

(Model.)

2 Sheets—Sheet 1.

R. O. & S. WALKER.

SEAL LOCK.

No. 283,836.

Patented Aug. 28, 1883.

Fig. 1.

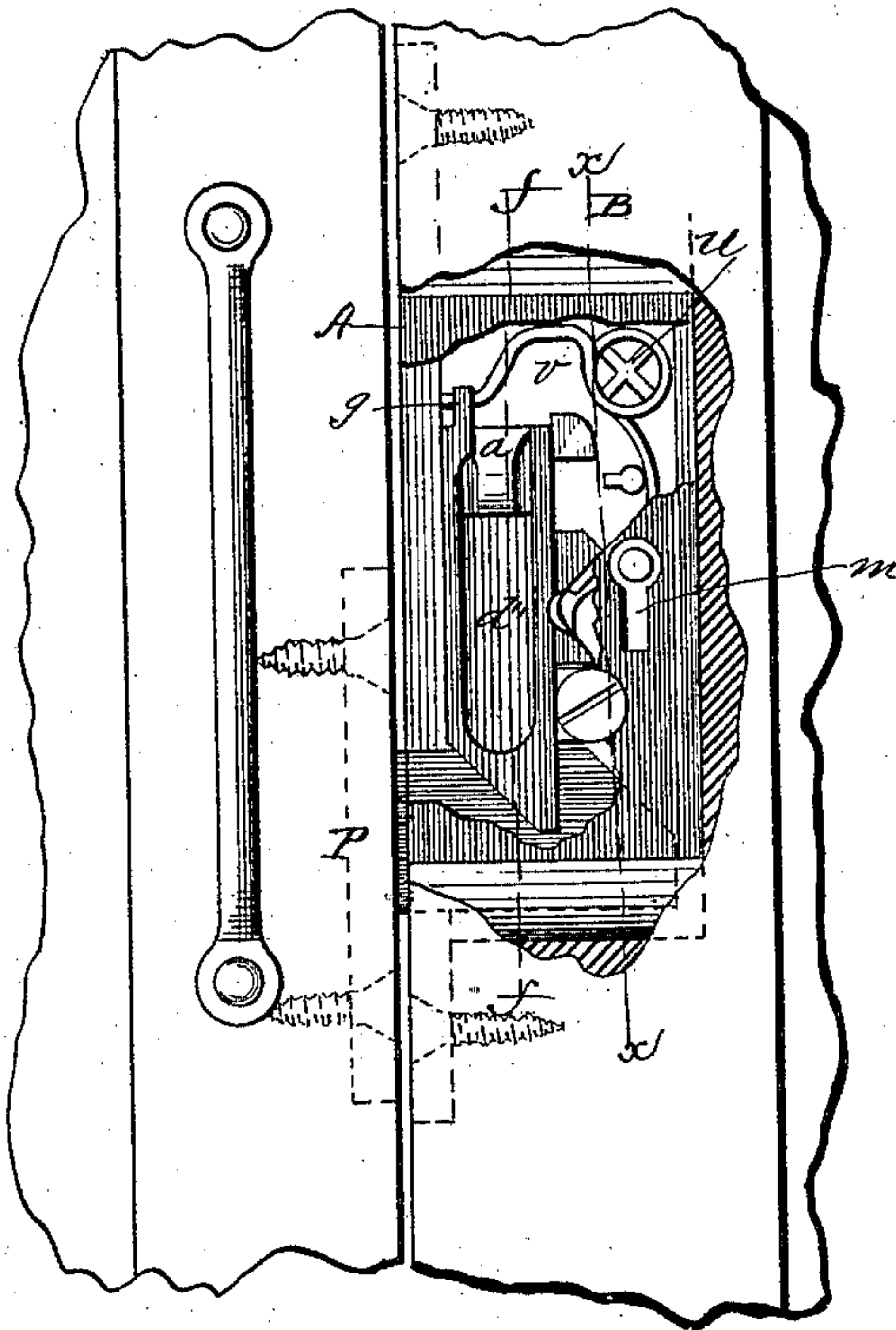


Fig. 3.

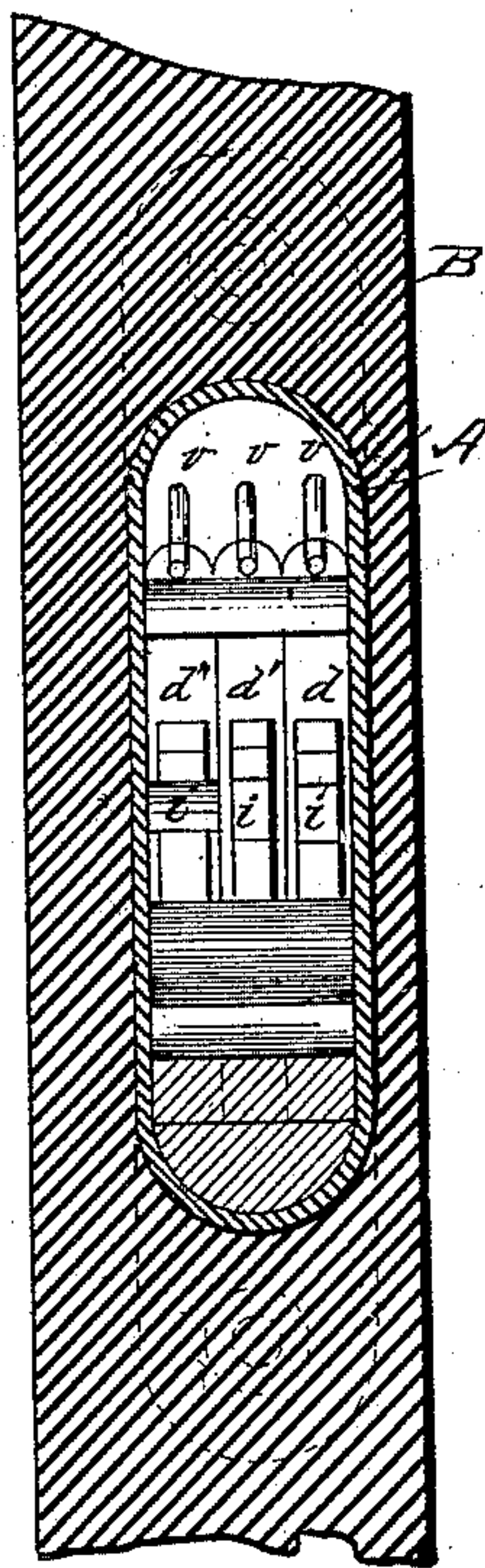


Fig. 4.

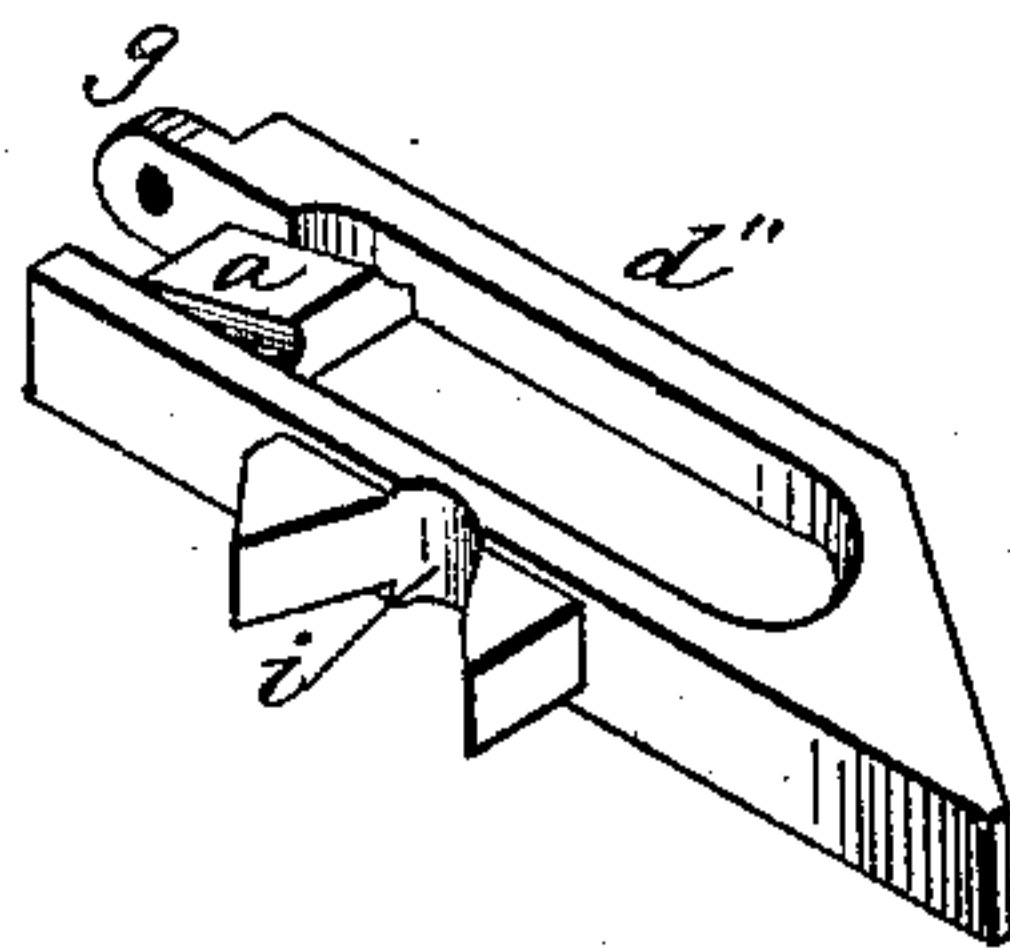


Fig. 2.

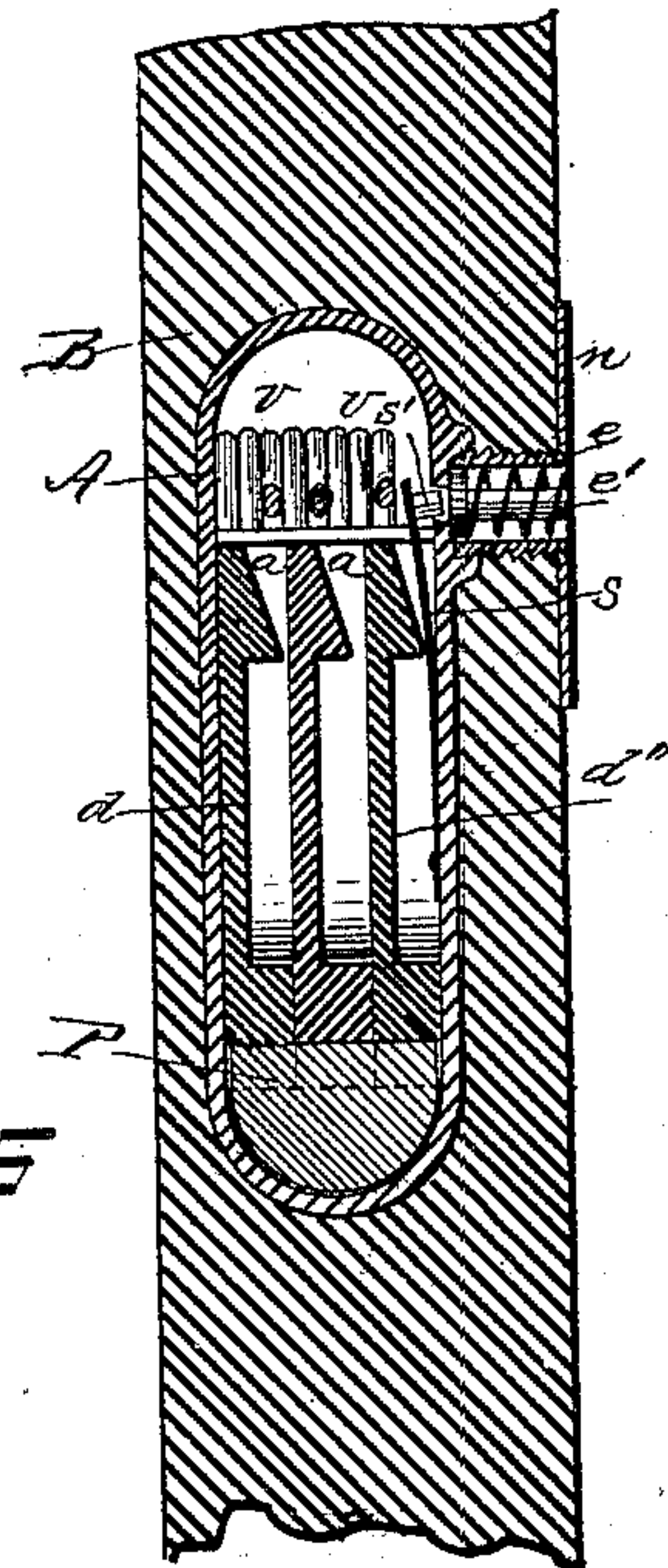


Fig. 5.

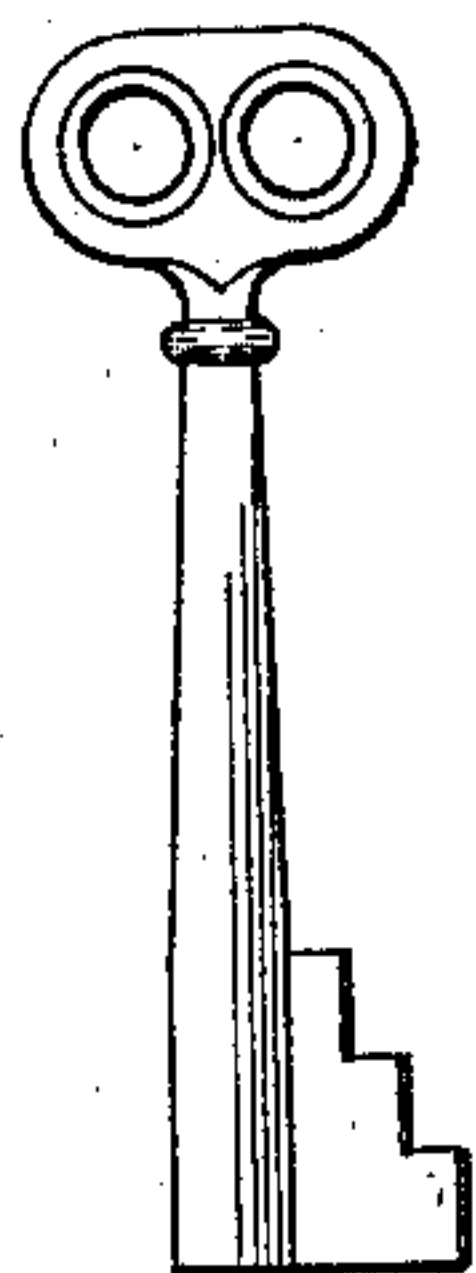
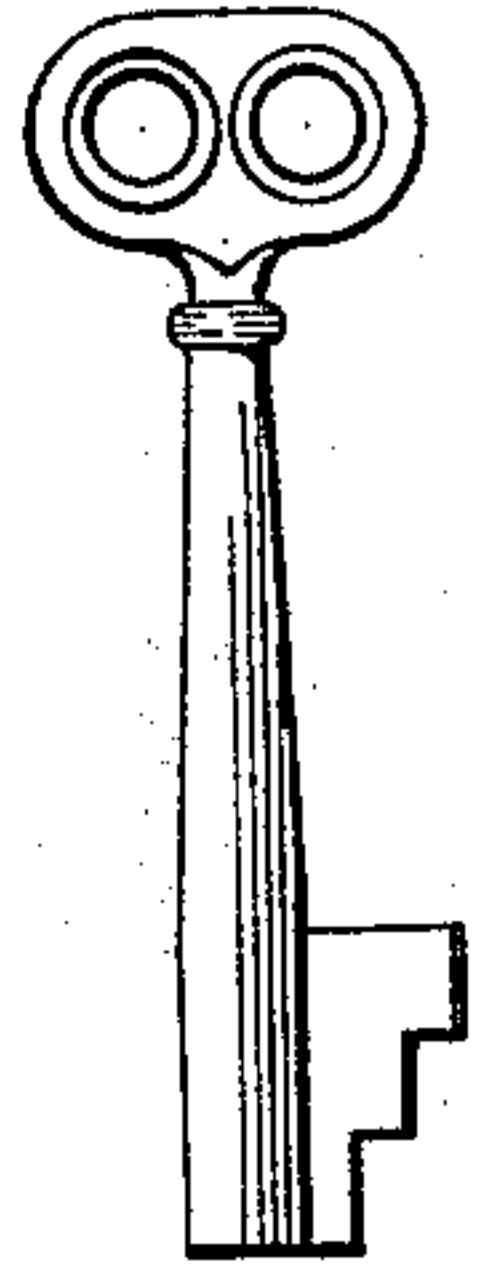


Fig. 6.



Witnesses:

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H. Harrison
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(Model.)

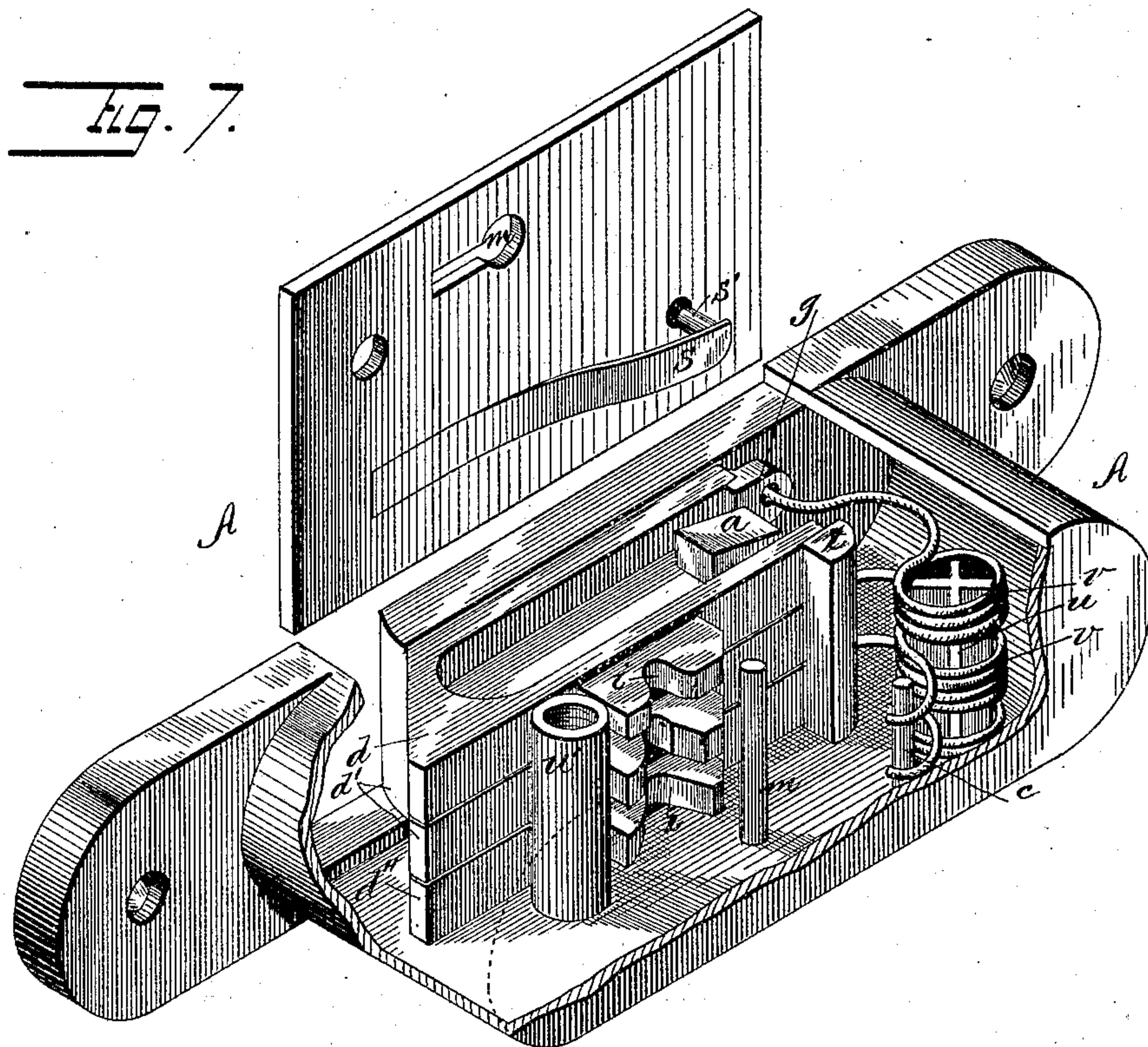
2 Sheets—Sheet 2.

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SEAL LOCK.

No. 283,836.

Patented Aug. 28, 1883.



Witnesses:
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UNITED STATES PATENT OFFICE.

ROBERT O. WALKER AND SOPHRONIE WALKER, OF CHICAGO, ILLINOIS.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 283,836, dated August 28, 1883.

Application filed March 27, 1883. (Model.)

To all whom it may concern:

Be it known that we, ROBERT O. WALKER and SOPHRONIE WALKER, citizens of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Seal-Locks, of which the following is a specification, to wit:

This invention relates to seal-locks; and it consists in the peculiar construction of the same, whereby the several parts of the bolt are interchangeable and are adapted to perforate a seal as the bolts are thrown back, substantially as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention relates to make and use the same, we will now proceed to describe its construction and operation, referring to the accompanying drawings, in which—

Figure 1 is a side elevation of the lock applied to a door, and with part of the case broken away. Fig. 2 is a vertical section on the line *ff*, Fig. 1. Fig. 3 is a similar view taken on the line *tt*, Fig. 1. Fig. 4 is a perspective view of one of the parts of the lock-bolt. Figs. 5 and 6 are views of keys applicable to this lock, and Fig. 7 is a perspective view of the lock with the case broken away to show the interior.

This lock is represented in the drawings of a form peculiarly applicable to freight-cars; and *A* indicates the lock-case, mortised into the door *B*, and engaging with the catch *P* on the door-frame *C*. This case *A* is provided with a bolt formed in several sections, *d d' d''*, each of which is beveled upon its outer corner at one end and provided at the other with a small perforated projection or lug, *g*, with which engages one end of a spring, *v*, secured upon a post, *u*; and having its opposite end held in position by a post, *c*. These springs hold the bolts in a normally-locked position. The parts of the bolt are placed side by side, and are on their rear edges provided with notches *i*, of different depths and form, corresponding to the wards of the key to be used. Each portion *d d' d''* of the bolt is also formed on one side with a beveled projection or cam, *a*, the purpose of which will be presently seen, and the bolts are all held in proper position and relation to each

other within the case by posts *t* and *u'*. One of the sides of the lock-case is upon its inner side provided with a flat spring, *s*, secured firmly at one end to the case *A*, and having its other or free end adapted to contact with the cam *a* upon the adjacent portion of the lock-bolt. Upon the free end of this spring is a pin, *s'*, adapted to pass through the case into a small cylinder, *e*, which is secured to the side of the lock-case, and extends out flush with the outer surface of the door *B*, and containing a small piston, *e'*, held in position by a spiral spring, as seen in the drawings.

In operation the car is locked and a seal, *n*, placed over the end of the tube or cylinder *e*. The key being then placed in the key-hole *m* and turned, the wards strike upon the edges of the notches *i* of the lock-bolts, and as these notches are of various shapes and depths the parts of the bolt will be moved from their normal position separately, but will all assume a corresponding position when thrown fully back. The movement of the upper part of the bolt and its cam *a* forces out the end of the spring *s*, and its pin *s'* enters the tube *e* and forces out the plunger *e'*, thus perforating the seal *n*. This seal is small and not liable to be noticed, and will at once record any tampering with a lock. The arrangement of the notches *i* by which the parts of the bolt are started separately also makes it difficult to pick this lock, and the portions of the bolt being interchangeable their position with relation to each other may be varied at any time should a key be lost or stolen, and thus prevent the old key from being used.

It is obvious that this arrangement is not confined to car-locks, but may with equal effect be applied to padlocks or other fastening devices.

We are aware that it is not new to puncture a seal by the movement of a lock-bolt operating a spring-pin, and we do not therefore claim such, broadly, as our invention.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a seal-lock, the pin *s'*, secured upon the end of the flat spring *s*, carried by the lock-case, and projecting into the cylinder *e*, pro-

vided with a spring-plunger, e' , and a seal, in combination with a lock-bolt formed with a cam projection, adapted, when the bolt is thrown back, to slide beneath the spring-pin
5 and cause it to force the spring-plunger outward and thereby break the seal, substantially as described.

2. In a seal-lock, a lock-bolt formed in several interchangeable parts, each of which is
10 provided with a projection or cam, in combination with a small spring piston or plunger adapted by the backward motion of the bolt to be thrown out and puncture a suitable seal placed over its end, substantially as described
15 and shown.

3. In a seal-lock, the case A, sectional bolt d d' d'' , having notches i i , of varying form, and each having a cam, a , and the springs v , in combination with a flat spring, s , secured to the lock-case, and having its free end provided with a pin, s' , tube e , and its plunger e' ,
20 all constructed and arranged to operate substantially as and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

ROBERT O. WALKER.
SOPHRONIE WALKER.

Witnesses:

CHAS. KRESSMANN,
FRANK JOHNSON.