



A.D. 1853 N° 160.

Locks and Latches.

LETTERS PATENT to John Chubb, of St. Paul's Churchyard, Patent Lock Manufacturer, and John Goater, Lock Maker, in the employ of the said John Chubb, for the Invention of "**IMPROVEMENTS IN LOCKS AND LATCHES.**"

Sealed the 16th March 1853, and dated the 21st January 1853.

PROVISIONAL SPECIFICATION left by the said John Chubb and John Goater at the Office of the Commissioners of Patents, with their Petition, on the 21st January 1853.

We, **JOHN CHUBB**, of St. Paul's Churchyard, Patent Lock Manufacturer, and **JOHN GOATER**, Lock Maker, in the employ of the said John Chubb, do hereby declare the nature of the said Invention for "**IMPROVEMENTS IN LOCKS AND LATCHES**" to be as follows:—

This Invention consists of forming the sliding bolt of a lock of two parts, the one hinged to or moving on the other. A spring is applied
10 between the parts of the bolt, with a tendency to keep them correctly together. The key only acts on the moveable part of the bolt, and any pressure put on the bolt with a view to act on the tumblers separately

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will be interfered with by the movement of the moveable part of the bolt, which rises so as to press against the stump. The tumblers are provided with inclined projections, which, acting against a stud on a moveable part of the bolt, causes it to rise when the bolt is shot, and any pressure applied tending to force the bolt back is resisted by the 5 stump till all the tumblers are lifted to their correct positions by a true key. The lock is provided with a screen to the keyhole and detectors to the tumblers.

Another improvement is, that on the screen is affixed a false bit, which, on turning the screen, acts on the tumblers, but not correctly, 10 and they will only assume their correct position for opening when the true key has been the cause of turning the screen. This part of the Invention is more particularly applicable to latches or locks with lifting bolts.

SPECIFICATION in pursuance of the conditions of the Letters Patent, 15 filed by the said John Chubb and John Goater in the Great Seal Patent Office on the 21st July 1853.

TO ALL TO WHOM THESE PRESENTS SHALL COME, we, JOHN CHUBB, of St. Paul's Churchyard, Patent Lock Manufacturer, and JOHN GOATER, Lock Maker, in the employ of the said John Chubb, 20 send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Twenty-first day of January, in the year of our Lord One thousand eight hundred and fifty-three, in the sixteenth year of Her reign, did, for Herself, Her heirs and successors, 25 give and grant unto us, the said John Chubb and John Goater, Her special licence that we, the said John Chubb and John Goater, our executors, administrators, and assigns, or such others as we, the said John Chubb and John Goater, our executors, administrators, and assigns, should at any time agree with, and no others, from time to 30 time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands,

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and Isle of Man, an Invention for "IMPROVEMENTS IN LOCKS AND LATCHES," upon the condition (amongst others) that we, the said John Chubb and John Goater, by an instrument in writing under our hands and seals, or under the hand and seal of one of us, should
5 particularly describe and ascertain the nature of the said Invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

NOW KNOW YE, that I, the said John Chubb, on behalf of myself
10 and the said John Goater, do hereby declare the nature of the said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement thereof (that is to say):

This Invention consists of forming the sliding bolt of a lock of two
15 parts, the one hinged to or moving on the other. A spring is applied between the parts of the bolt, with a tendency to keep them correctly together. The key only acts on the moveable part of the bolt, and any pressure put on the bolt with a view to act on the tumblers separately will be interfered with by the moveable part of the bolt, which
20 rises so as to press against the stump. The tumblers are provided with inclined projections, which, acting against a stud on the moveable part of the bolt, causes it to rise when the bolt is shot, and any pressure applied tending to force the bolt back is resisted by the stump till all the tumblers are lifted to their correct positions by a true key. The lock is
25 provided with a screen to the keyhole, and detectors to the tumblers.

Another improvement is, that on the screen is affixed a false bit, which, on turning the screen, acts on the tumblers, but not correctly, and they will only assume their correct position for opening when the true key has been the cause of turning the screen. This part of the
30 Invention is more particularly applicable to latches or locks with lifting bolts.

And in order that my Invention may be more fully understood and readily carried into effect, I will proceed to describe the Drawings hereunto annexed, in the various Figures of which the same letters
35 are used to indicate similar parts wherever they occur.

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DESCRIPTION OF THE DRAWINGS, SHEETS 1, and 2.

Figure 1, shews a front view of a lock constructed according to our Invention, having some of the parts removed in order to shew more clearly the working parts of the lock; this Figure shows the bolt thrown back. Figure 2, shows a similar view, having the bolt shut out; and Figure 3, shows a front view of the lock complete. The 5 other views shew details of the various parts composing the lock. The nature of each view being written thereon, it will not be necessary further to describe the same. The bolt is composed of two parts *a*, and *b*; the part *a*, of the bolt has a stump *a*¹, and slot *a*², for the passage through of the main stump, on which the tumblers work as 10 usual. *a*³, is a pin or projection, on which the moveable portion *b*, of the bolt *a*, *b*, works. *a*⁴, is a spring on the part of the bolt *a*, which acts at all times to press on the part *b*¹, of the moveable part *b*, of the bolt, the tendency of which is to keep them correctly together. By applying the key to the lock while in the position shown at Figure 1, 15 where the part of the bolt *a* is back, and turning it in the direction to shoot out the bolt, the tumblers *c*, *c*, will be acted on as usual, and the stump *a*¹ will pass through the openings *c*¹, *c*¹, of the tumblers *c*, and move into the position shewn in Figure 2; such movement of the bolt *a*, *b*, causing the pin *b*², on the part *b*, to come against the inclines *c*², *c*², of 20 the tumblers *c*, by which the end of the moveable portion *b*, on which is the pin *b*², will be caused to rise, and the squared portion of the main stump of the lock, on which the tumblers *c* work, will enter the part *b*³ of the slot formed in the moveable portion *b* of the bolt, by which any attempt to pick the lock by pressure back of the bolt *a*, *b*, 25 during the raising of the tumblers, will be rendered impossible. Should the tumblers be raised by a false key or other picklock, or any instrument but a proper key, then the pin *b*⁴ on the moveable part *b* of the bolt will be acted upon by the rising too high of the tumblers *c*, and it also will be the means of raising the recess *b*³, in such a manner as to 30 embrace the squared portion of the main stump of the lock. By one or more of the tumblers being formed with a projection *c*³, as the one marked No. 2, the spring catch *d* will slide over such projection and

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enter the recesses formed in the bolt *a, b*, shewn in Figure 2, Sheet 1, and so prevent the falling down again of such of the tumblers by the action of the spring *e*, the spring catch *d* acting as a detector in addition to those shown at *f*, which, in the event of the tumblers being
5 raised too high, would enter beneath the parts *c', c'*, of the tumblers, and retain them so. The key in unlocking acts only on the part *b* of the bolt *a, b*, but in locking the key acts on the part *a*, of the bolt *a, b*.

Figures 1, 2, 3, Sheet 2, show various views of a change or permutation lock, the bolt being formed in two parts *a*, and *b*, in a like
10 manner to that above described.

The Drawing shows the nature of the several other parts of the lock, but as they are not new, and form no part of our Invention, it will not be necessary to describe the same further.

15

DESCRIPTION OF SHEET 3.

Figure 1, shows a front view of a lock commonly known as the combination latch, which has the second part of our Invention applied thereto in a locked position; Figure 2, shows a similar view, in which the combination latch is raised by the false bit in the manner
20 hereafter explained; and Figure 3, shows another similar view, in which the combination latch is in an unlocked position. *a, a*, is the latch, which, in the latch shewn, consists of five parts, which are shewn separately, and numbered to indicate their respective positions in the details of this Sheet. *b*, is a revolving cap, having fixed thereon a
25 false bit *c*, at or nearly at a right angle to the proper keyhole, so that by the placing in of the proper key at the keyhole, the key so placed enters the part *c'*, of the false bit *c*, in such a manner that, by turning the correct key *d*, the false bit *c*, will be caused to travel also, and by being so placed and fixed upon the revolving plate *b*, will first act upon
30 the parts 1, 2, 3, 4, 5, of the latch, and raise them above the proper height for opening, so that by continuing to turn the key *d* in the same direction, the parts 1, 2, 3, 4, 5, will descend on the removal past a vertical position of the false bit *c*, and be caught up and rest upon the steps or nose of the correct key *d*.

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The object of this arrangement is, that should an attempt be made to pick a lock of this description by pressing the latch against its catch (fixed to the door post), when attempting to raise the parts composing the latch by means of a pick or instrument, the false bit will prevent the parts of the latch being got at, and the pressure prevents the bit 5 rotating.

Having thus described the nature of our said Invention, and the manner of performing the same, we would have it understood that we make no claim to the separate parts; nor do we confine ourselves to the forms and arrangement of the parts, so long as our improvements be 10 retained. But what we claim is, first, the mode herein described of forming the bolts of locks, each of two parts, and combining them with the tumblers and apparatus as herein described; and, secondly, we claim the mode of constructing locks and latches with false bits, as herein described.

In witness whereof, I, the said John Chubb, have hereunto set my hand and seal, this Eighteenth day of July, in the year of our Lord One thousand eight hundred and fifty-three. 15

JOHN CHUBB. (L.S.)

Witness,

FRED^K HARRIS.

20

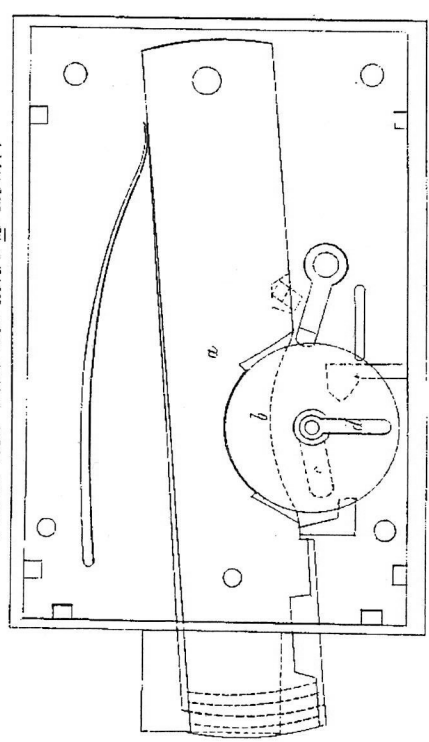
LONDON :

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1854.

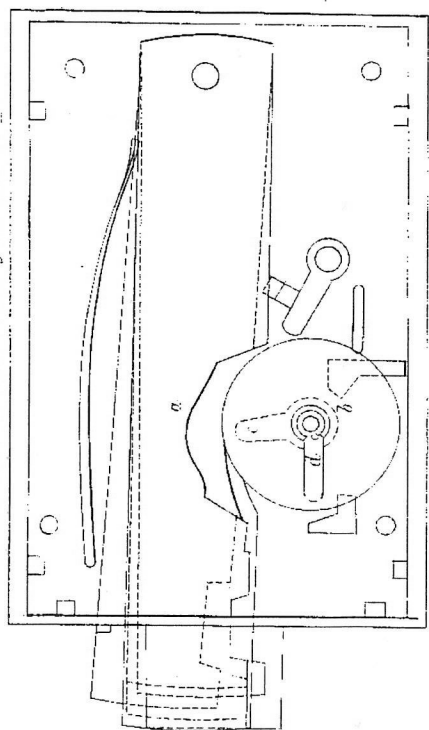
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 CHUBB & GOATER'S SPECIFICATION.

FIG. 1.

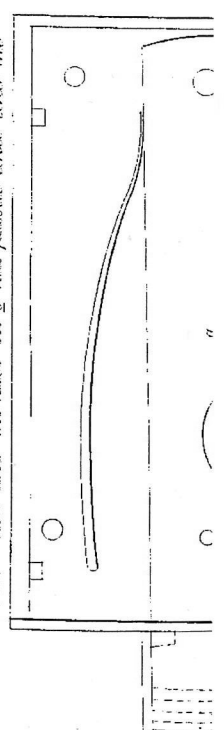
Front view with the latch *a* down.



Front view with the latch raised by the false bit *c*.



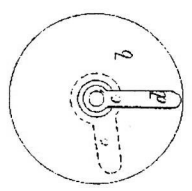
Front view after the false bit *c* has passed and the



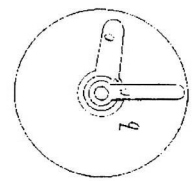
The parts of which it
 is

Separate views of the revolving cap *b* and
 false bit *c* connected thereto.

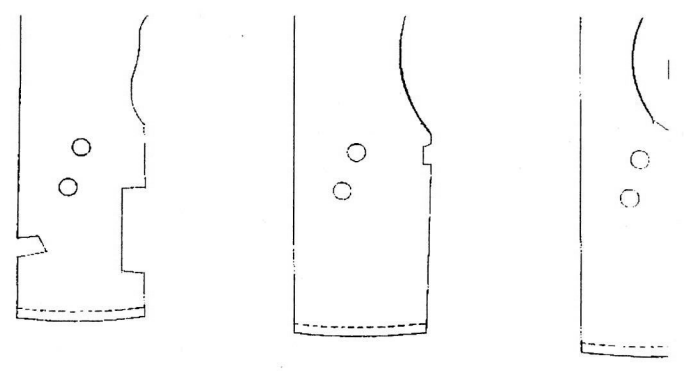
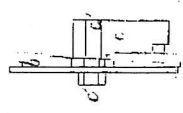
Front view.



Back view.

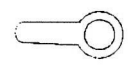


Side view.



Separate views of the handle and part connected
 for opening the door from the inside.

Front view



Side view partly
 in section.

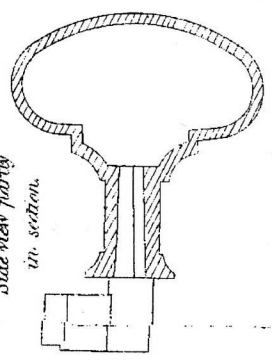
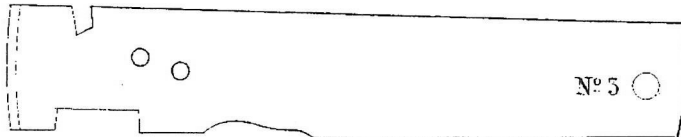
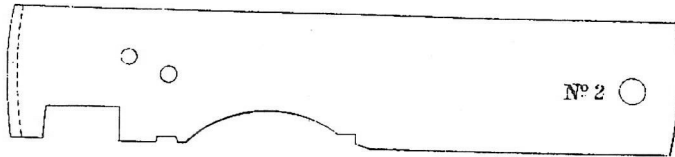
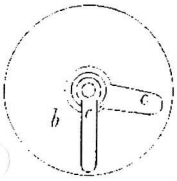
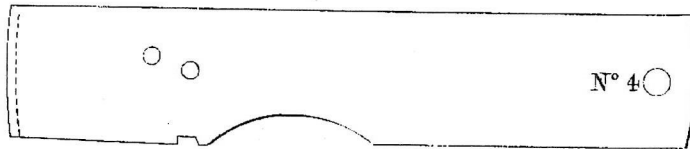


FIG. 2.

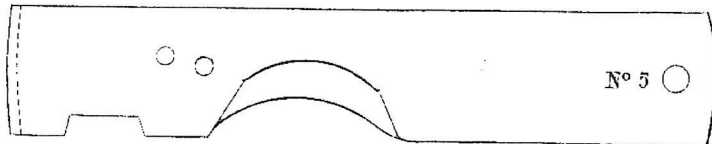
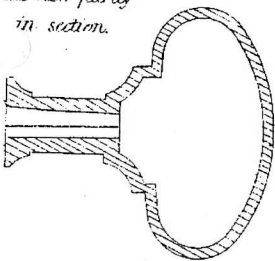
Back view.



*and part connected
inside.*



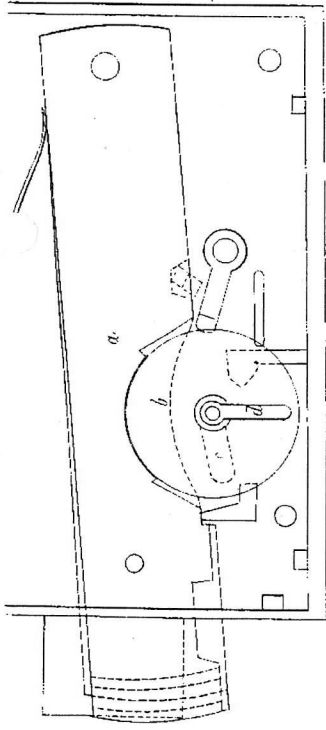
*side view partly
in section.*



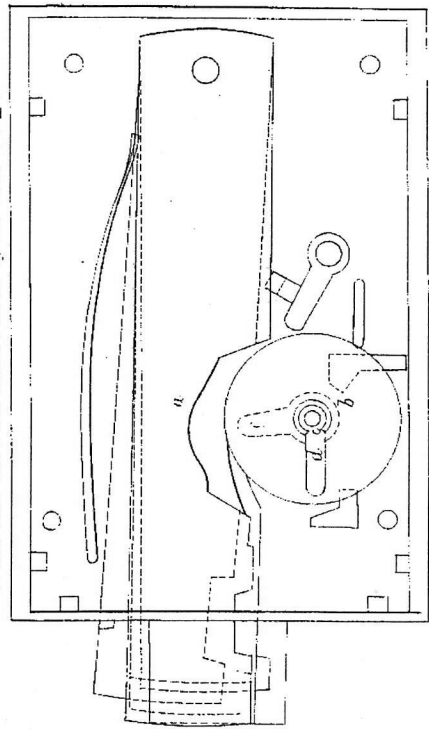
Edge view of latch α .



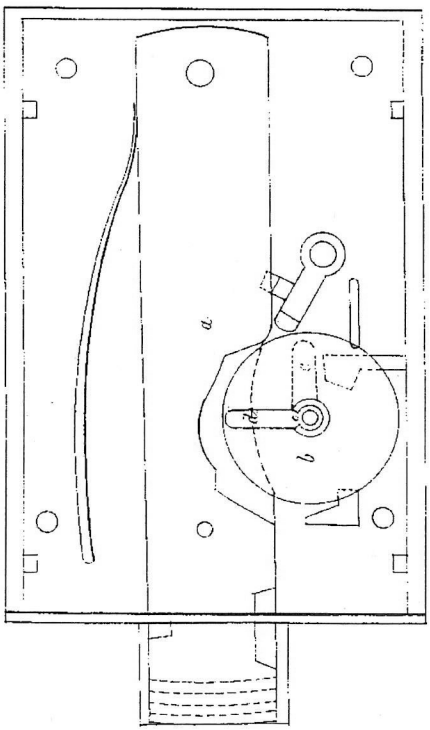
Adlard & Palmer Lithographers 55, Ludgate Hill.



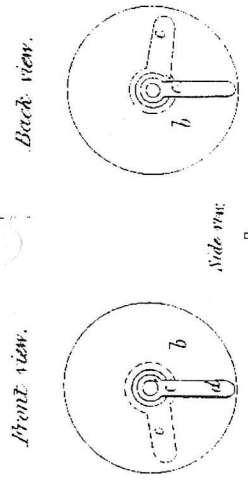
Front view with the latch raised by the false bit *a*.



Front view after the false bit *a* has passed and the



true key *d* has received the latch *c*.



Back view.

Front view.

Side view.

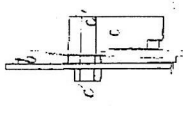
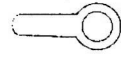


FIG. 2.

Separate views of the hole and part connected for opening the door from the inside.

End view.



Side view partly in section.

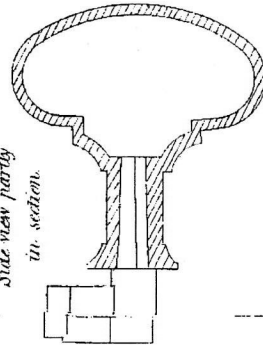
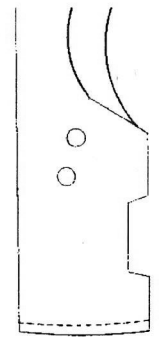
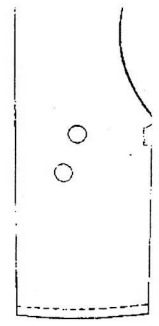
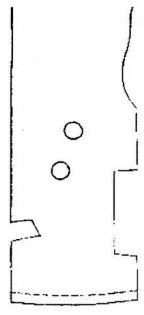
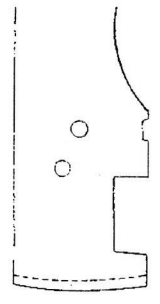


FIG. 3.



Edge view.



Sliding Bolt of Two
 Parts the one hinged to
 moving on the
 other. A spring
 between the
 two parts keep
 them correctly
 together

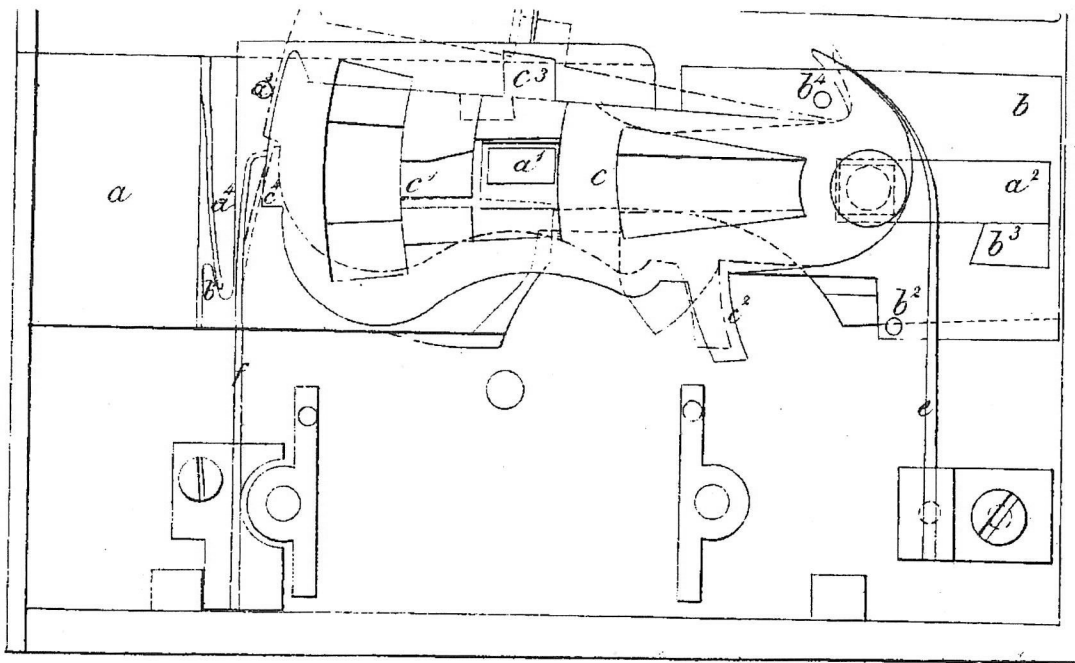


FIG. 2.

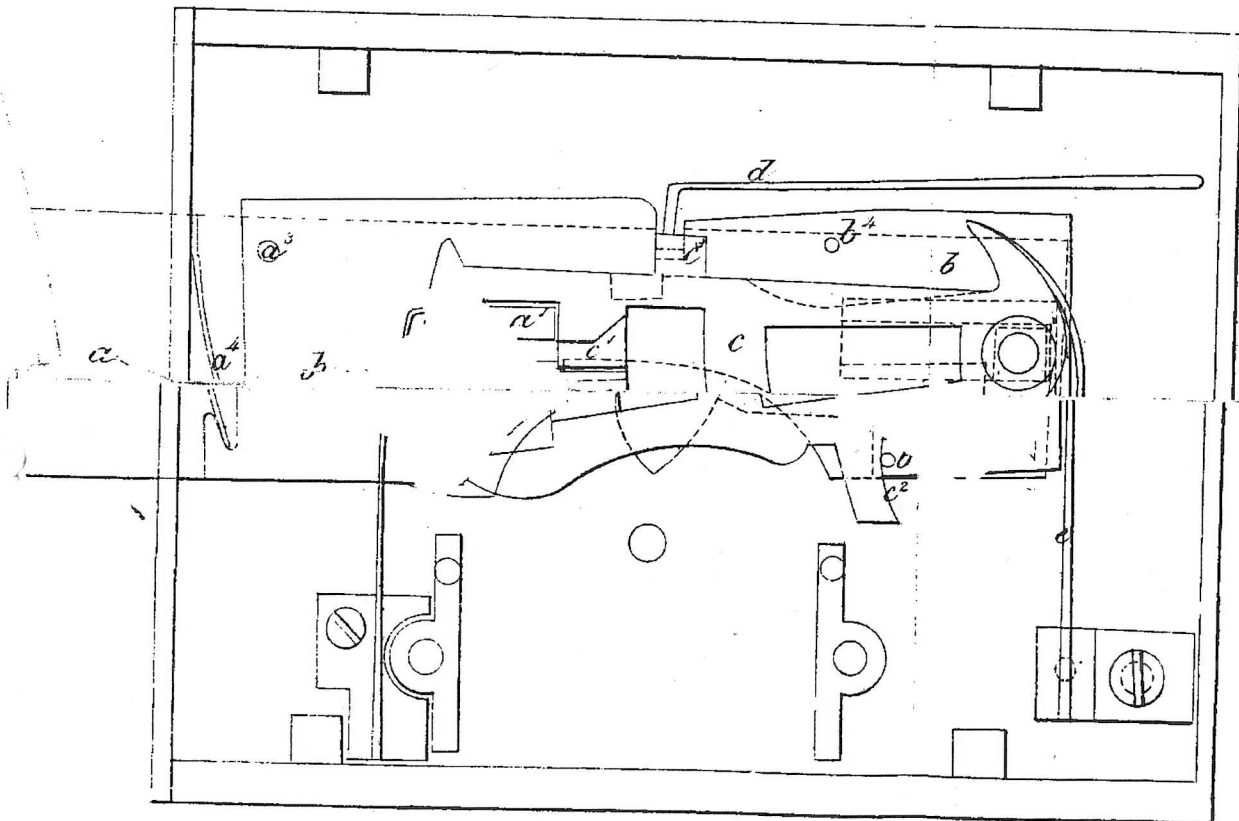
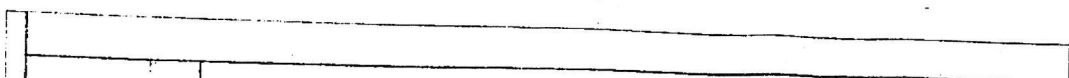


FIG. 3.



A. D. 1853. JAN^Y 21. N^o 160.
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FIG. 1.

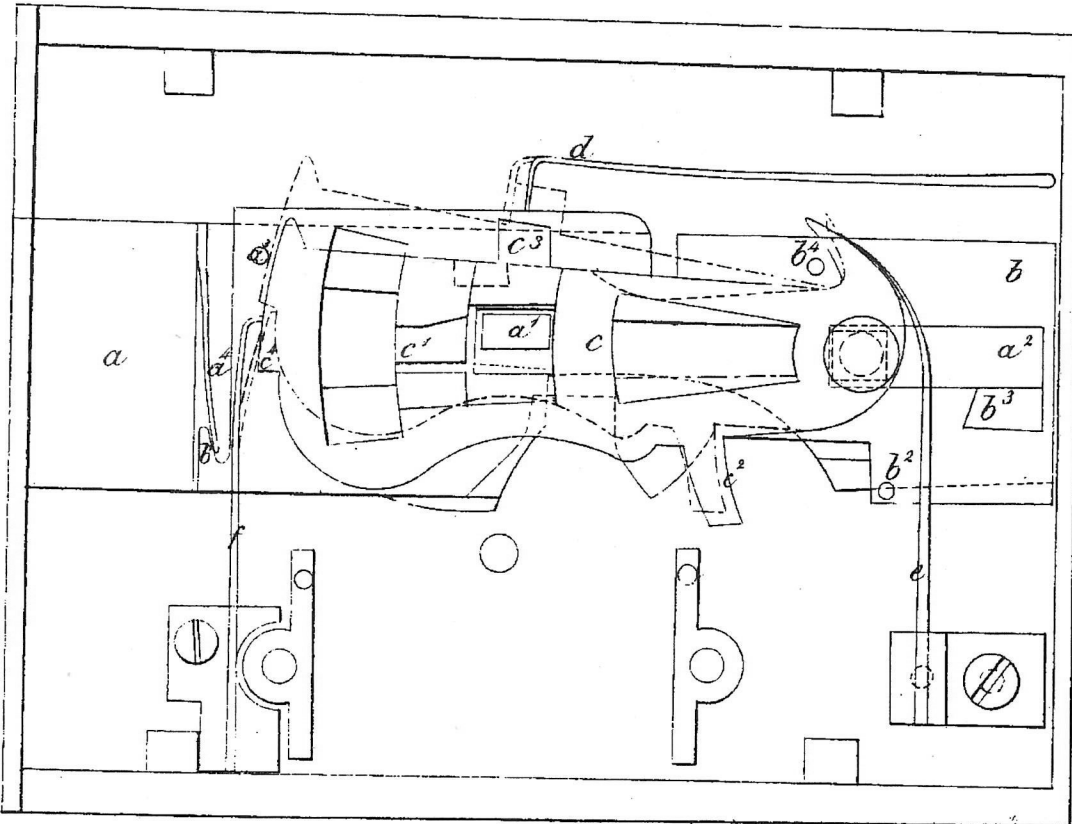
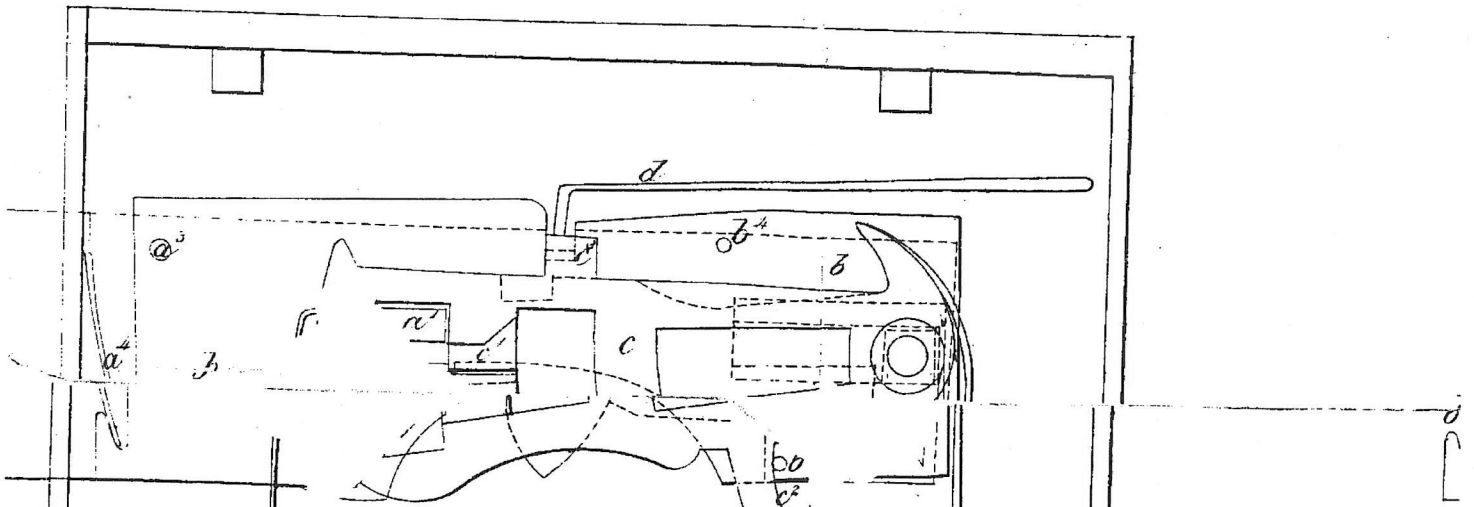


FIG. 2.



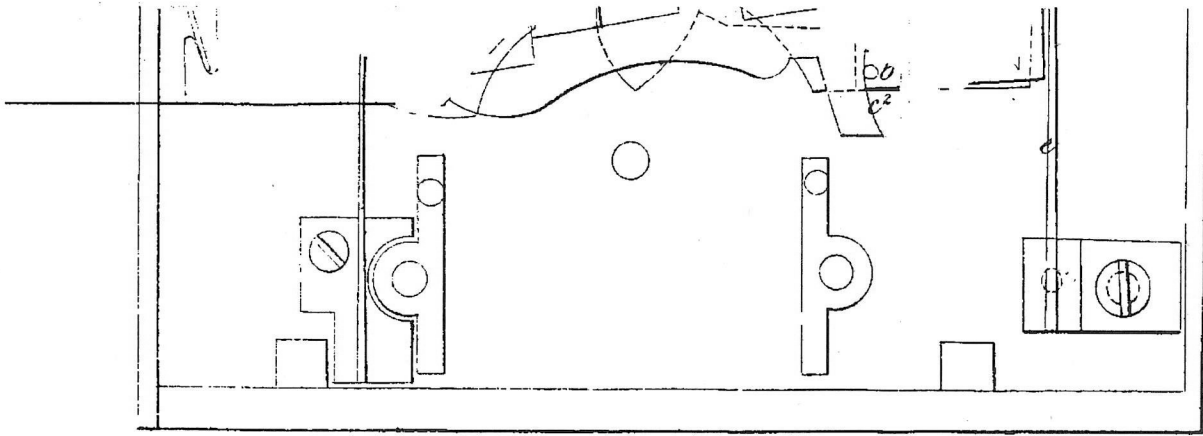
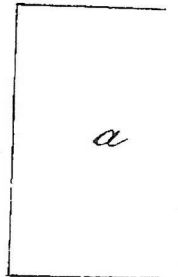
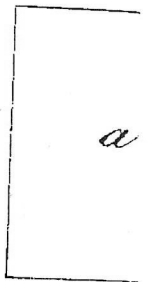
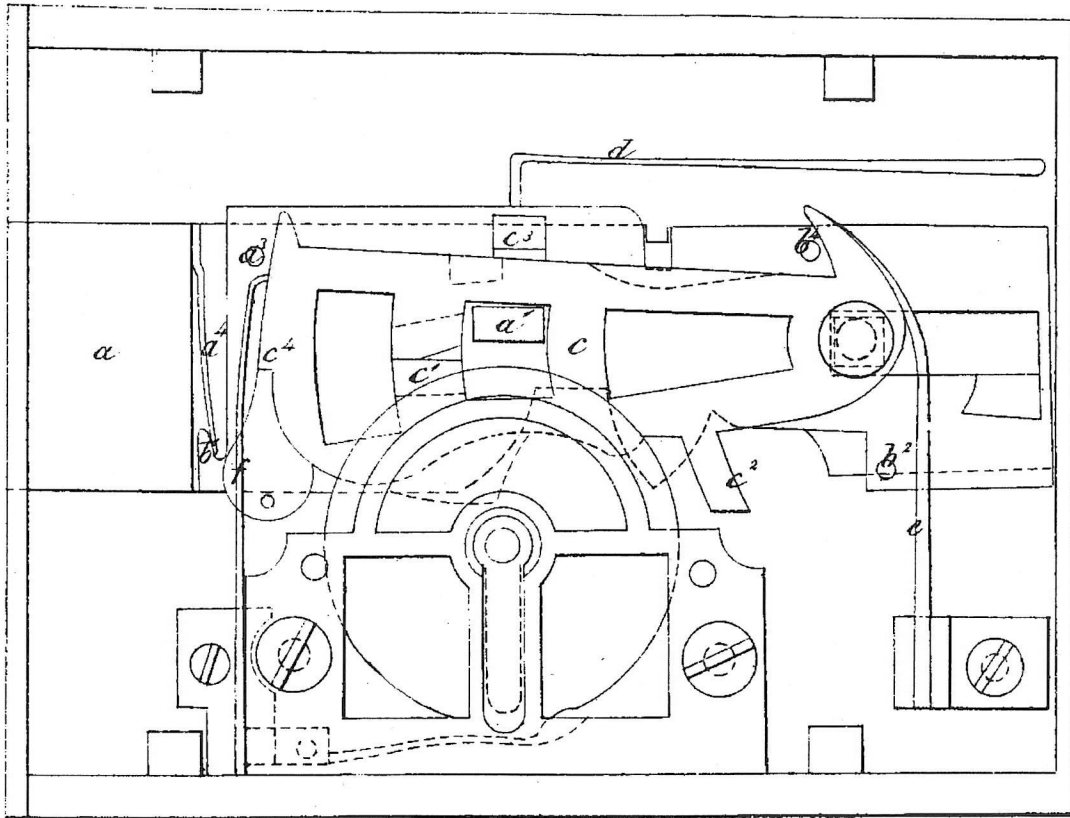


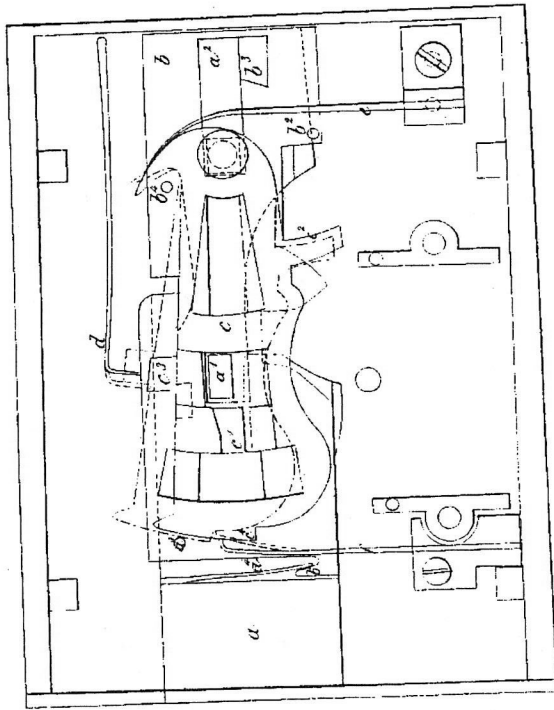
FIG. 5.



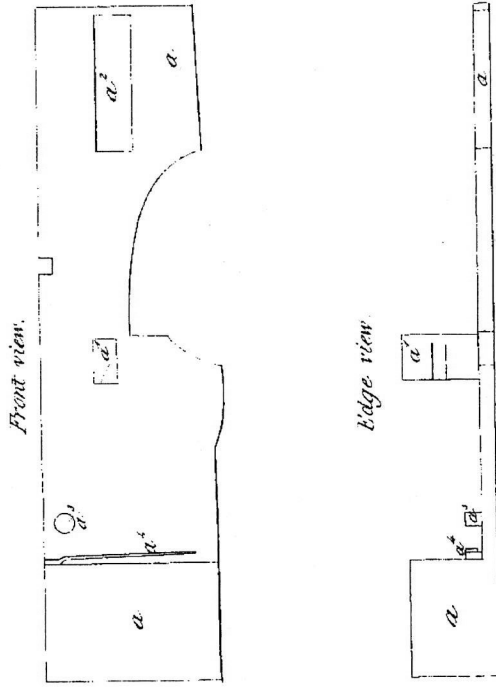
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 CHUBB & GOATER'S SPECIFICATION.

FIG. 1.



Separate views of the bolt *a*.



Separate view of the moveable part *b* of the bolt *a*.

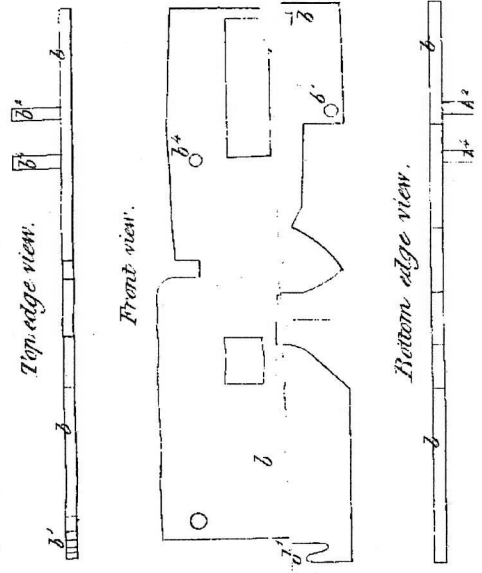
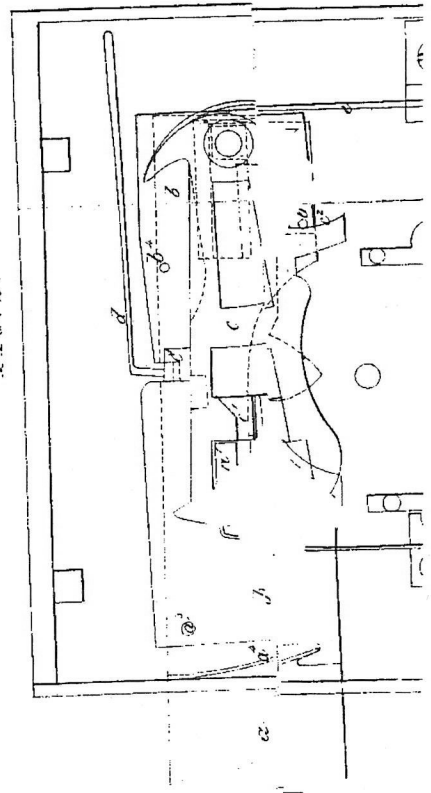
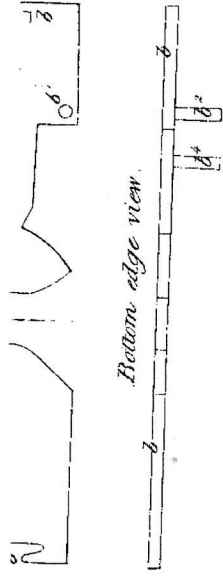
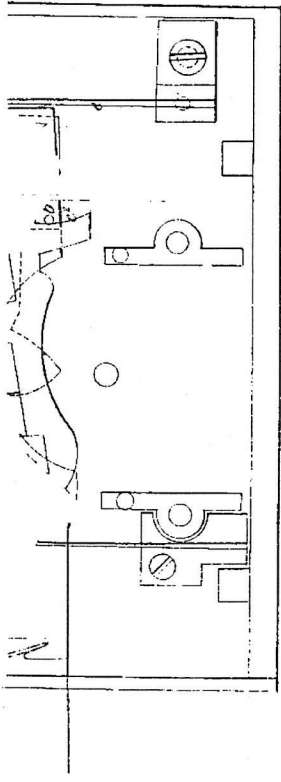


FIG. 2.

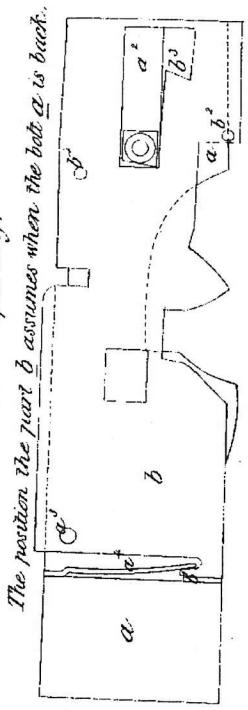


Duplicate Sliding Bolt, 2 Parts Drawin



Bottom edge view.

The bolt a with its moveable part b shown separately.



The position the part b assumes when the bolt a is back.

The position of the part b when the bolt a is shot out.

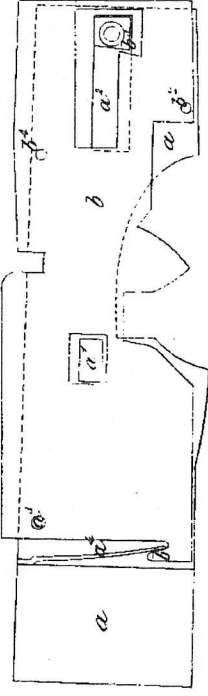
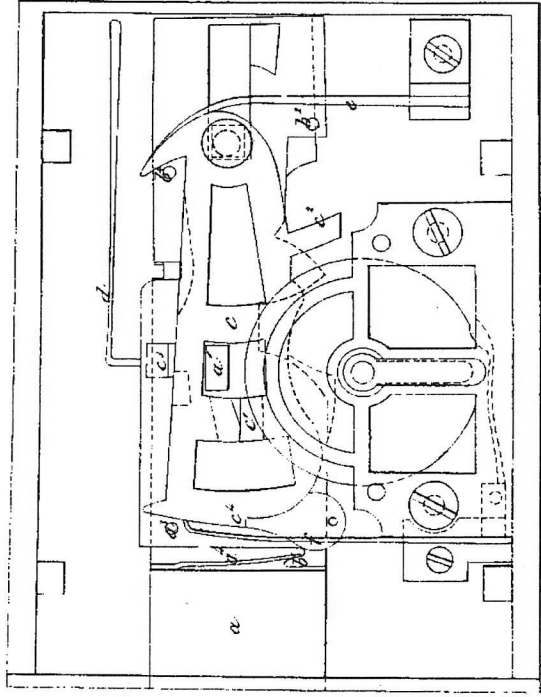


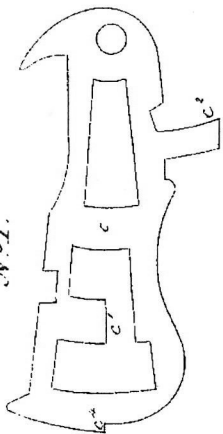
FIG. 3.



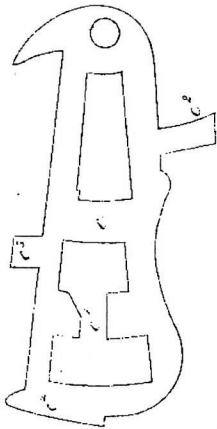
The Filed Drawing is correct.

The tumbler shown separately.

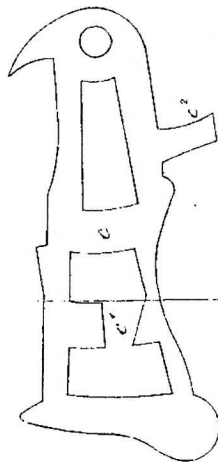
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No. 2.



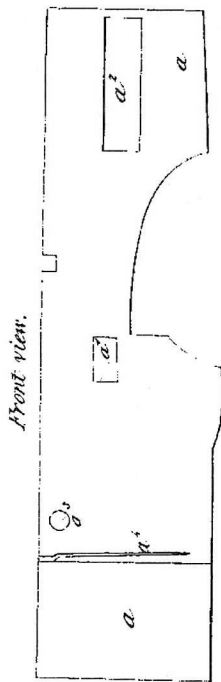
No. 3.



No. 4.

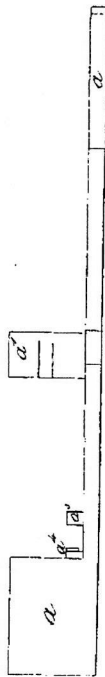


Separate views of the bolt. a.

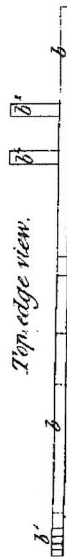


Front view.

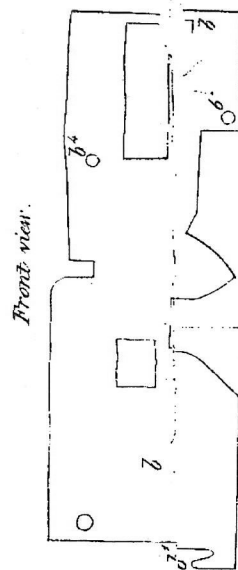
Edge view.



Separate view of the movable part b of the bolt. a.



Top edge view.



Front view.



Bottom edge view.

FIG. 1.

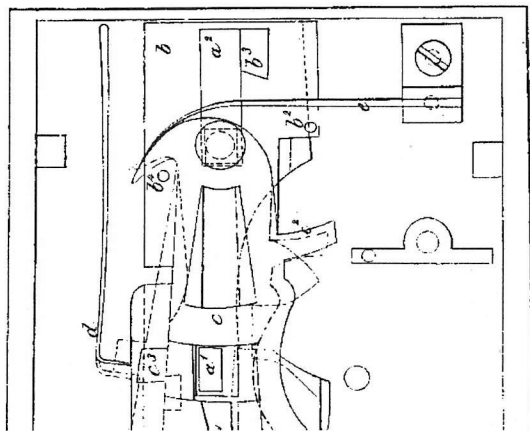
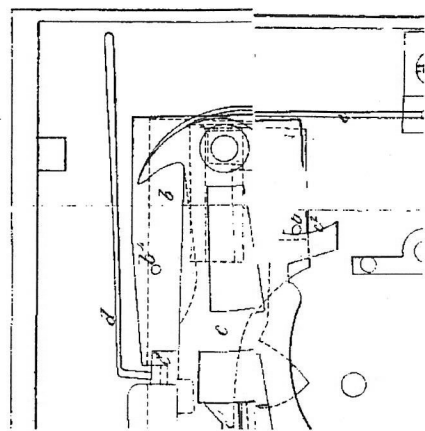
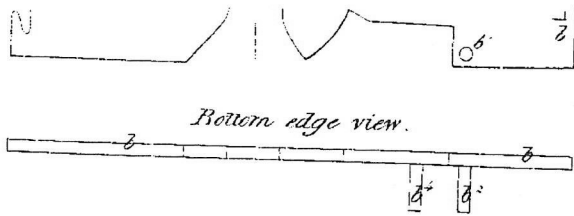


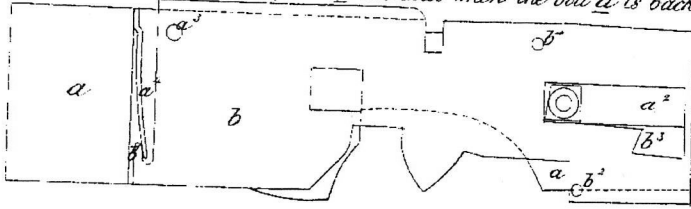
FIG. 2.





The bolt *a* with its moveable part *b* shown separately.

The position the part *b* assumes when the bolt *a* is back.



The position of the part *b* when the bolt *a* is shot out.

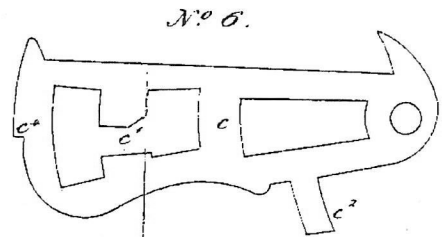
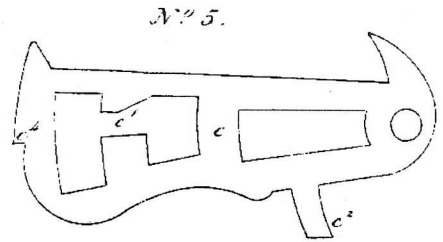
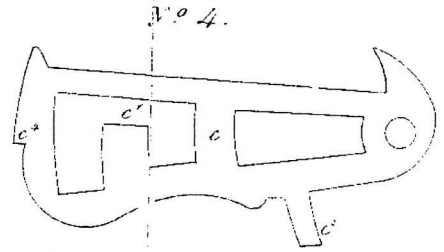
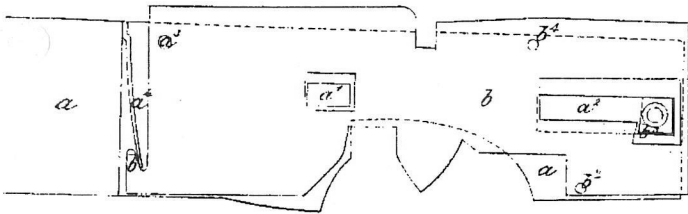


FIG. 1.

Front view of the lock with the bolt *a. b* thrown back

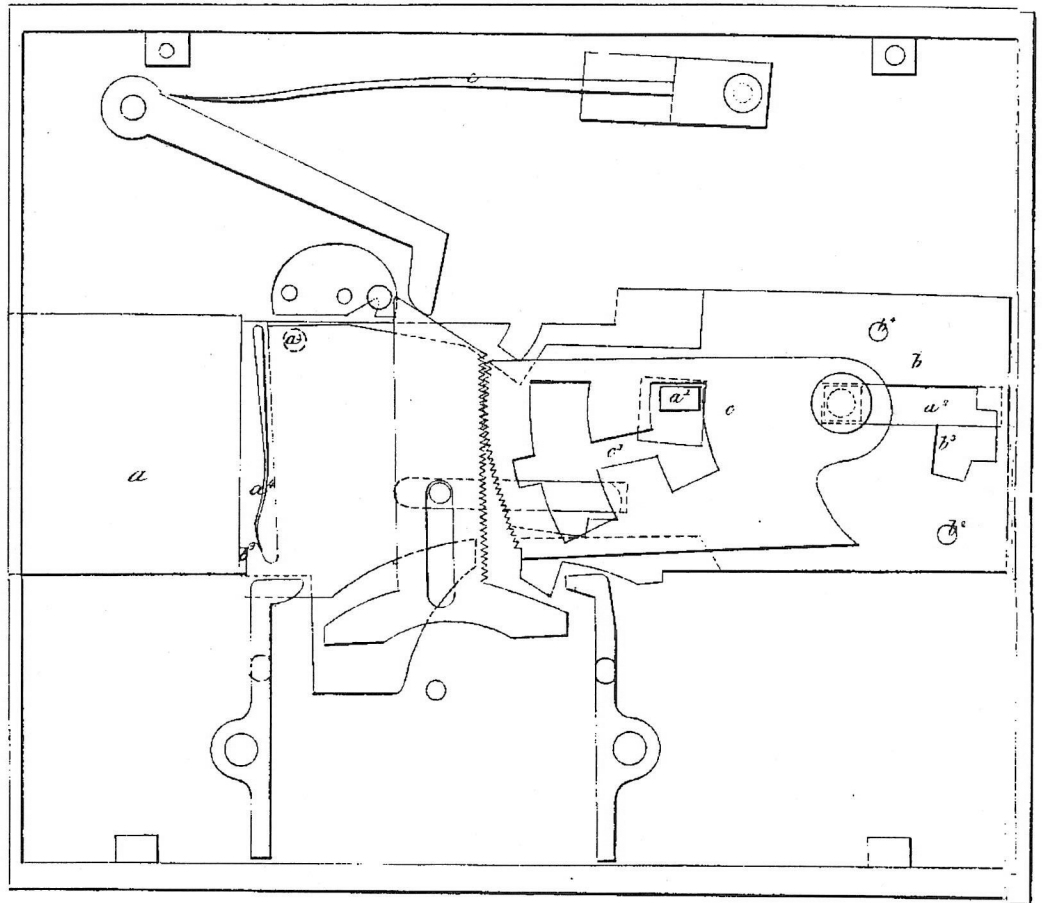


Figure 2.

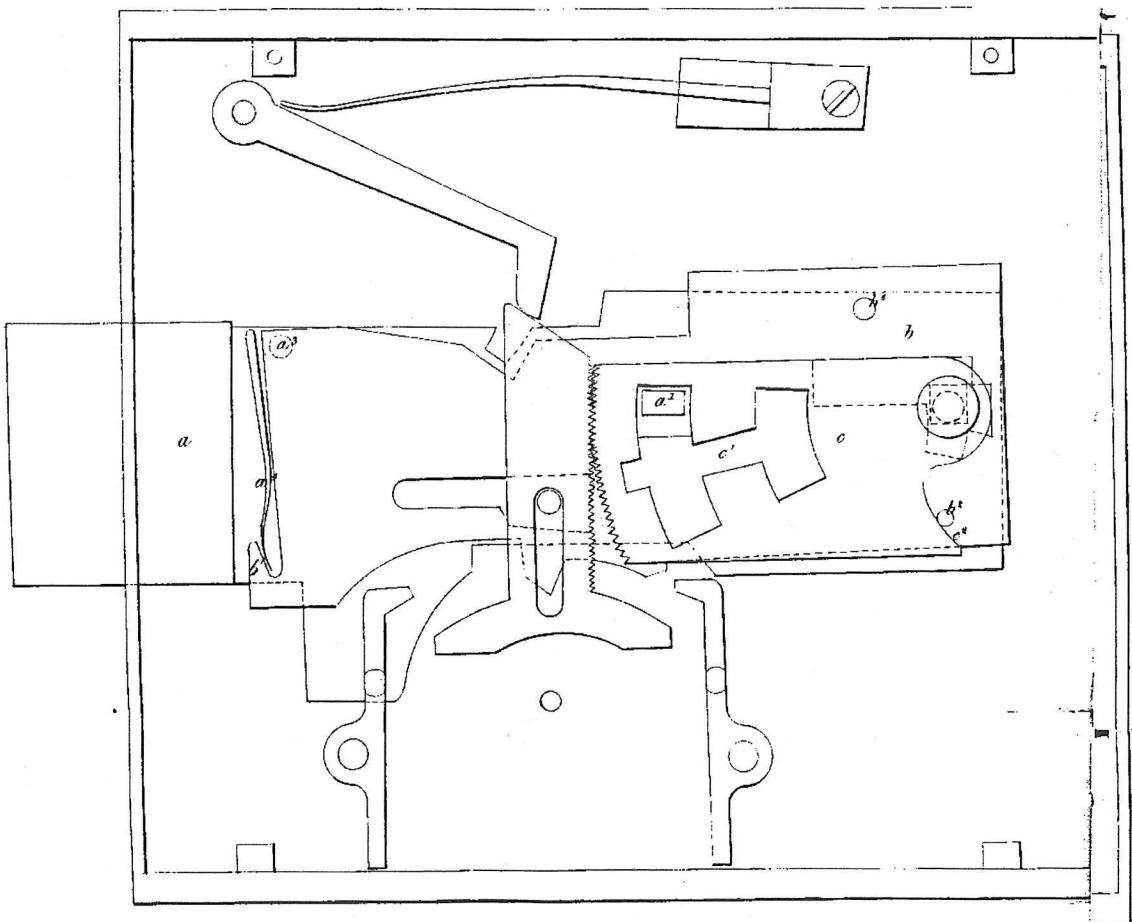
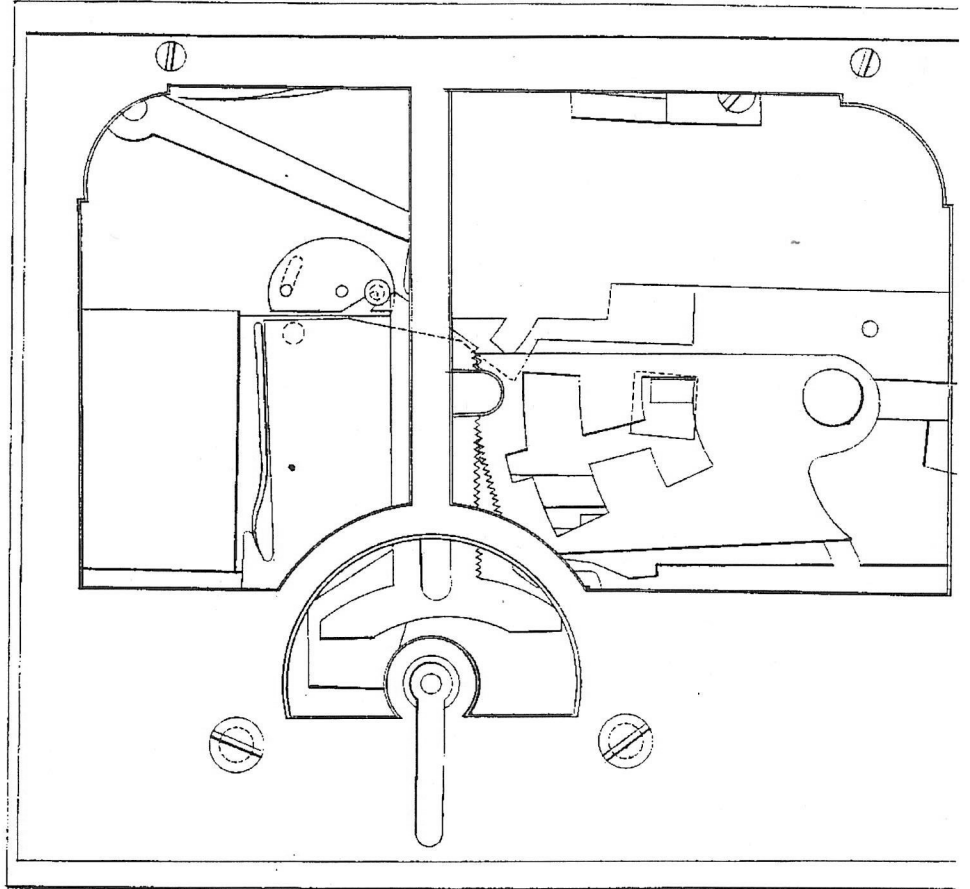


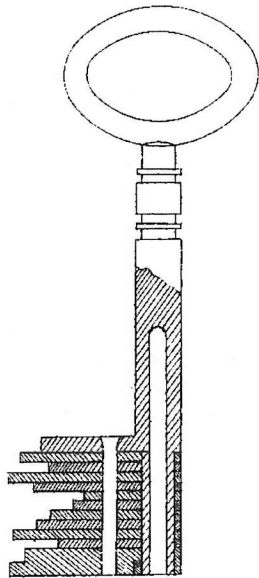
FIG. 3.

Front view of the lock with its plate complete.

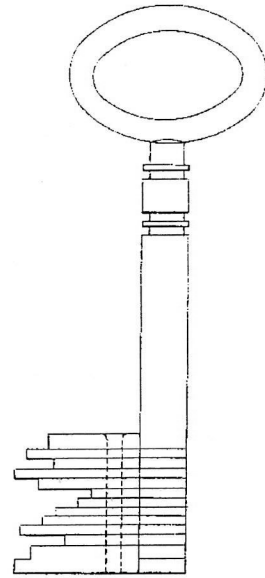


Separate views of the permutating key.

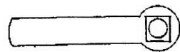
Section.



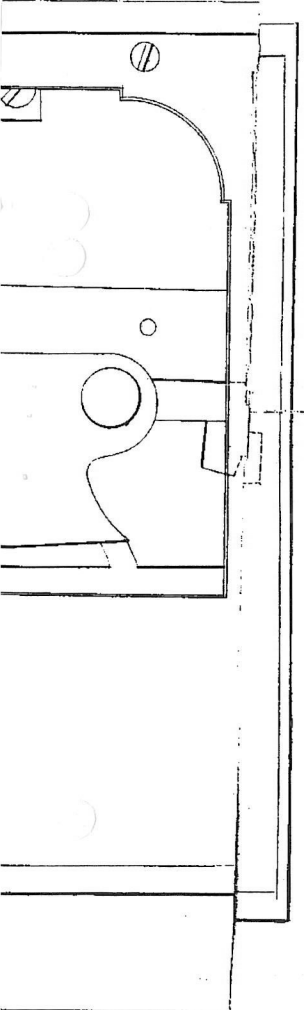
Side view.



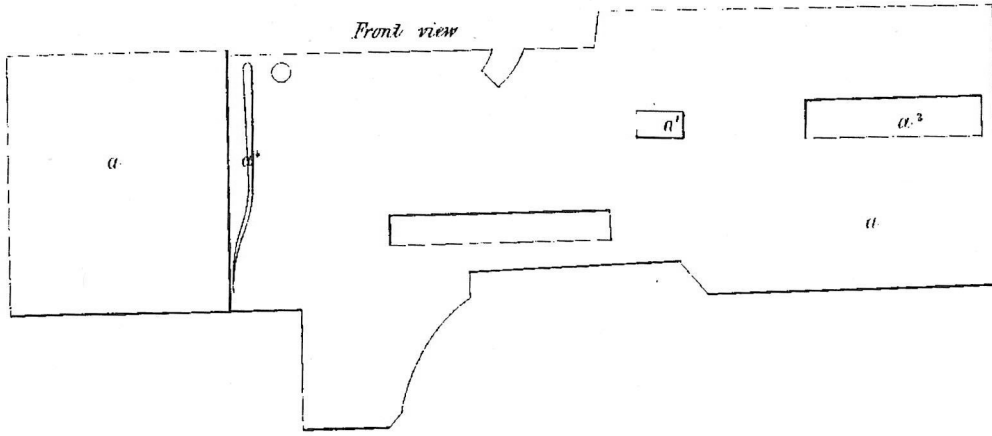
Underside view



complete.



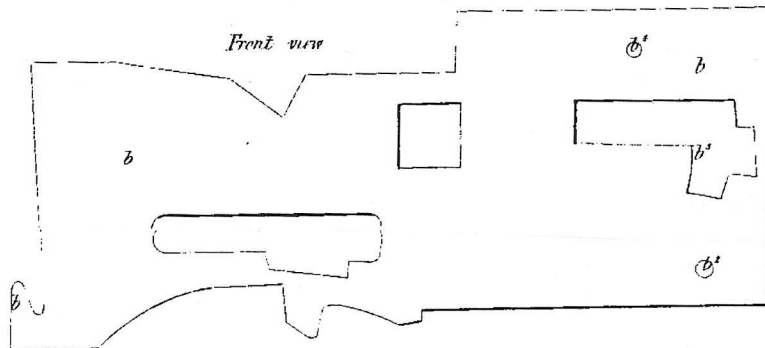
The bolt *a* shown separately



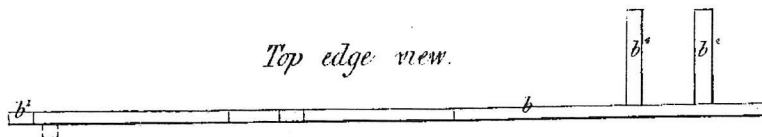
Edge view



The moveable portion *b* of the bolt *a* shown separately



Top edge view.



Bottom edge view.

