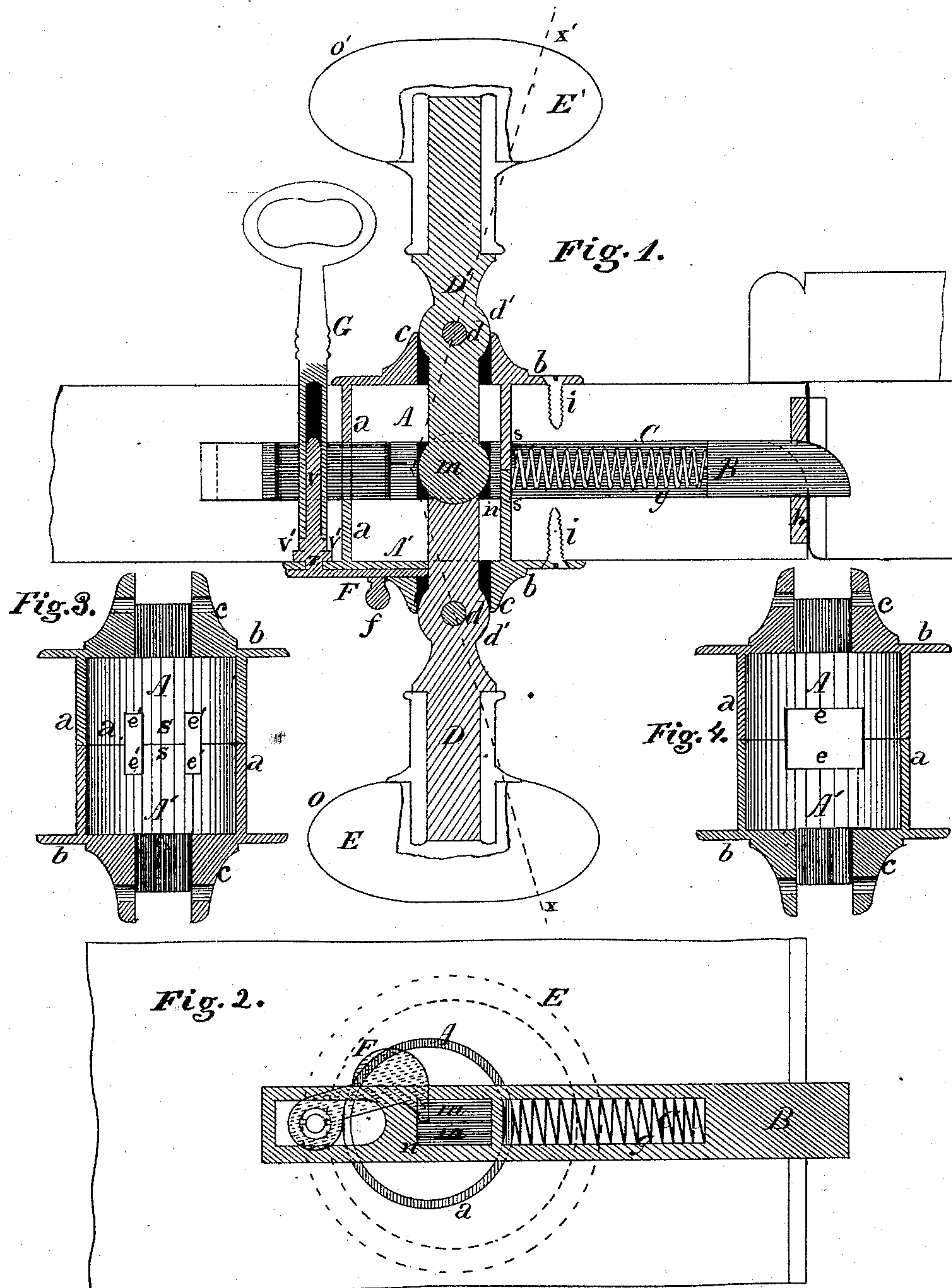


O. F. RUSS.
Door-Latch.

No. 159,281.

Patented Feb. 2, 1875.



Witnesses { Louis J. Newell,
 { Alex. Selkirk

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UNITED STATES PATENT OFFICE.

OSCAR F. RUSS, OF ALBANY, NEW YORK.

IMPROVEMENT IN DOOR-LATCHES.

Specification forming part of Letters Patent No. 159,281, dated February 2, 1875; application filed December 12, 1874.

To all whom it may concern:

Be it known that I, OSCAR F. RUSS, of the city and county of Albany, State of New York, have invented certain Improvements in Door-Locks; and I do hereby declare that the following is a description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a cross-sectional view of the lock, embodying the improvements in this invention. Fig. 2 is a sectional view in the transverse, and longitudinal with the bolt. Fig. 3 is a sectional view of the front half of the body of the lock, inclosing the short ends of the levers and receiving the bolt, illustrating the slots in the side of the same and the bearings for the spring. Fig. 4 is a sectional view of the rear half of the body, showing the slot for receiving the bolt.

My invention relates to that class of door-locks in which the bolt is operated by levers; and it consists of a sectional body, each section of which is composed of a slotted case, a rose-plate, and a bracket, combined with a spring-bolt and one or more levers, the several parts of the lock being arranged relatively one to the other in such a manner that the spring-bolt may be moved back and the door opened by pushing forwardly on either of the levers, as will hereinafter more fully appear.

To enable others skilled in the art to make and use my invention I will proceed to describe it in reference to the drawings and the letters of reference marked thereon, the same letters indicating like parts.

In the drawings, A A' represent the body of the lock, which incloses the operating parts of the lever within. The said body is made in sections or parts, with each section being comprised by the case *a*, made preferably with a tubular form, the rose-plate *b* and the bracket *c* for the support of the pivot *d*. When the said parts are inserted in place in the door they will nearly, if not quite, contact with each other within by their case portions *a a*, as shown in Fig. 1. A portion of each case is made with notches *e* and *e'*, (Figs 3 and 4,) to receive the bolt, through which notches the said bolt may move longitudinally, as shown in Figs. 1 and 2. The notches *e'* have projecting bearing pieces *s s* between, the use of which

will be hereinafter described. The case portions *a* are each made solid with its rose-plate *b*, and is placed eccentrically with same, as shown, so as to locate the chamber, formed by the case *a a*, in which the inner ends of the levers work, back, while the brackets supporting the levers will be relatively forward, so as to allow the inner ends of the levers to be moved back, as indicated by the dotted lines *x x'* in Fig. 1.

The bolt B may be made in any of the forms heretofore employed, and is made elastic by the spring C, which spring is supported within the body of the bolt in the slot *g*, with one end bearing against the end of the said slot, and the other end against the bearing pieces or lips *s s* between the slots *e' e'* in the case *a*. The bolt B is also provided with the slot *n*, Fig. 1, to receive the inner ends of the levers D D, operating the bolt.

The bolt is operated by the levers D D, pivoted to the brackets *c c* by the pivot *d*, Fig. 1. Locks for closets, or the like, may be provided with a single lever, so placed as to be capable of being operated from the outside. E E' are knobs, acting as handles by which the said levers are operated. The inner ends *m m* of the said levers are made preferably rounded, as shown in Figs. 1 and 2, and work against the ends of the slots *n* in such a manner that when the levers are pressed forward to position shown by dotted lines *x x'*, Fig. 1, they will bear against the rear end of the said slot, and throw the bolt B back to draw it out from the keeper.

To lock the levers from being operated so as to throw the bolt back a stop, F, Figs. 1 and 2, is provided, which stop is pivoted in such a manner as to be capable of being thrown against the inner arm of the lever D, as shown by outline in Fig. 2, to prevent the said lever being removed to throw back the bolt. When the said stop is raised the levers will be free to be moved to operate the bolt.

To render the lock capable of having the stop F lifted or thrown out of contact with the lever, that the lock may be made to operate as a night-latch, the pivot *z* of the said stop is continued with a stem, *v*, provided with the feathers *v' v'*, with which the key G may engage, as shown in Figs. 1 and 2, which key,

when turned in the proper direction, will throw the said stop up, and from contact with the lever, so that it and its coacting lever may be operated to move the bolt. For convenience in raising the said stop without the aid of a key, the said stop is provided with a finger piece or knob, *f*, Fig. 1, by which the said stop may be lifted from contact with the lever.

In fitting this lock to the door the door is pierced at a proper place in a lateral manner to receive the case parts *a a*. A hole is also made for the pin *v* and key. A proper mortise or hole is made at right angles with the lateral case holes from the edge of the door to receive the bolt *B*. The face-plate *h* is then let in the wood in the usual manner. The cases *a a* are then put in position, with the bearing-lips *s s* entering the slot *g* of the bolt back of the rear end of the spring *C*, and the bolt in the slots *e e'*, when they are secured in place by screws *i*, or their equivalents, passing through the rose-plates *b*. The levers *D D* are then placed in position with their ends *m m* in the slot *n*, and their knuckles *d'* in the brackets *c*, when the pivots *d* are in their places through the said brackets and levers. The parts being thus placed and secured, the lock is ready for operation.

When it is desired to open the door toward the person, the operator will press the knob *E* forward, so as to carry the lever in position shown by dotted line *x*, by bearing on the rear of the knob and at a point on the side of the same toward the door, as at *o*, when the bolt will be thrown back and the door will at the same time be drawn outward.

When the door is to be opened from the person the pressure is to be exerted on the knob *E'* at its rear and on its side off from the door, as at *o'*, when the lever will assume the position indicated by dotted line *x'*, and operate to press the bolt back and the door open.

By these improvements the lock may be more readily placed in position, and be more firmly secured to the door than locks of this class as heretofore constructed. The operator may open the door by simple pressure with his hand, or arm, when his hands are engaged.

The bolt may be effectually held in the keeper by the ends *m* of the levers in the slot *n* of the bolt by the stop *F*, when thrown against the lever, and the stop thus placed with its stem gives to the lock the advantages of a night-latch.

I am aware that locks having their bolts operated by levers have been used; I therefore do not claim such devices, either in themselves or combination.

What I claim and desire to secure by Letters Patent is—

In a door-lock the sectional body *A A'*, each section consisting of the slotted case *a e e'*, rose-plate *b*, and bracket *c*, in combination with the spring-bolt *B* and one or more levers, *D D'*, substantially as set forth.

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Witnesses:

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