(Model.)

C. BERGERON.

COMBINED LATCH AND LOCK.

No. 301,474. Patented July 8, 1884.

Fig1.

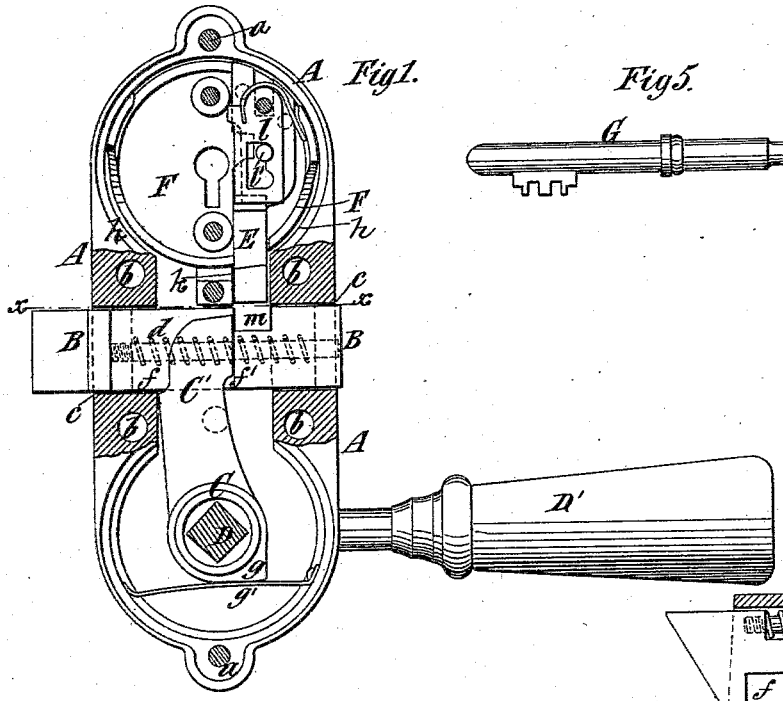


Fig5.

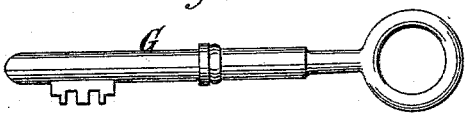


Fig3.

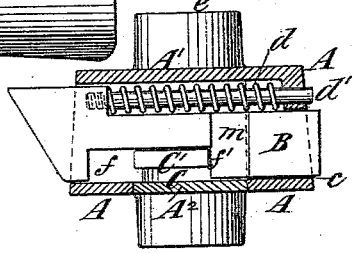


Fig2.

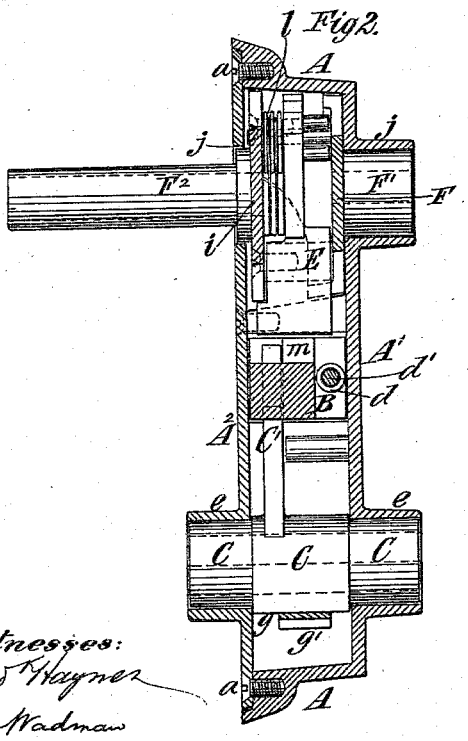
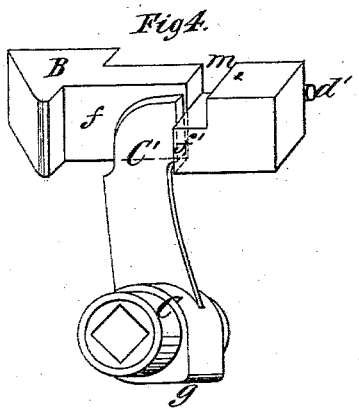


Fig4.



Witnesses:
Thos Haymer
Geo Wadman

Inventor:
C Bergeron

UNITED STATES PATENT OFFICE.

CELESTIN BERGERON, OF NEW YORK, N. Y.

COMBINED LATCH AND LOCK.

SPECIFICATION forming part of Letters Patent No. 301,474, dated July 8, 1884.

Application filed September 13, 1883. (Model.)

To all whom it may concern:

Be it known that I, CELESTIN BERGERON, of the city and county of New York, in the State of New York, have invented a new and useful Improvement in Latch-Locks, of which the following is a specification.

My invention relates to that class of latches in which the latch-bolt may, when desired, be locked, so that it cannot be operated by the spindle, and so that it will then serve all purposes of a lock.

The invention consists in the combination, with a latch-case, a latch-bolt, and its operating mechanism, of a lock-case containing a lock mechanism and a locking-bolt, all arranged within the latch-case for locking said latch-bolt, as more fully hereinafter described.

The invention also consists in details of construction in a latch and lock combined as above described.

In the accompanying drawings, Figure 1 is a partly-sectional view of a latch-lock embodying my invention, the back plate of the latch-case and the back plate of the lock-case being removed. Fig. 2 is a sectional view in a plane transverse to the latch-bolt and parallel with the locking-bolt. Fig. 3 is a transverse section on the dotted line *x x*, Fig. 1. Fig. 4 is a perspective view of the latch-bolt, with the spindle-hub and its horn or arm for operating the same detached from other parts; and Fig. 5 is a view of the key employed for the lock here shown.

Similar letters of reference designate corresponding parts in all the figures.

A designates the latch-case, which is shown as of very strong construction. It may be made of cast metal, and, as shown, is of oblong form with rounded ends. The front plate, A′, forms an integral part of the case, while the back plate, A^2, is removable, and is secured by screws *a* or otherwise. The latch-case A is provided with holes *b*, through which screws may be passed for securing it to the door or other part on which it is to be used.

B designates the latch-bolt, which works in a slideway, *c*, extending entirely across the case A transversely. The spring here shown for projecting the bolt B outward consists of a spiral spring, *d*, surrounding a guide-rod, *d′*, which works through the lock-case, as shown in Fig. 3. A spring otherwise arranged may be employed for this purpose.

C designates the spindle-hub, which is supported in bearings *e* in the front and back plates, A′ A^2, of the case, and which has a projecting arm or horn, C′, entering a recess, *f*, in the side of the bolt B, and adapted to work against a shoulder, *f′*, to retract the said bolt. Through this hub extends the spindle D, furnished with knobs or handles D′. The spindle-hub C has a square surface, *g*, on which a spring, *g′*, acts to return the hub after it is turned by the spindle, and it will be observed that the recess *f* in the side of the bolt B is of such length that the said bolt can slide back or retract in shutting the door to which the latch is applied without affecting the horn or arm C′ of the spindle-hub C, and without moving the handle D′.

In one end of the latch-case A is arranged a locking mechanism and a locking-bolt, E, operated thereby. The locking mechanism and bolt are in an independent case, F, of circular or cylindric form, arranged in a correspondingly-formed recess, *h*, in the rounded end of the latch-case. The back plate, *i*, of the lock-case F is removable, and the said case is provided at the front and back with hubs or circular projections F′ F^2, which fit in corresponding bearings, *j j*, in the front and back plates, A′ A^2, of the latch-case. The lock-case F, with its contained mechanism and locking-bolt E, may be removed from the latch-case A when the back plate, A^2, thereof is taken off. The locking-bolt E projects from the lock-case F, and works in a slideway, *k*, in the latch-case, as shown in Fig. 1. The hubs F′ F^2 of the lock-case form keyways, in which a key, G, (shown in Fig. 5,) may be inserted. The locking mechanism in the case F may be of any suitable construction. In the lock here shown there are tumblers *l*, which engage with a pin, *l′*, on the locking-bolt, and hold it in either position to which it is adjusted by the key G.

As shown clearly in Figs. 1 and 4, the latch-bolt B is provided on the side on which is the locking-bolt E with a notch, *m*, and when the locking-bolt E is shot into this notch it will be readily understood that the latch-bolt B is locked in a very secure and positive manner,

and can no longer be operated by the spindle D. When the locking-bolt E is retracted, the latch-bolt B serves the purpose of an ordinary latch.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with a latch-case, a latch-bolt, and its operating mechanism, of a lock-case containing a lock mechanism and a locking-bolt, all arranged within the latch-case for locking said latch-bolt, substantially as herein described.

2. The combination, with a latch-case having the circular recess *h*, and the latch-bolt B and its operating mechanism, of the circular lock-case F and locking mechanism contained therein, arranged in said recess, and the locking-bolt E, operated by the lock mechanism in said case F, substantially as herein described.

C. BERGERON.

Witnesses:
FREDK. HAYNES,
ED. L. MORAN.