

F. M. Rauous,

Latch.

No. 110,071.

Patented Dec. 13. 1870.

Fig. 1.

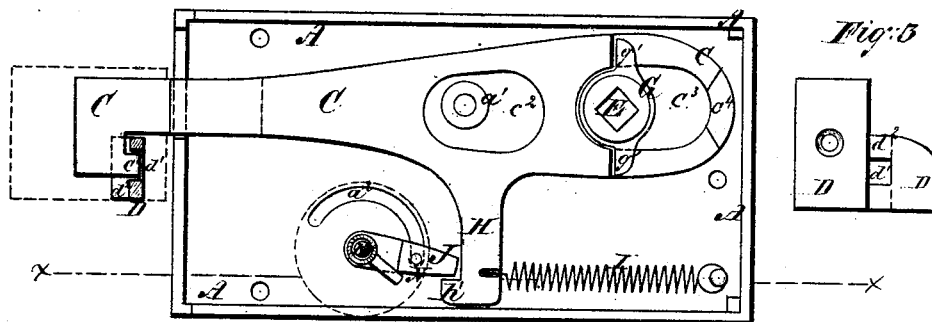
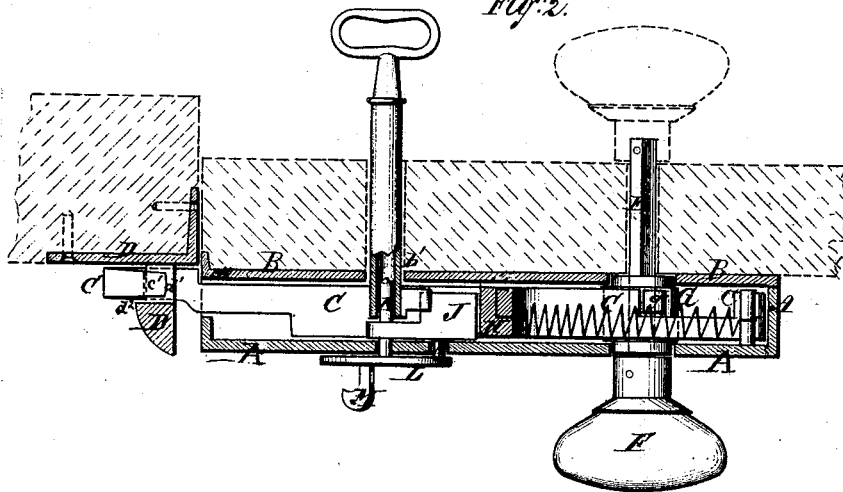


Fig. 2.



Witnesses:

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FRANCIS M. RANOUS, OF YREKA CITY, CALIFORNIA.

Letters Patent No. 110,071, dated December 13, 1870.

IMPROVEMENT IN COMBINED LOCKS AND LATCHES.

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, FRANCIS M. RANOUS, of Yreka City, in the county of Siskiyou and State of California, have invented a new and useful Improvement in Combined Lock and Latch; 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 drawing forming part of this specification.

Figure 1 is a side view of my improved lock and latch, the inner plate of the lock-case being removed.

Figure 2 is a detail sectional view of the same, taken through the line *x x*, fig. 1.

Figure 3 is a detail view of the catch.

Similar letters of reference indicate corresponding parts.

My invention has for its object to improve the construction of my improved gate-latch patented October 26, 1869, and numbered 96,147, so as to make it more convenient in use and more effective in operation, enabling it to be used in either a lock or latch; and

It consists in the construction and combination of various parts, as hereinafter more fully described.

A is the case of the lock, which is secured to the door by screws in the ordinary manner.

B is the inner plate of the case A, which is secured in place by a screw passing through it and screwing into the stud *a'* formed upon the case A.

C is the sliding latch, the forward part of which passes out through a slot in the forward end flange of the case A.

The forward end of the latch C has a downwardly-projecting shoulder or hook formed upon it, which is notched upon its inner edge close to the body of the latch, as shown in fig. 1, forming a projection, *c'*, which enters a hole, *d'*, in the neck of the double-inclined catch D.

The catch D is beveled or inclined upon its upper and inner sides, so that when the door or gate is swung shut the said catch may raise the forward end of the latch C, and at the same time draw it outward, bringing it into proper position for the projection *c'* of the said hook-latch C to be drawn into the hole *d'* of the catch D.

E is the spindle, to the ends of which the knobs F are attached in the ordinary manner.

G is the hub, through which the spindle E passes, and by means of which the knob-spindle is enabled to operate the latch C.

In the rear part of the latch C is formed an oblong hole, *C'*, to receive the hub G.

The inner side of the latch C, at the sides of the hole *c'*, is notched or recessed, to form shoulders for the cams or arms *g'* of the hub G to press against in operating the latch, said notch or recess being made of such a length that, when the lower cam or arm *g'* has pushed the latch C forward sufficiently far, the upper cam or arm *g'* may strike against the shoulder *c'*, formed at the rear end of the said notch or recess, so that the cam *g'* may assist in raising the forward end of the latch C.

Upon the lower edge of the latch C is formed an arm, H, to the rear side of the outer end of which is attached one end of a spring, I, the other end of which is connected with the case A, as shown in figs. 1 and 2. By this arrangement the same spring I will draw the latch back, and at the same time draw and hold the forward end of said latch down.

Upon the forward edge of the lower or outer end of the arm H is formed a hook or shoulder, *k*, to receive the stop J, which locks the latch, by preventing, when in the positions shown in the drawing, the latch C from being drawn back to unlatch the door or gate.

The stop J is pivoted to a pin, K, attached to the plate of the case A.

To the outer end of pin K, upon the outer side of the plate of the case A, is pivoted a disk, L, provided with a thumb-piece, knob, or other handle, M, to enable it to be conveniently operated.

To the disk L is attached a pin, N, which passes in through a curved slot, *a''*, in the plate of the case A, the said curved slot *a''* being made of such a length as to limit the movement of the stop J.

In the inner plate B of the case A, directly opposite the inwardly-projecting end of the pin K, is formed a key-hole, *b'*, to allow a key to be inserted from the outside of the door, to unlock the latch when required.

The outer edge of the stop J is notched around the pivoting-pin K, to adapt it to receive a key, and to allow the guard of the said key to strike against the body of the said stop, and thus operate it.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

The pivoted stop J, pivoting-pin K, pivoted disk L, provided with a thumb-piece, knob, or handle M, pin N, and curved slot *a''* in the plate B of the case A, in combination with the arm H *k* of the sliding hook-latch C *c'*, substantially as herein shown and described, and for the purpose set forth.

Witnesses:

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