

(No Model.)

B. G. LOWREY.
LATCH AND LOCK COMBINED.

No. 476,663.

Patented June 7, 1892.

Fig. 1.

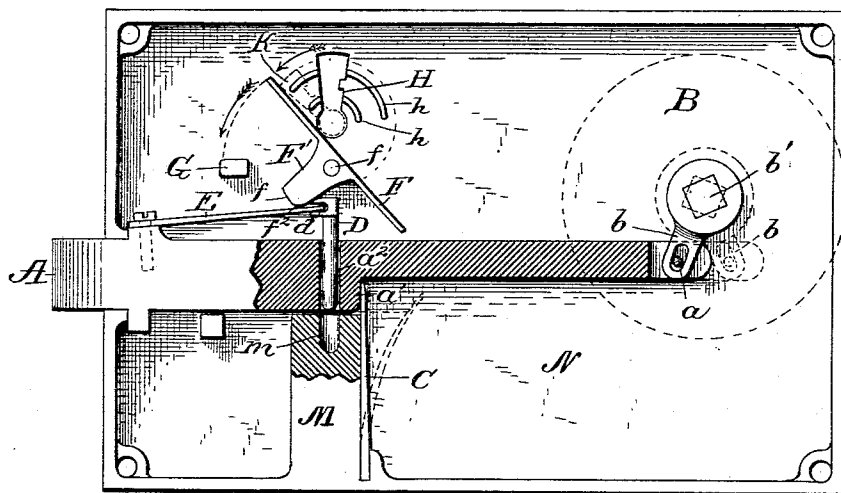
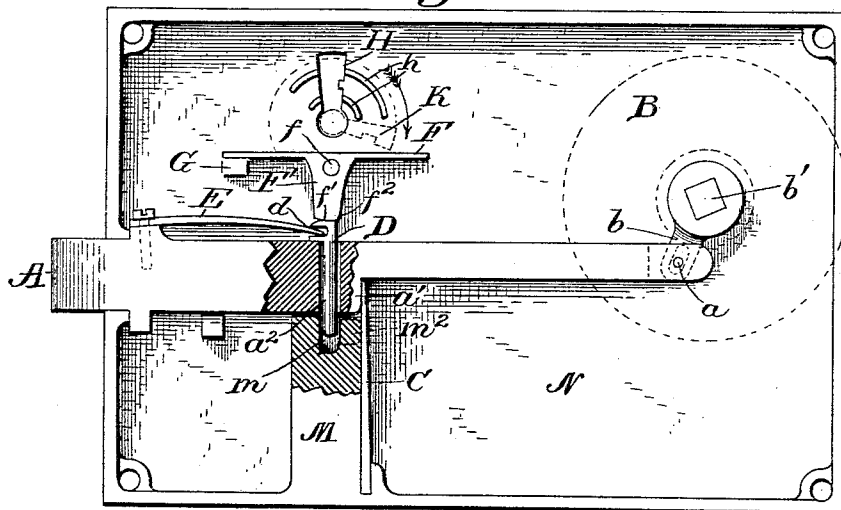


Fig. 2.



Witnesses;

Reuben C. Bowen.
John C. Tolson.

Inventor;

Bill G. Lowrey

By Whitman & Wilkinson
Attorneys.

UNITED STATES PATENT OFFICE.

BILL G. LOWREY, OF BLUE MOUNTAIN, MISSISSIPPI.

LATCH AND LOCK COMBINED.

SPECIFICATION forming part of Letters Patent No. 476,663, dated June 7, 1892.

Application filed March 25, 1892. Serial No. 426,442. (No model.)

To all whom it may concern:

Be it known that I, BILL G. LOWREY, a citizen of the United States, residing at Blue Mountain, in the county of Tippah and State of Mississippi, have invented certain new and useful Improvements in Door-Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to locks, and especially to locks for doors; and it consists of certain novel features, which will be hereinafter described and claimed.

Reference is had to the accompanying drawings, wherein the same parts are indicated by the same letters.

Figure 1 represents a side elevation of the interior of the door-lock when the door is unlocked, parts being broken away; and Fig. 2 represents a similar view of the lock when the door is locked.

A represents a bolt similar to that ordinarily used in door-locks, but normally pressed outward by the spring C, pressing on the shoulder a' , and withdrawn by turning the knob B, (shown in dotted lines,) attached to the square shank b' , carrying the slotted crank b . The pin a , attached to the bolt A, passes through the slot in the crank b . Upon letting go the knob the spring C will press against the shoulder a' with sufficient force to return the bolt A to its normal position.

In order to lock the bolt, a pin D passes through a hole a^2 in said bolt and into a hole or score m in a lug M, attached to the plate N, which forms the cover for the lock. Instead of a lug M with a hole m therein two separate lugs with an opening between or a single lug, as shown in dotted lines at m^2 in Fig. 2, may be used. This pin D is normally held clear of the lug m by means of a spring E, attached to said bolt. The opposite end of the spring E is connected to the head of the pin D in any convenient way. Vertically over the pin-head when the bolt is in the proper position for locking the pivot f of the double-bell-crank lever F is placed. This lever has an arm F' , with flat end f' and rounded corner f^2 .

H represents the keyhole, and h h the guards thereto.

I do not claim any particular form of key.

The spring E is of such strength as to normally keep the pin D lifted and support the small weight of the arm F' , keeping it normally in about the position shown in Fig. 1.

When it is wished to lock the door, insert the key K (shown in dotted lines) and turn it in the direction of the arrow in Fig. 1. The cam-face f^2 will force the pin D down, and when the flat face f' engages the top of the pin-head the pressure upward will be sufficient to prevent the arm F' from being thrown to either side, and the key may be withdrawn from the lock. In order that the arm F' may not be turned beyond the vertical position, the stop G is provided.

To unlock the door, insert the key and turn it in the direction shown by the arrow in Fig. 2. As soon as the square face f' of the arm F' is well clear of the pin-head the spring E will throw the arm F' around to the position shown in Fig. 1, at the same time raising the pin D from the hole m and unlocking the bolt A.

It will be obvious that the keyhole may be arranged beneath the bolt A, when the spring E will be made to support the pin D, which latter will be pressed upward into a lug above the bolt A.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a door-lock, the combination, with the bolt A, having hole a^2 therein, of the pin D, normally passing through said hole, the spring E, attached to said bolt and adapted to lift said pin clear of the lower end of said hole, the double-bell-crank lever F, having arm F' for pressing said pin down, and a catch for engaging the lower end of said pin D when pressed through said hole, substantially as and for the purposes described.

2. In a door-lock, the combination, with the bolt A, having hole a^2 and shoulder a' , with means for withdrawing said bolt, of the spring C, engaging said shoulder and normally pressing said bolt outward, the pin D, normally passing nearly through said hole a^2 , the spring E, attached to said bolt and adapted to lift said pin clear of the lower end of said hole, and the double-bell-crank lever F, having arm

F', with cam-face f^2 and flat face f' , and a catch for the lower end of said pin D when pressed through said hole a^2 , substantially as described.

- 5 3. In a door-lock, the combination, with the knob B, slotted crank b , pin a , bolt A, having hole a^2 and shoulder a' , of the spring C, engaging said shoulder and normally pressing said bolt outward, the pin D, normally passing
10 nearly through said hole a^2 , the spring E, attached to said bolt and adapted to lift said pin clear of the lower end of said hole, and

the double-bell-crank lever F, having arm F', with cam-face f^2 , flat face f' , stop G, and a catch for the lower end of the said pin D when pressed through said hole a^2 , substantially as described. 15

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

BILL G. LOWREY.

Witnesses:

F. C. GUYTON,

H. R. HAWTHORN.