H. W. BUSSE.

COMBINED KNOB LATCH AND DOOR LOCK.

No. 75,360. Patented Mar. 10, 1868.

Figure 1

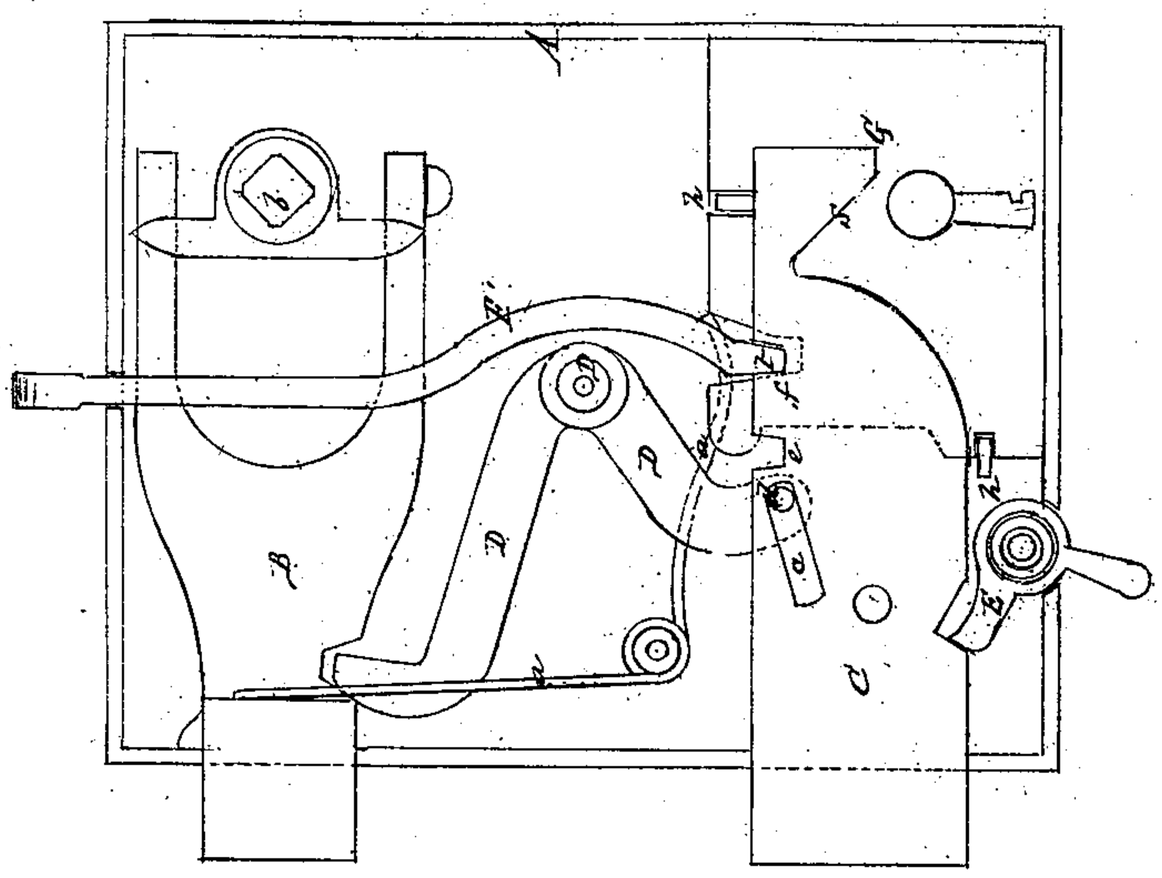


Figure 3

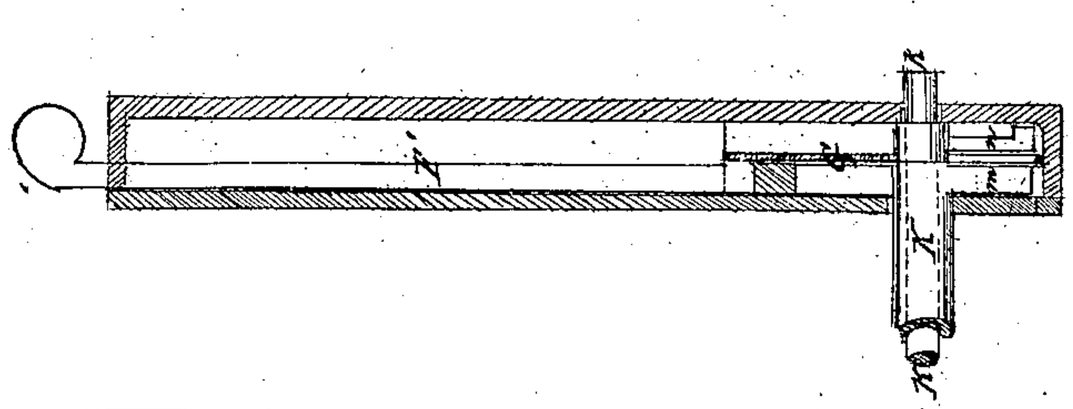


Figure 2.

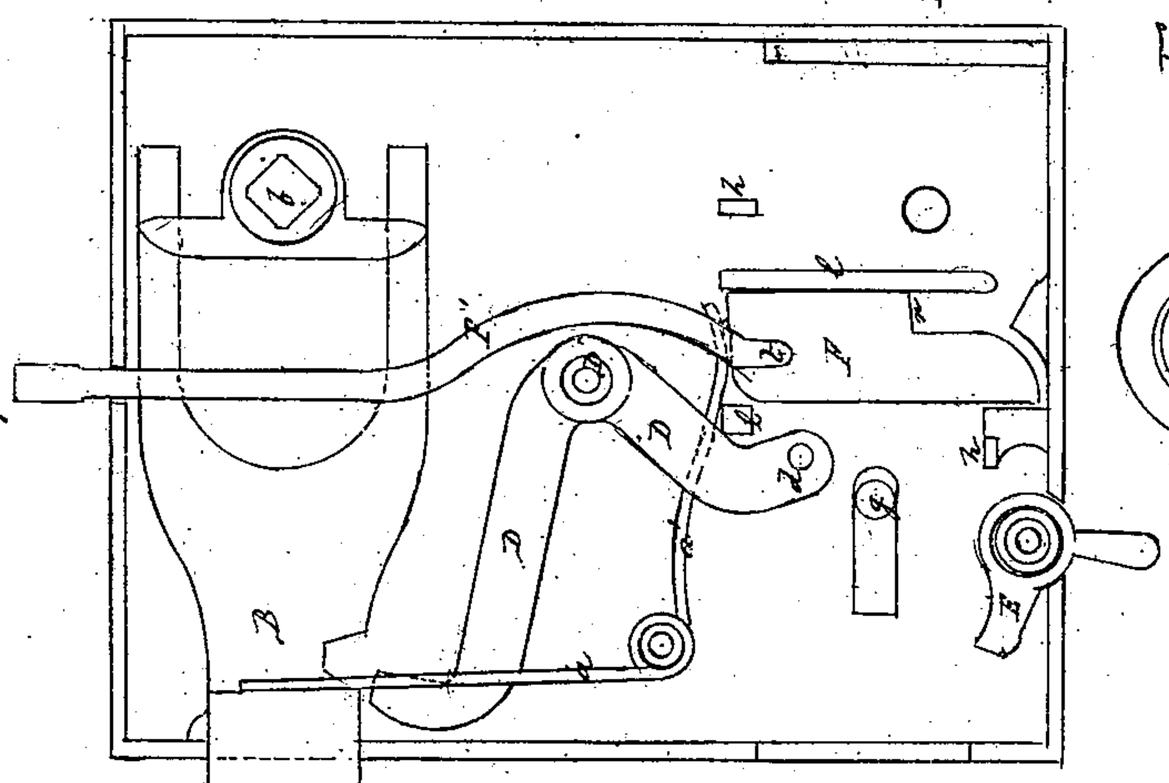
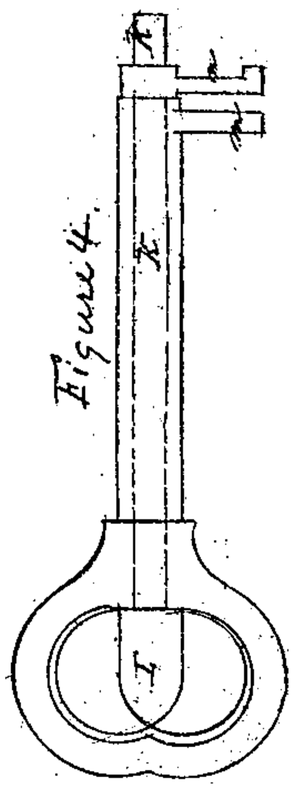


Figure 4.



Witnesses.
E. M. Manley
J. E. Burr

Inventor.
Henry W. Busse.
by Coburn & Mann
attorneys

United States Patent Office.

HENRY W. BUSSE, OF CHICAGO, ILLINOIS

Letters Patent No. 75,860, *dated March* 10, 1868.

IMPROVEMENT IN COMBINED KNOB-LATCH AND DOOR-LOCK.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, HENRY W. BUSSE, of Chicago, in the county of Cook, and State of Illinois, have invented a new and useful Improvement in Door-Locks; and I do hereby declare and make known that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and the letters and figures marked thereon, which form part of this specification.

To enable those skilled in the art to understand how to construct and use my invention, I will proceed to describe the same with particularity, making reference in so doing to the aforesaid drawings, in which—

Figure 1 represents an interior view of the lock.

Figure 2 is a similar view, the plate G being removed.

Figure 3 is a transverse section, taken through the key-hole; and

Figure 4 is a detached view of the key of the lock.

Similar letters of reference in the several figures indicate the same parts of my invention.

A represents the case of the lock, B the ordinary latch, operated by the knobs, whose spindle passes through the socket *b* in the usual manner. C is the bolt, operated by the key, as hereinafter specified, being provided with a knob, *g*, passing through a slot in the inner face of the lock-case, so that the bolt may be operated from the inside by moving said knob.

D represents a bent arm or lever pivoted at D′, one end of the same operating in the notch in the under side of the latch B, and the other end being provided with a pin, *d*, projecting through the slot *c*, in the bolt C, as shown.

F′ represents a bar attached to a block, F, said bar F′ projecting up out of the case A, as shown, so as to be operated by the hand on the inside if desired. At the point where said bar F′ is attached to the block F, said bar and block really forming one and the same piece, is a tongue, *t*, which is held down in one of the notches *e f* on the bolt C, by the action of a spring, *a′*, a spring, *a*, resting against a shoulder on the latch B, to keep it out in the position desired, in the usual manner. Said bar F F′ moves up and down in suitable guides, *l l*, as shown in fig. 2.

G represents a plate arranged on or over the slide or bar F, being held firmly in position by lugs *h h*, as shown, being provided with a key-hole, as shown, through which one of the wards of the key passes, as hereinafter specified. Said key K is provided with a rod, *k*, which passes through the hollow key K, and is provided with a suitable knob, L, whereby it may be turned independently of the outer key, K, said rod *k* having a bit, *n*, and said key K having a bit, *m*, each susceptible of a separate movement as aforesaid, the bit *n* being fitted so as to enter the key-hole in the plate G, while the bit *m* cannot. When desired, the bolt C is thrown out; it may be locked so as to render it impossible to open it from without by means of the dog E, as shown.

Having described the construction of my invention, I will proceed to describe its operation.

As the bits *m n* do not project from their posts in the same line when the heads of the keys are parallel, to insert the key in the lock it is necessary to enter the key and turn the bit *n* until it enters the key-hole in the plate G, and passes beneath it, which will then permit the bit *m* to enter the key-hole in the case A. In fig. 1 the parts are represented as being locked, and in unlocking, the dog E must be turned down away from the bolt C.

It will be observed that the bolt B is locked also, and kept from moving back by the arm D, and this arm cannot be moved away until the bolt C is withdrawn, to accomplish which the tongue *t* must be raised up from the notch *f* in the said bolt, which is the first thing to be done. The rod *k* is, therefore, first turned until the bit *n* comes against the shoulder *r* on the bar F F′, when it is moved up far enough to withdraw the tongue *t* from the said notch *f*. The key K is then turned so as to bring the bit *m* against the shoulder *s* on the bolt C, when it is readily thrown back, thus also throwing the arm D out from the bolt B, when it may be thrown back by the knobs in the ordinary way, and the door may be opened, the spring *a′* in the mean time throwing the tongue *t* down into the notch *e*, and securing the bolt in place.

To lock the door the bit *n* is turned as before, until the tongue is thrown out from the notch *e*, when the bit *m* is turned against the heel of the bolt C, and throws it out as desired, said movement of the bolt C moving the arm D so as to lock the bolt B, while the spring *a′* throws the tongue *t* into the notch *f*, and locks the entire works as before.

Having described the construction and operation of my invention, I will now specify what I claim and desire to secure by Letters Patent.

I claim the combination, in a door-lock, of the latch B, provided with a notch, *b*, the bolt C, provided with a slot, *c*, and notches *e f*, the bent arm D, the bar F F′, provided with a tongue, *t*, the spring *a a′*, and the plate G, all arranged and operating substantially as and for the purposes specified.

HENRY W. BUSSE.

Witnesses:

AUGUST TANCK,

JULIUS PAESKE.