

(No Model.)

R. M. SULLY.
SEAL LOCK.

No. 380,269.

Patented Mar. 27, 1888.

Fig. 1.

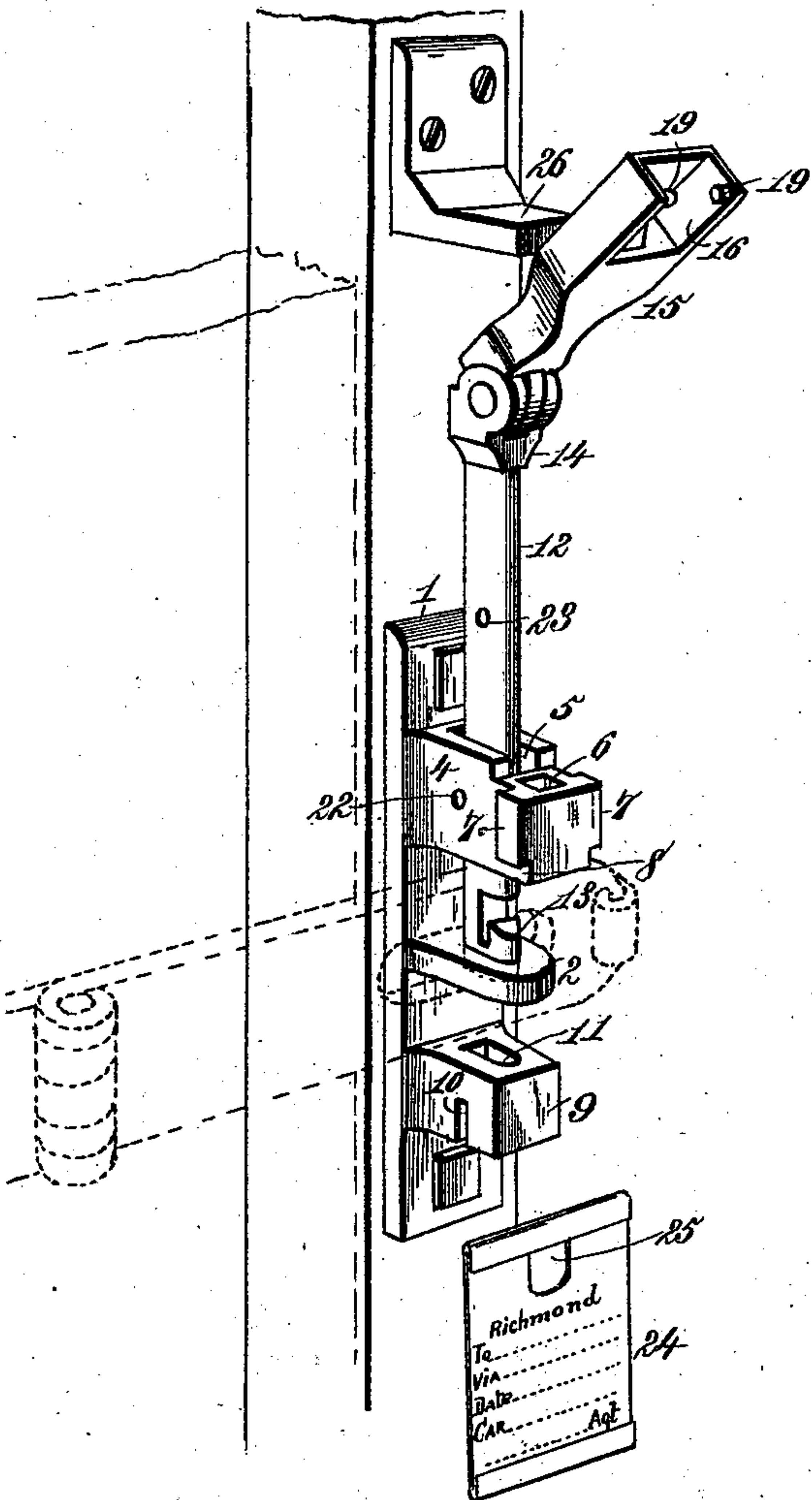


Fig. 2.

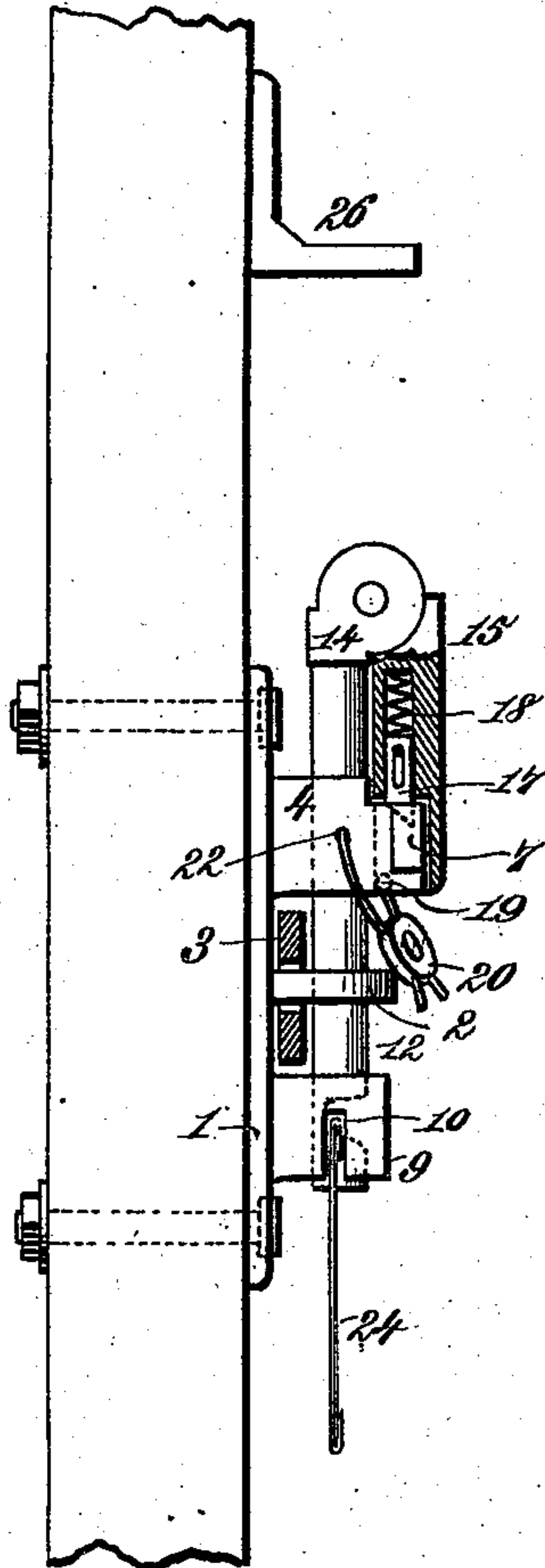


Fig. 3.

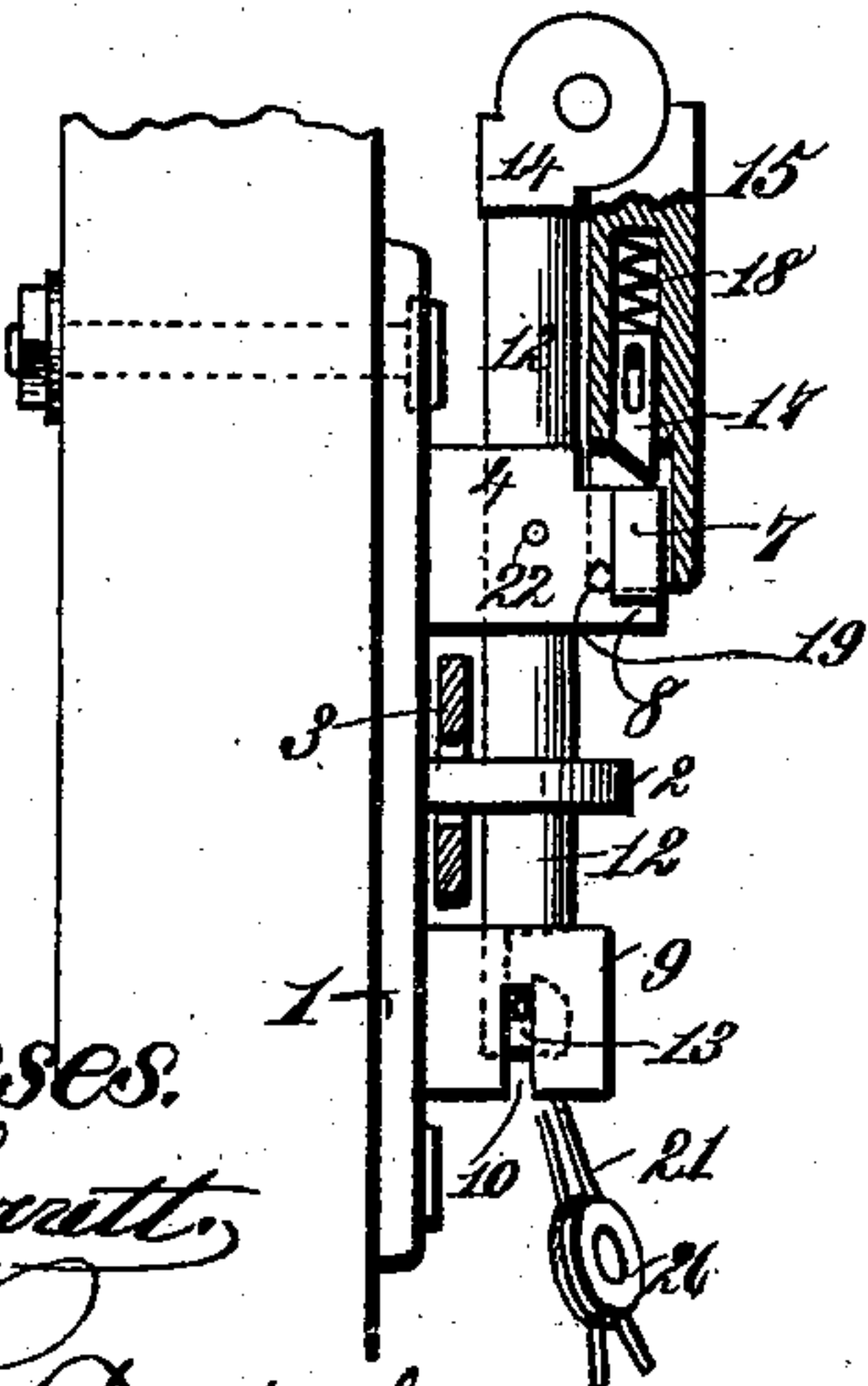
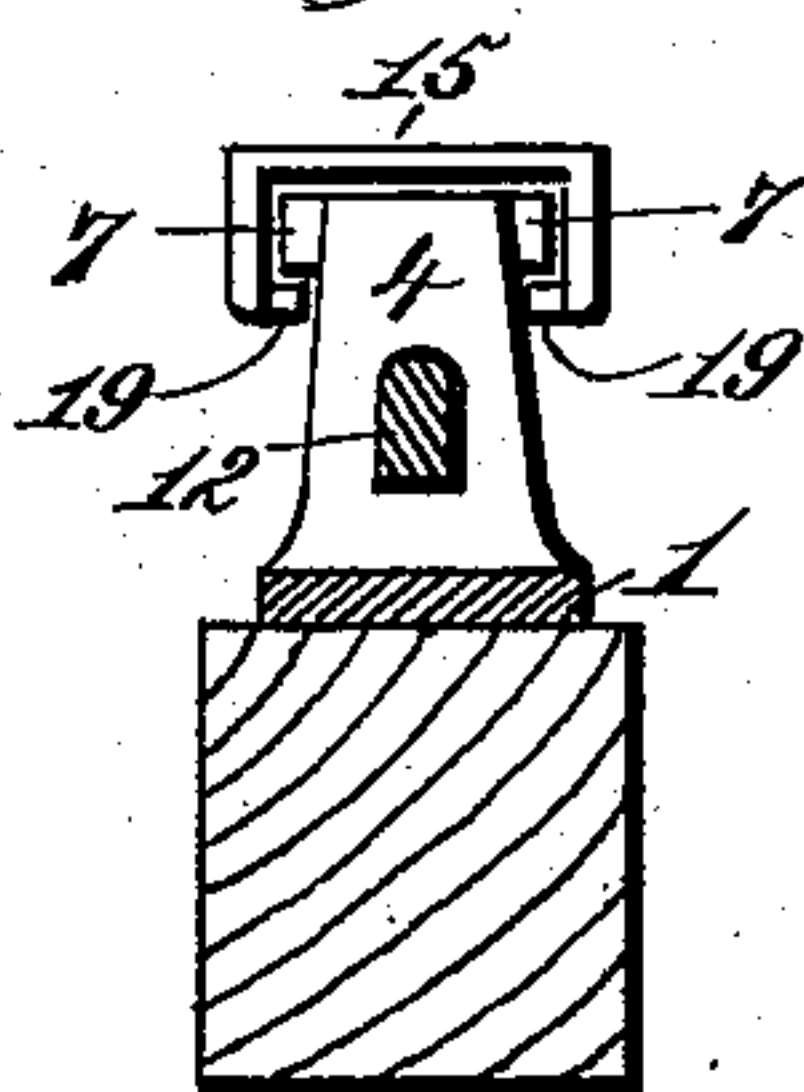


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

ROBERT M. SULLY, OF PETERSBURG, VIRGINIA.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 380,269, dated March 27, 1888.

Application filed December 17, 1887. Serial No. 258,222. (No model.)

To all whom it may concern:

Be it known that I, ROBERT M. SULLY, a citizen of the United States, residing at Petersburg, in the county of Dinwiddie and State of Virginia, have invented new and useful Improvements in Seal-Locks, of which the following is a specification.

This invention relates to seal-locks for the doors of railroad freight-cars, and has for its object to provide for certain improvements in the seal-lock for which Letters Patent No. 363,775 were granted to me May 24, 1887, whereby said lock is readily adapted for the reliable use in different positions of the ordinary lead seal attached to a wire, or of a seal that is combined with a destination-tag.

The invention is illustrated in the annexed drawings, in which—

Figure 1 is a perspective view of my improved lock unfastened and showing the hasp in dotted lines. Fig. 2 is a sectional side elevation of the lock, showing the bolt locked in position and seals attached. Fig. 3 is a sectional side elevation showing how the bolt is locked when an ordinary lead seal is attached to its lower end. Fig. 4 is a transverse sectional detail view.

The numeral 1 designates a plate secured to one side of the door-frame, and carrying a staple, 2, for engagement with a hasp, 3, on the car-door. On the plate 1, above the staple 2 and in line therewith, is a lug, 4, having a vertical perforation, 5; preferably oblong from front to rear, as shown in Fig. 1. On the upper face of this lug, at its front end, is a mortise, 6, and on each side is a shoulder, 7, the lower end of which is rabbeted at 8, for a purpose hereinafter explained. The plate 1 also carries a lug, 9, located beneath and in line with the staple. In each side of this lug are vertical slits 10, that intersect a preferably oblong perforation, 11, formed vertically through said lug. A locking-bolt, 12, is passed loosely through the upper lug, 4, staple 2, and lower lug, 9, and is formed at its lower end with a hook, 13, for engaging a seal. The upper end of the locking-bolt 12 has an enlarged head, 14, which prevents it from falling entirely through the staple and adjacent lugs. This enlarged head also forms a pivotal bearing for a hinged fastening-cap, 15, which is adapted to engage the upper lug, 4, and lock the bolt

12 in position after the seal has been attached in either of the ways hereinafter explained. In the form of construction shown the free end of the hinged fastening-cap 15 is flanged on three sides in such a manner as to form in its end a recess, 16, to engage and cover the whole of the lug 4 in front of the lowered bolt. A catch, 17, is arranged in the recess 16 to engage the mortise 6 in the upper face of the lug 4, and this catch may have a beveled face, as shown, and be provided with a spring, 18, to facilitate its engagement with said mortise.

By referring to Figs. 1 and 2 it will be seen that the flanged or recessed portion of the hinged fastening-cap 15 is of such length as to completely cover the forward portion of the lug 4 in front of the lowered bolt, and that it thus forms such a close covering for the lug as to effectually prevent the insertion of a knife or other small instrument to surreptitiously raise the catch 17 from its engagement with the lug.

In each side of the recess 16, at its outer or lower end, is an inward-projecting stud, 19, which passes along the rabbeted portion 8 of the lug 4, beneath the adjacent shoulder 7, when the fastening-cap is sprung inward to secure the bolt; but while the bolt is being raised to disengage the catch 17 the studs 19 necessarily pass upward behind the shoulders 7 and engage therewith, so as to prevent the cap 15 from being swung outward until it has entirely cleared the lug. If an ordinary lead seal, 20, is attached to a wire, 21, engaged with the bolt-hook 13, as shown in Fig. 3, it will be seen that although the bolt 12 may be raised to some extent, or even sufficient to disengage the catch 17 from the mortise 6, the studs 19, by engaging the rear sides of the shoulders 7, will serve to hold the cap 15 in such engagement with the lug 4 as to prevent the withdrawal of the bolt 12 without first breaking the seal.

It will also be seen that the same effect will be produced if the lead seal 20, Fig. 2, is attached to a wire passed through lateral perforations 22 in the lug 4 and through a perforation, 23, in the upper portion of the bolt. Although the lock is thus adapted for use with the ordinary lead seal, 20, in either of the positions above explained, I prefer to use a seal, 24, which consists of a piece of thin sheet metal

capable of being broken or torn under the application of a moderate force, but at the same time sufficiently tough and durable to afford adequate support and protection for a paper or card-board tag secured thereto by the upper and lower folded-over edges of the metal. The perforation 25, for engaging the hook 13, is made through both the paper and metal, and the width of the upper folded-over portion of the metal above the perforation 25 is such that when the bolt 12 is fastened said folded-over upper edge of the seal completely fills the slits 10 above the hook 13 and prevents the least upward movement of the bolt. By folding over the upper portion of the seal 24 above its perforation 25 to a predetermined distance, according to the space within the slits 10 above the hook 13, when the bolt 12 is fastened, the said folded-over portion of the seal will form a gage and stop that will always insure a proper position of the bolt for enabling the lug 4 and cap 15 to be engaged without delay or difficulty.

When, for any reason, the tag-seal 24 is undesirable or is not at hand, the lead seal 20 can be used in either of the positions above described, and will afford a convenient and reliable substitute. Both seals can be used together, as shown in Fig. 2, if desired.

From the foregoing description the operation and advantages of this seal-lock will be readily understood. By raising the bolt 12 sufficiently the hasp 3 can be brought over the staple 2, and when so raised the upward movement of the bolt is limited and its disengagement from the lug 4 prevented by a stop, 26, located above said lug, as shown. When the bolt 12 is lowered into place through the staple 2 and lug 9 and in front of the hasp, a seal can be attached in either of the ways hereinbefore described, and the bolt can then be secured by bringing the hinged cap 15 into locking engagement with the lug 4, so as to prevent the further descent of the bolt and at the same time lock it in such manner that it cannot be withdrawn until after the seal has been broken.

What I claim as my invention is—

1. In a seal-lock for cars, the combination of a perforated lug, a locking-bolt passed through said lug, and a fastening-cap hinged to the upper end of the bolt to have locking engagement with the lug when the bolt is in locking engagement with a connected seal, and flanged to cover the whole of said lug in front of the bolt, substantially as described.

2. In a seal-lock for cars, the combination of a perforated and mortised lug having lateral shoulders rabbeted at their lower ends, a staple, a perforated and slitted lug, a locking-bolt passed through said lugs and staple and having a hook at one end, a seal adapted to engage said hook and slitted lug, and a fastening-cap hinged to the other end of the bolt and adapted to engage the mortised and shouldered lug and completely cover said lug in front of the bolt, substantially as described.

3. In a seal-lock for cars, the combination of the lug 4, having perforation 5, mortise 6, shoulders 7, and rabbets 8, the bolt, and the fastening-cap 15, hinged to the head of said bolt and provided with a recess, 16, formed by flanges adapted to cover the whole of the lug in front of the bolt, studs 19 to engage the shoulders 7, and a catch, 17, to engage the mortise 6, substantially as described.

4. In a seal-lock for cars, the combination of the staple 2, the perforated and mortised lug 4, having shoulders 7 and rabbets 8, the perforated lug 9, having side slits, 10, the locking-bolt 12, having hook 13 and perforation 23, and the fastening-cap 15, hinged to the head of said bolt and provided with catch 17 and studs 19, said cap being adapted to cover the whole of the lug 4 in front of the bolt, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT M. SULLY.

Witnesses:

ALEXR. HAMILTON,
ALEX. DUNCAN, Jr.