought-iron bolt and is capable of being manufactured at a moderate expense.

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

The revolving button C or C', bearing against inclined planes *d* or *d'*, cast on the case of the bolt or on a bridge placed over the same, and having its shank or pivot riveted in a sleeve, D or D', through which the bolt B or B' passes, all arranged substantially as and for the purpose herein set forth.

DANIEL C. HELLER.

Witnesses:

B. FRANK BOYER,
M. P. BAYARD.