

(No Model.)

V. A. KREPPS.

SEAL LOCK.

No. 287,299.

Patented Oct. 23, 1883.

Fig. 1.

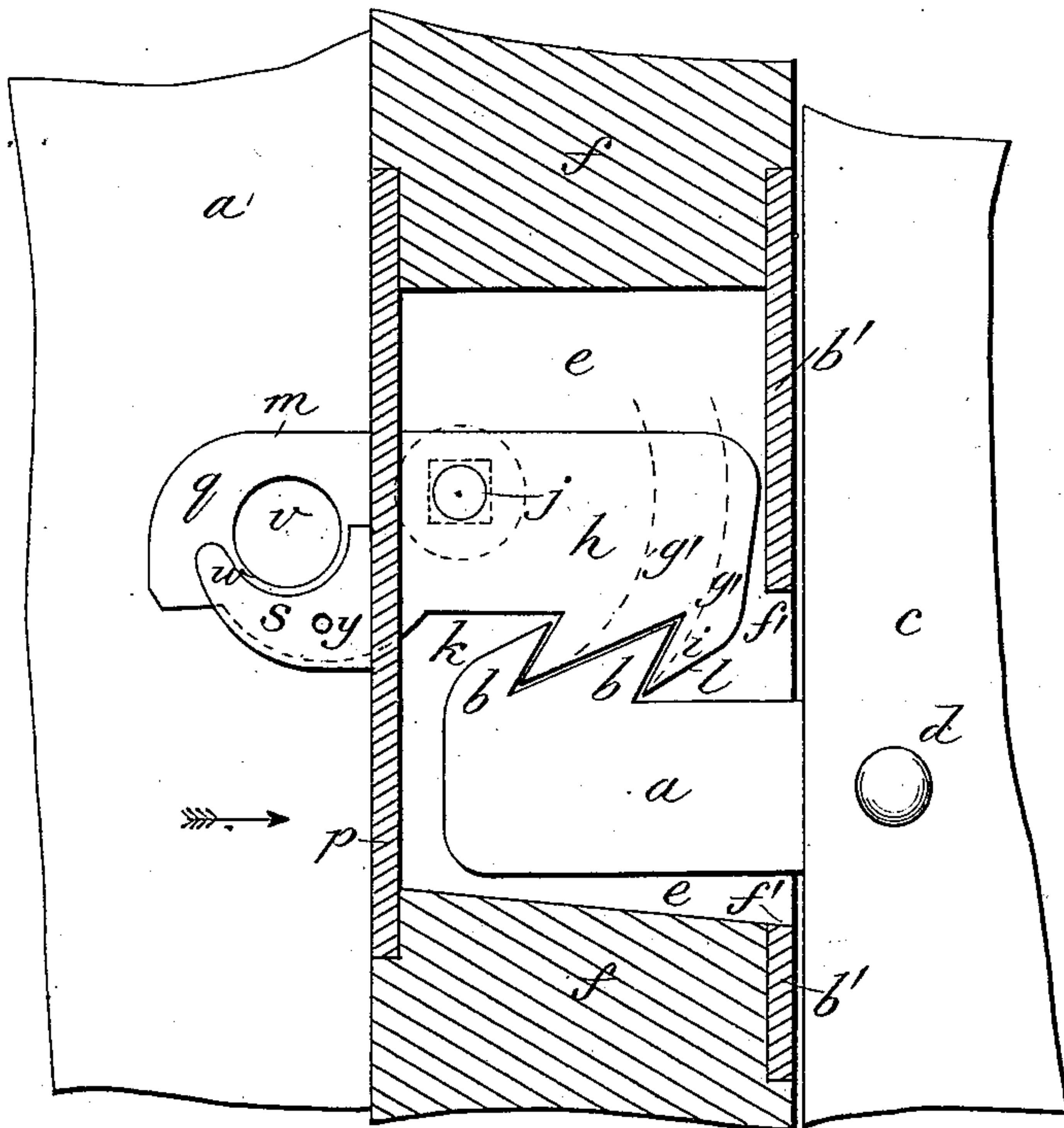


Fig. 2.

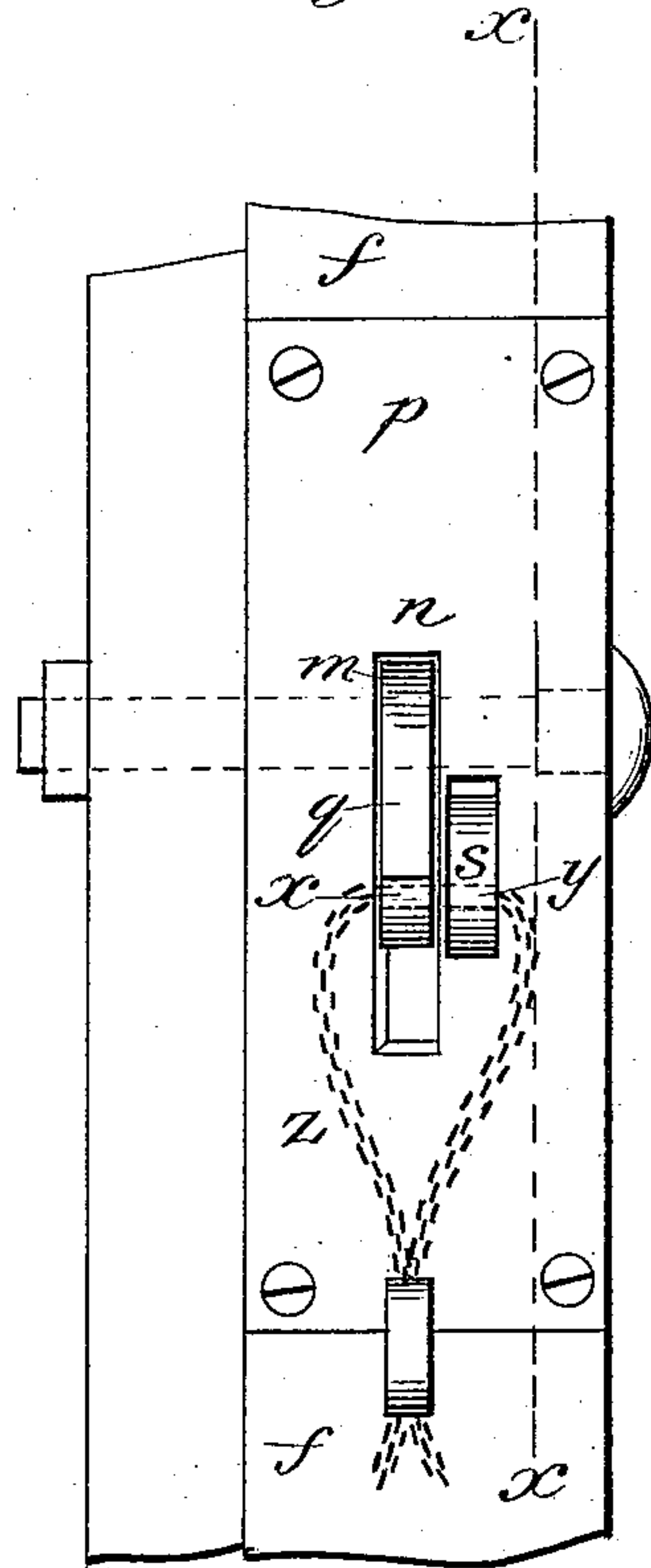


Fig. 3.

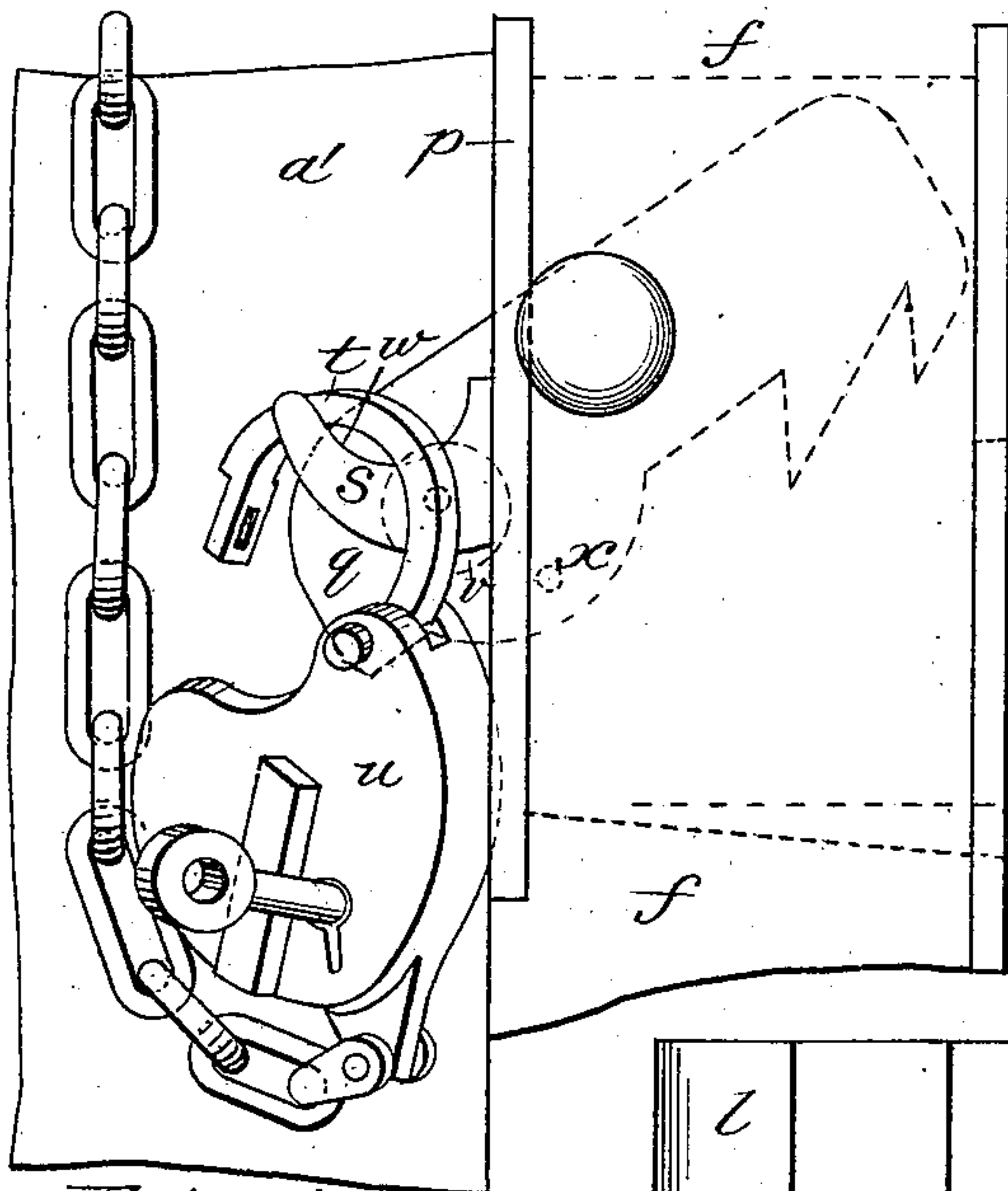
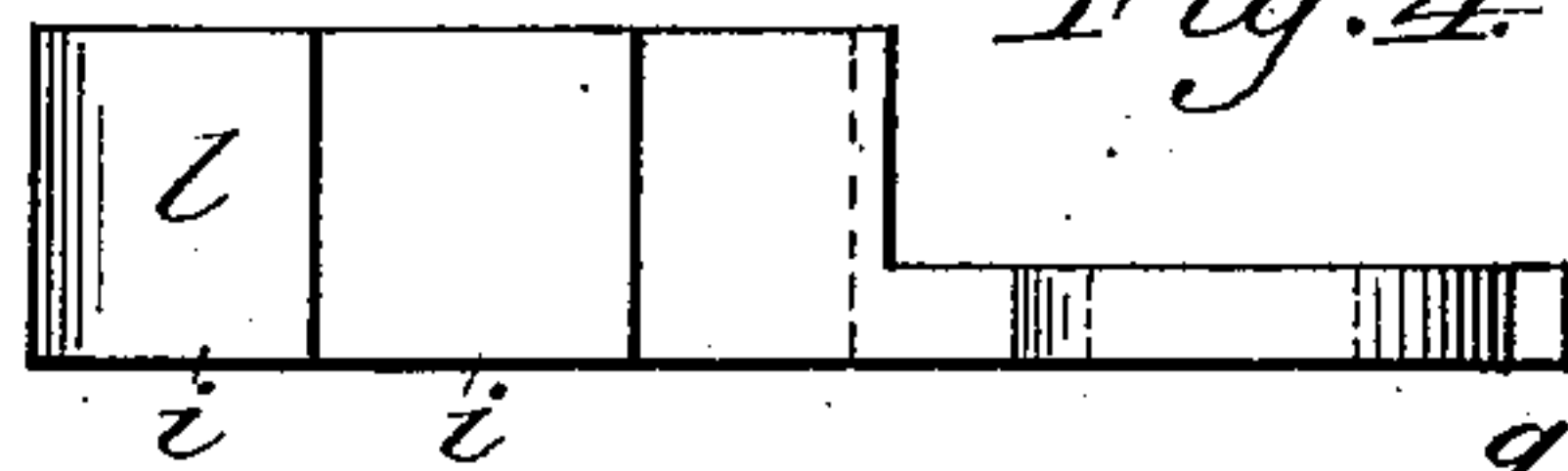


Fig. 4.



Attest:

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VIRGIL A. KREPPS, OF NEW YORK, N. Y.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 287,299, dated October 23, 1883.

Application filed October 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, VIRGIL A. KREPPS, a citizen of the United States, and residing at New York, in the county and State of New York, have invented new and useful Improvements in Car-Door Locks, of which the following is a specification.

The object of my improvements in car-door locks is to provide simpler, cheaper, and more efficient locks for freight-cars than any now in use.

The said improvements consist of a bolt attached to and projecting from the edge of the door to enter a lock-case in a cleat on the door-frame, and be there secured self-actingly by a vertical swinging catch having hooks on its under side engaging with corresponding hooks on the upper side of the bolt, the said catch having an arm extending backward from its pivot out through the opposite edge of the cleat in which the lock-case is formed, where, in the angle between said cleat and the side of the car-body, a projecting stud of the cleat is located for a means of fastening the catch by a seal or padlock, which are much less exposed in said angle to accidental injury than when located on the front of the door or cleat, or suspended below them, as in some other arrangements. The contrivance is also so designed that the padlock may be temporarily suspended on the locking-stud and in connection with the door-catch to hold the latter up free of the bolt when the door is to be opened, so that the attendant may not be obliged to give any attention to it while opening the door after unfastening it, as required in some cases, thus affording the attendant the free use of both hands for sliding the door open, whereas many locks are so arranged that he must either hold the catch up with one hand while sliding the door with the other or block up the catch with a stick or other object beforehand.

Figure 1 in the accompanying drawings is a longitudinal sectional elevation through the lock-case, and side elevation of the bolt and part of the door, the section being taken on the line *x x* of Fig. 2. Fig. 2 is a side elevation of the lock as seen looking in the direction indicated by the arrow in Fig. 1. Fig. 3 is a front elevation of the lock, the catch being disconnected from the bolt and the door

partly opened. Fig. 4 is a plan view of the catch inverted.

The bolt *a*, having hooks or barbs *b*, is attached to the vertical bar *c* of the door-frame by bolts *d*, or by any other approved means, to project into the chamber *e* of the lock, formed in the cleat *f*, and containing the gravity-catch *h*, having hooks *i*, to engage the bolt automatically when it enters the lock-case, said catch being arranged on the pivot-bolt *j*, so as to be raised by the bevel *k* of the bolt, acting on the bevel *l* of the catch, the catch being suspended at the proper level by the contact of the back *m* with the end *n* of the slot *o* in the inclosing-plate *p* of the rear side of the lock-case. The arm *q* of the catch projects outside of the lock-case through slot *o* and alongside of a stud, *s*, attached to plate *p*, and sufficiently higher than said arm to receive the hasp *t* of the padlock *u* through its hole *v*, above a notch, *w*, in the upper edge of said stud *s* for locking the catch. Said arm *q* also has a small hole, *x*, which is coincident with a similar hole, *y*, in the stud *s*, when the catch is engaged with the bolt, to receive the wire *z* of a seal, when it is desired to use that method of security. The notch *w* in the stud *s* also serves for the lodgment of the hasp of the padlock when used for a weight to hang on the top of arm *q* for holding up the catch, as shown in Fig. 3, to force the bolt preparatory to opening the door. The cleat *f*, in which the chamber *e* is formed, represents the piece usually attached to the side *a'* of the car-body for the connection of the lock. The said chamber is formed in it by boxing it out from side to side about half its thickness, or a little more, and closing the notch at the edges by the plates *p* and *p'*, which are properly and respectively slotted for the bolt *a* and catch *h*. The pivot-bolt *j* for the catch *h* is also a fastening-bolt for the cleat *f*, said bolt passing through the slide *a'* of the car-body. The lower wall, *e'*, of the chamber *e* is made to descend to the bottom of the slot *f'* for the bolt *a*, in order that any dust, gravel, grain, or other matters falling into said space may escape, so as not to accumulate and choke up the lock. The bolt *a* and catch *h* each have two hooks for greater security of fastening, and so that the door may be fastened partly open when required for ventilation. The form

of the hooks is such that the points *i* swing close to the bottom of the notches in bolt *a*, as shown by dotted lines *g'*, and hold the bolt without any slack, keeping the door close shut.

5 The importance of this lock will be appreciated by those whose experience in freight-car service has taught them the need of a simple lock that can be readily and cheaply applied to any cars, and can be as conveniently
10 manipulated as the one here represented.

It is to be understood that while I have described the bolt *a* as attached to the door and the catch *h* attached to the side of the car-body they may be reversed as to their positions, and I do not limit myself to the arrangement as described, for I may, if preferred,
15 locate the catch on the door and the bolt on the side of the car-body.

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

1. The improved lock for freight-car doors, consisting of hook-bolt *a*, attached to the door, hook-catch *h*, having a perforated arm, *q*, and
25 attached to the side of the car-body and located in the lock-chamber, and a fastening-stud, *s*, exterior to the lock-chamber, substantially as described.

2. The combination of the perforated stud

s, projecting from the casing, with the lock- 30 catch *h*, provided with a perforated arm, *q*, substantially as described.

3. The pivoted lock-catch *h*, provided with an arm, *q*, in combination with the fastening-stud *s*, projected from the casing, said arm *q* 35 provided with hole *v* for the hasp *t* of a padlock, substantially as described.

4. The lock-catch *h*, provided with arm *q*, in combination with the fastening-stud *s*, said stud having a notch, *w*, for the lodgment of 40 the padlock-hasps over the arm of the catch, for the purpose of holding the catch out of engagement with the hasp, substantially as described.

5. In a lock for freight-car doors, consisting, 45 essentially, of hook-bolt *a* and hook-catch *h*, the said catch having an arm, *q*, and the lock having a fastening-stud, *s*, therefor, said arm and stud being located in the angle between the side *a'* of the car-body and the cleat *f* contain- 50 ing the lock-case, substantially as described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

VIRGIL A. KREPPS.

Witnesses:

W. J. MORGAN,
S. H. MORGAN.