

S. C. St. John,

Lock.

N^o 31,267.

Patented Jan. 29, 1861.

Fig. 3.

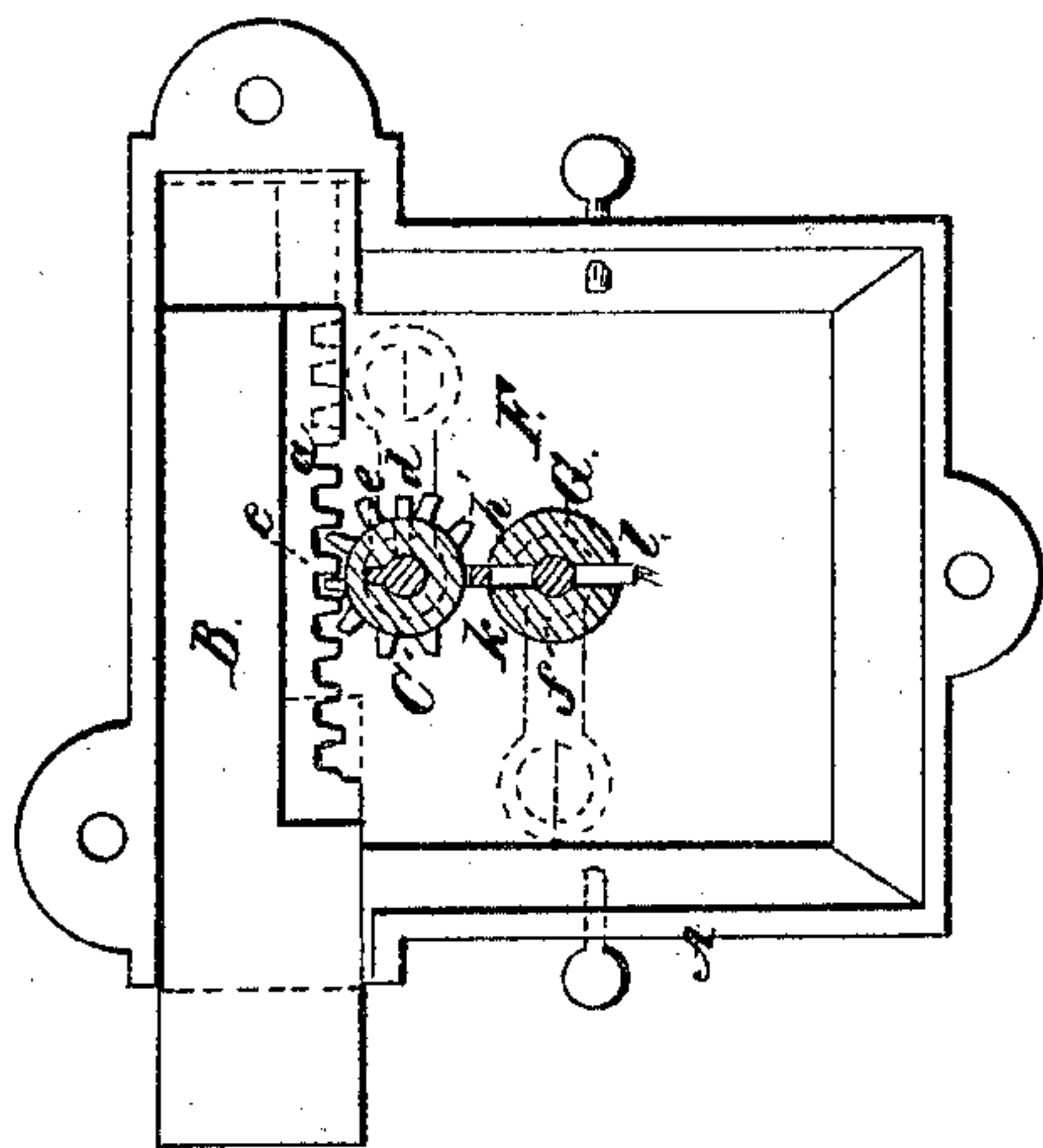


Fig. 2.

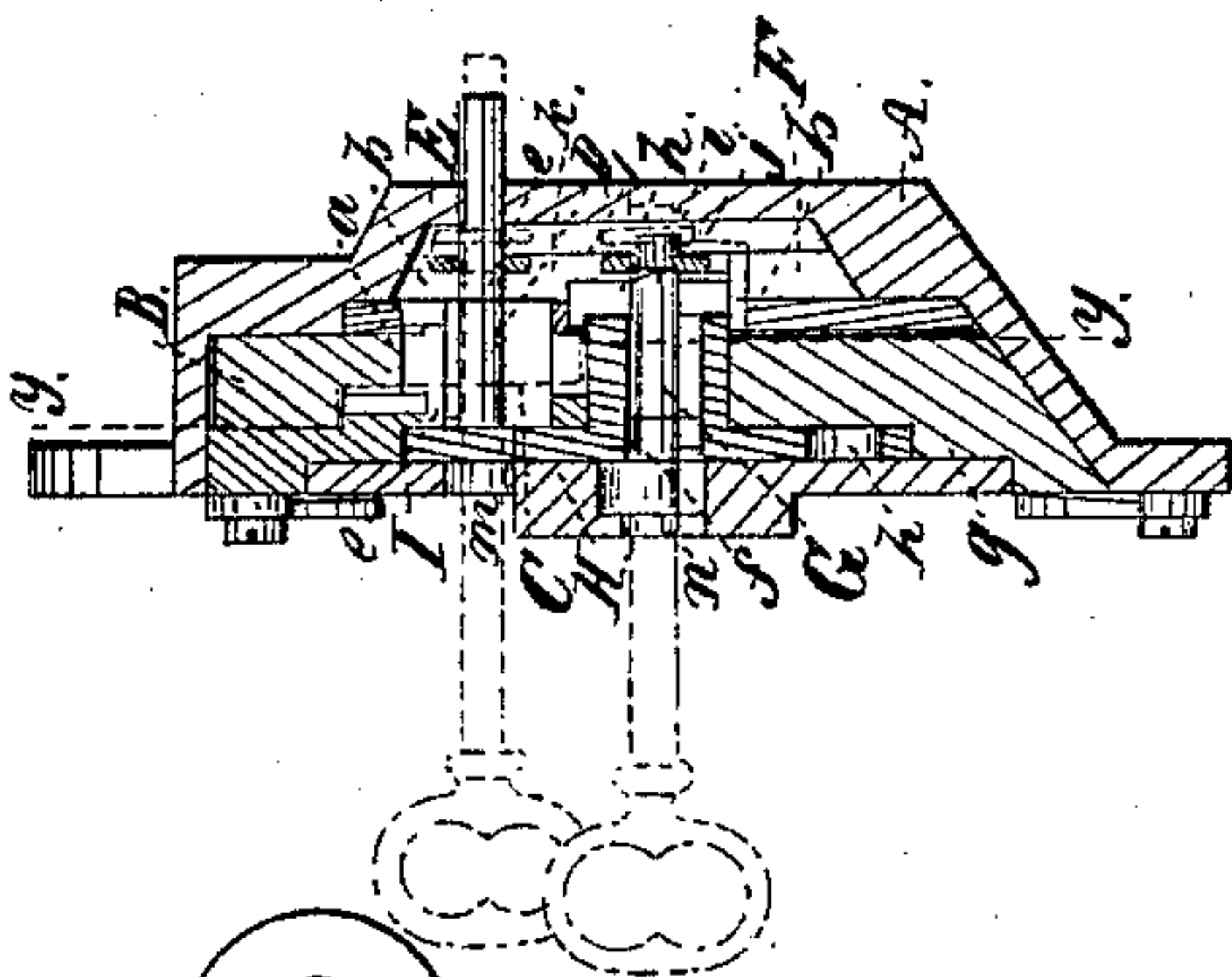


Fig. 1.

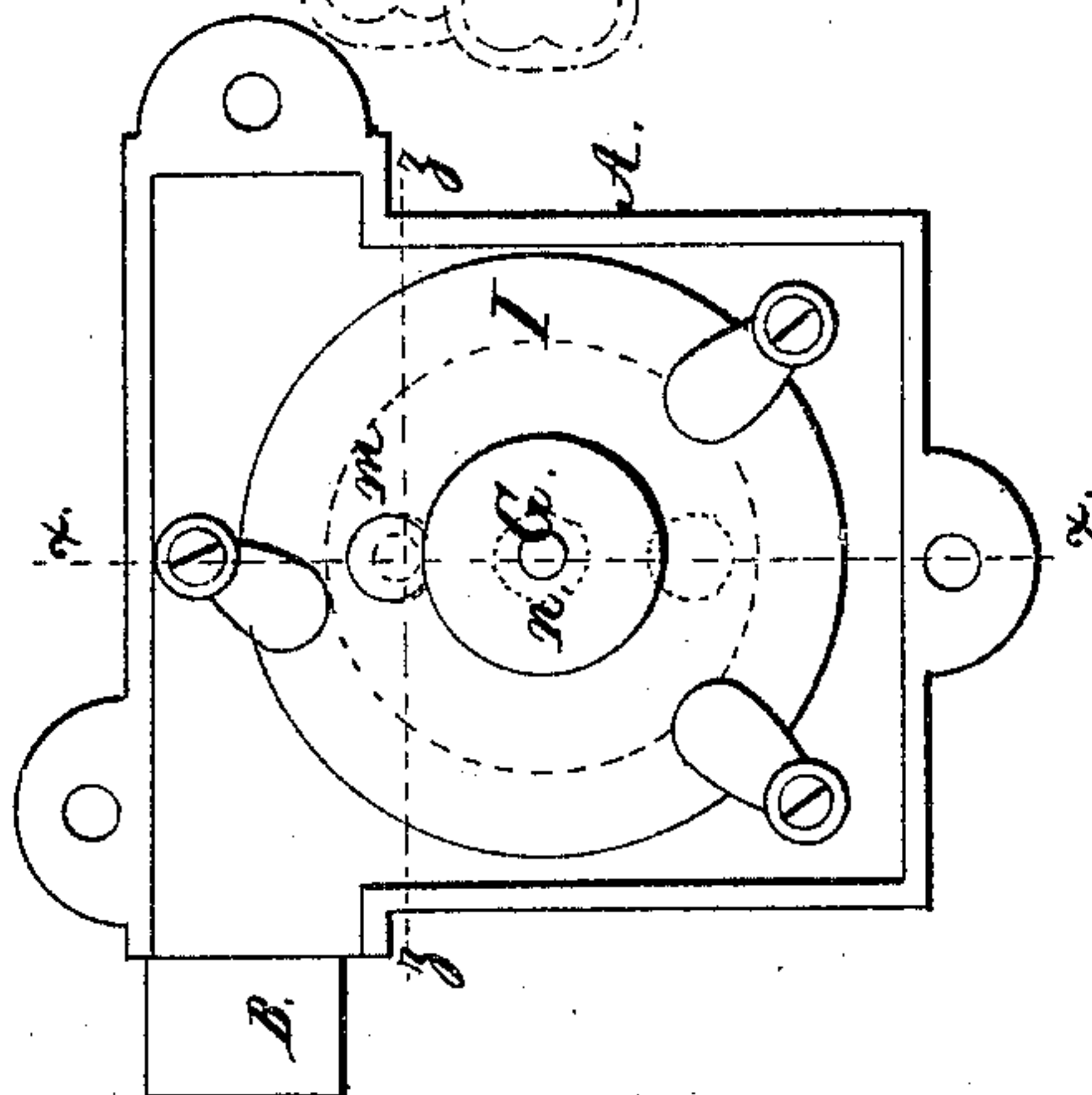


Fig. 5.

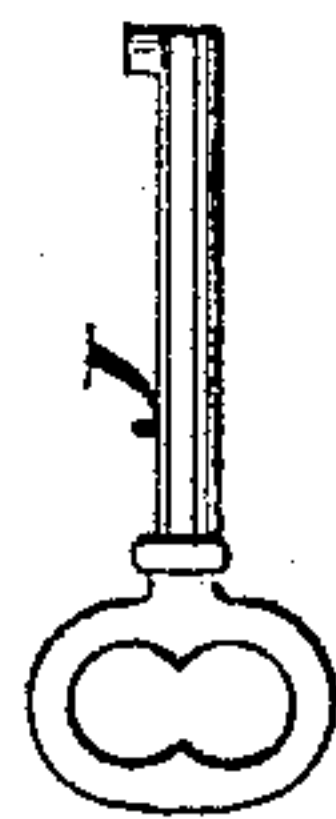
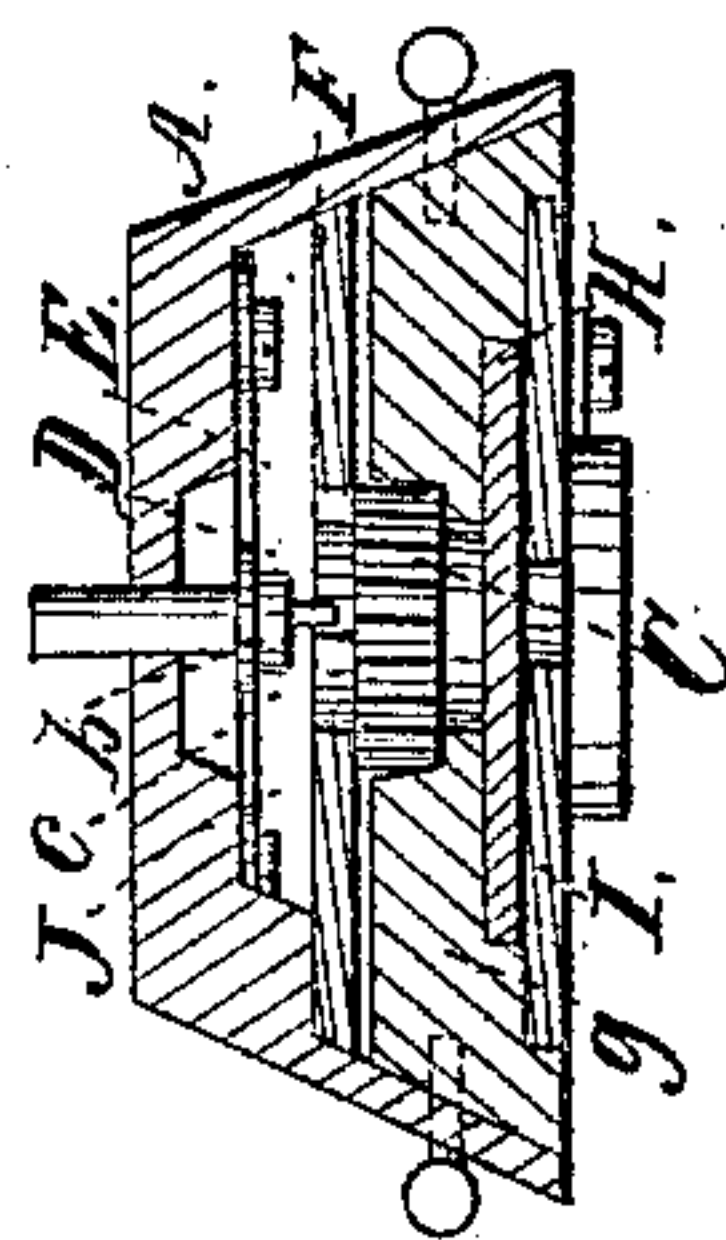


Fig. 4.



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SOL. C. ST. JOHN, OF EDMESTON, NEW YORK.

LOCK.

Specification of Letters Patent No. 31,267, dated January 29, 1861.

To all whom it may concern:

Be it known that I, S. C. ST. JOHN, of Edmeston, in the county of Otsego and State of New York, have invented a new and Improved Lock; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a face view of my invention. Fig. 2 is a section of the same taken in the line *x, x*, Fig. 1. Fig. 3 is a section of the same, taken in the line *y, y*, Fig. 2. Fig. 4 is a section of the same, taken in the line *z, z*, Fig. 1. Fig. 5 is a detached view of the key of the same.

Similar letters of reference indicate corresponding parts in the several figures.

The object of this invention is to obtain a simple and compact lock, which may be cheaply constructed and therefore generally adopted, and still be burglar-proof or unpickable.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the case of the lock, which may be of quadrilateral form, and B, is a bolt which is fitted between proper guides in the case, and allowed to work freely in and out. At the lower side of the bolt B, there is a rack *a*, into which a pinion C, gears, as shown plainly in Fig. 3.

The pinion C, is hollow and has a spindle D, fitted within it, said spindle being allowed to slide freely in the pinion and having a projection *b*, on it. Said spindle also has on it a collar *c*, against which a spring E, bears, said spring having a tendency to keep the spindle D, forced outward and its projection *b*, within either of two recesses *c*, *d*, in a plate F, in the case A. Both these recesses are shown in Fig. 3, one by dotted lines. The spindle D, is provided with a feather *e*, which fits in a recess in the pinion, and insures the rotation of the pinion with the spindle.

G is a spindle which is fitted in the hub *f*, of a circular plate H, said plate being in a circular recess in a plate *g*, which is fitted in the case A. This plate H, has a hole *h*, made in it, which, when said plate is turned

in the proper position will come in line with the end of spindle D, and expose the same.

The spindle G, is provided with a projection *h'*, and it has also a shoulder *i*, on it, against which a spring *j*, bears; said spring having a tendency to keep the projection *h'*, in either of two recesses *k*, *l*, in the plate F, both of which recesses are shown in Fig. 3.

I is a circular plate which is placed over the plate H, and has a hole *m*, in it, said hole being in a circle which corresponds with a circle, in which the hole *h*, of the plate H, is made. At the center of the plate I, there is a hole *n*, which is in line with the spindle G.

The key J, is provided with a bit *o*, which corresponds in form to the end of the spindles D, G.

The operation is as follows:—Suppose, for instance, the lock to be in a locked state, as shown in Figs. 1 and 3. In order to unlock the lock the key is inserted in the hole *n*, of plate I, and the spindle G, forced back until its projection *h'*, is behind the plate F. The plate H, is then allowed to turn by turning the key J, and the hole *h*, of said plate is brought in line with the spindle D, the correct position or precise spot being known by the spring *j*, forcing the projection *h'*, of said spindle into the upper recess *k*, of plate F. The plate I, is then turned until its hole *n*, is brought in line with the hole *h*, of plate H, and the spindle D, is exposed. The key J, is then pressed against the spindle D, the latter forced inward until its projection *b*, is behind the plate F. The pinion C, is then turned by turning the key, and the bolt B, thrown back, the pinion C, being turned until the projection *b*, of spindle D, enters the recess *d*, in plate F, as shown in red in Fig. 3. By this arrangement it will be seen that it would be almost impossible to pick the lock, as the plate I, may be provided with figures, and placed in varying positions, so that no person but the one who locked the lock or adjusted said plate could turn it so as to bring its hole *n*, in line with the spindle D. This lock at the same time is exceedingly simple and may be constructed at a small expense.

The spindle D, may extend entirely through the lock, so that the latter may be

opened from the inner side by having a knob attached to the inner end of said spindle.

Having thus described my invention what I claim as new and desire to secure by Letters Patent, is:—

The arrangement and combination of the plates H, I, spindles D, G, provided with

the projections *b*, *h'*, the stationary plate F, pinion C, and bolt D, provided with the rack *a*, as and for the purpose herein set forth.

SOL. C. ST. JOHN.

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