

(Model.)

N. J. CÔTÉ.

LOCK.

No. 305,796.

Patented Sept. 30, 1884.

Fig. 1

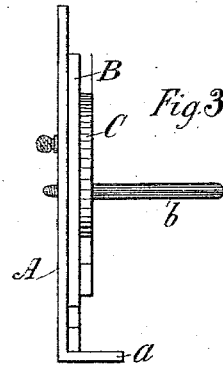
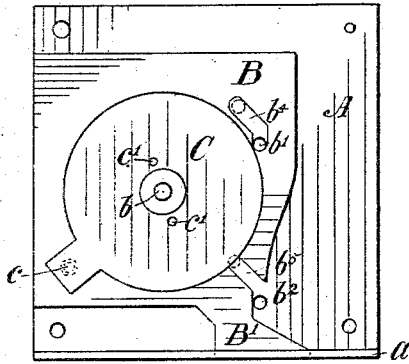


Fig. 4

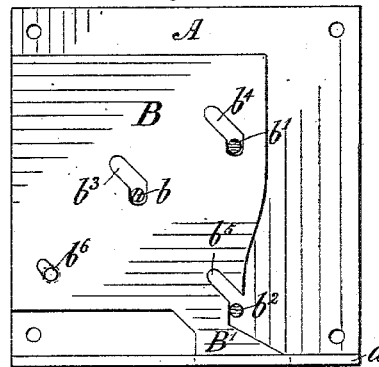


Fig. 5

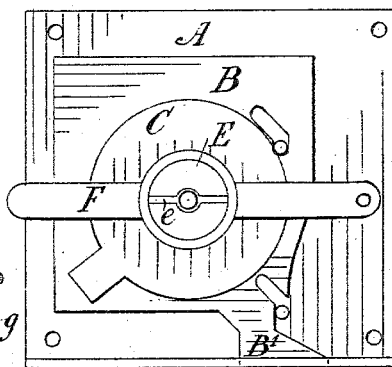


Fig. 6

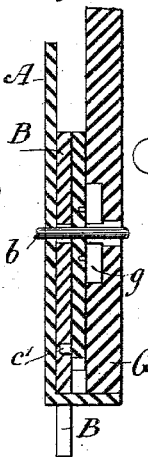


Fig. 7

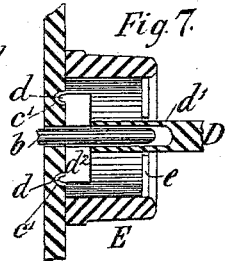
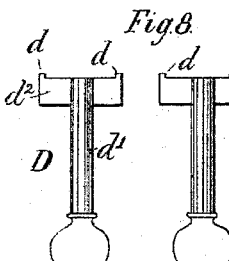


Fig. 8



Witnesses

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Inventor

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Per *W. H. Radis.*
Att'y

UNITED STATES PATENT OFFICE.

N. JOSEPH COTÉ, OF MONTREAL, QUEBEC, CANADA, ASSIGNOR OF ONE-HALF TO JEAN BAPTISTE L. ROLLAND, JR., OF SAME PLACE.

LOCK.

SPECIFICATION forming part of Letters Patent No. 305,796, dated September 30, 1884.

Application filed August 24, 1883. (Model.)

To all whom it may concern:

Be it known that I, NAPOLEON JOSEPH COTÉ, of the city of Montreal, in the district of Montreal and Province of Quebec, Canada, have invented certain new and useful Improvements in Locks; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to that class of locks which are particularly suitable for desks, boxes, pianos, and other articles where falling or drop covers are used, and where access for the key is only required from the outside.

From its simplicity of construction, and the absence of wards, tumblers, and springs, it will be at once seen that a great saving is effected in first cost by my invention, which also combines accuracy of movement with safety and convenience in its use, for the purposes named.

The improved lock may be briefly described as consisting of a back plate provided with a rim, as usual, and a movable plate resting on said back plate, provided with slots and bracing-pins firmly riveted to said back plate, and having an extension or projection on its lower edge, of suitable shape to form the bolt or catch, said movable plate falling by its own weight through a perforation in the rim, and allowing said bolt or catch to interlock automatically with the cross-bar or projection in the socket, and to be unlocked by a key provided with points fitting into holes, with its barrel passing over a central pin firmly riveted to the back plate and passing through a slot in the movable plate and loosely through a hole in a shifting front plate, from the under side of which, near one edge, a short pin projects into a slightly-elongated hole in the central movable plate.

The invention consists, also, of certain details of construction and arrangements of escutcheon, &c., for the full comprehension of which reference must be had to the accompanying drawings, in which letters similar to those used in the following detailed description indicate like parts, and where—

Figure 1 is a front view of my lock without escutcheon, and showing bolt ready to fall; Fig. 2, a similar view, but indicating bolt or

catch shot into socket behind striking-plate; Fig. 3, a side view of Fig. 2; Fig. 4, a view of lock with bolt up and shifting front plate removed; Fig. 5, a front view of lock provided with stationary escutcheon; Fig. 6, a vertical section on line X X, Fig. 2; Fig. 7, an enlarged sectional detail showing escutcheon and key in position for unlocking; Fig. 8, details of keys.

A represents the back plate, provided with rim *a* of ordinary construction. Riveted to this back plate are three pins, *b b' b''*, that marked *b* being the central pin, upon which the barrel of the key is fitted, as will be explained, and being considerably longer than those marked *b' b''*, which latter are of sufficient length simply to pass through slots formed in a movable plate, B, resting upon said back plate, A. This movable plate is substantially of the configuration shown in the drawings, and has formed on its lower edge a projection, B', which acts as the bolt or catch for the lock, the rim *a* being slotted to permit same to pass through.

The slots in the movable plate B are three in number, (one for each of the pins mentioned,) and are marked, respectively, *b'' b' b*. Those marked *b''* and *b'* are of the same shape, each having a vertical portion which embraces the pins when the bolt is up, and an extension at an angle of forty-five degrees, the ends of which extension embrace the pins when the bolt is down. Near the lower left-hand corner, or that opposite to the slot *b''*, is an elongated hole, *b''*, formed in this locking-plate, into which fits loosely a short pin, *c*, projecting from the under side of a shifting front plate, C, which lies on top of the movable plate B, the central pin, *b*, also passing through a hole in the center of this front plate, B, the pin *c* being located near the lower edge, and preferably to one side of said plate C.

In the face of the plate C, I form two holes, *c' c'*, on either side of the central pin, *b*, but not necessarily equidistant therefrom, into which fit the points or projections *d d* of the key D, (shown in Fig. 8,) the barrel *d'* of which slips over the central pin, *b*. When the key is in position, by turning it to the right (or to the left, if the lock is in the opposite position)

the leverage exercised by the points $d d$ upon the plate C, and by the pin e working in the elongated slot b^e , lifts the plate B upward and releases the projection B' from the socket, the article to which the lock is attached thus being unlocked. Before the key is removed, however, the lid or cover of the article must be raised, as when the key is removed the bolt—viz., the plate B and projection B'—falls again by its own weight, ready for automatic locking when the folding cover is again let down.

Turning now to Figs. 5 and 7, it will be observed that in some cases an escutcheon will be used in connection with my improved lock. I have shown a stationary escutcheon, E, which is held in place over the center of the lock by the brace F, or other suitable means, in such manner as not to interfere with the free working of the front plate, C, and locking-plate B. By inserting the key D into the aperture e in the escutcheon, and then turning same round to the right or left until the points $d d$ meet the holes $e' e'$, (which are placed so as not to be seen through the aperture,) the unlocking is effected. As will be seen, this gives additional security against the use of false keys. The key for my lock may have the points $d d$ either equidistant from the center of the barrel or at unequal distances therefrom, and may be placed, if desired, at an angle to each

other; or two or more points may be used on either side, and the holes $e' e'$ varied accordingly. In fact, this part of my invention may be varied to a considerable extent without departing from the principle. 35

In Fig. 6 I have shown a vertical section of a lock without an escutcheon, the wood being simply perforated to receive the key G, and cut away on the inside, as at g , to allow the main ward d' to be turned round so as to bring the points $d d$ in connection with the holes $e' e'$. 40

What I claim, and desire to secure by Letters Patent, is as follows:

In a lock, the combination, with back plate, A, provided with pins $b b' b''$, of the plate B, having a projection on its lower side to form the bolt or catch, and guiding-slots to receive and move upon said pins, and to fall by its own weight, and a front-plate, C, provided with pin e , fitting into an elongated hole, b^e , in the locking-plate B, and holes or other connections for the key on its face, all combined and arranged in such manner that by turning said front plate, C, in one direction its pin e , acting as a lever in slot b^e , will raise the plate B, and thus raise the bolt, substantially as described. 45 50 55

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Witnesses:

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G. W. ADDIS.