J. N. SMITH.

SEAL-LOCK.

No. 189,582. Patented April 17, 1877.

Fig.1.

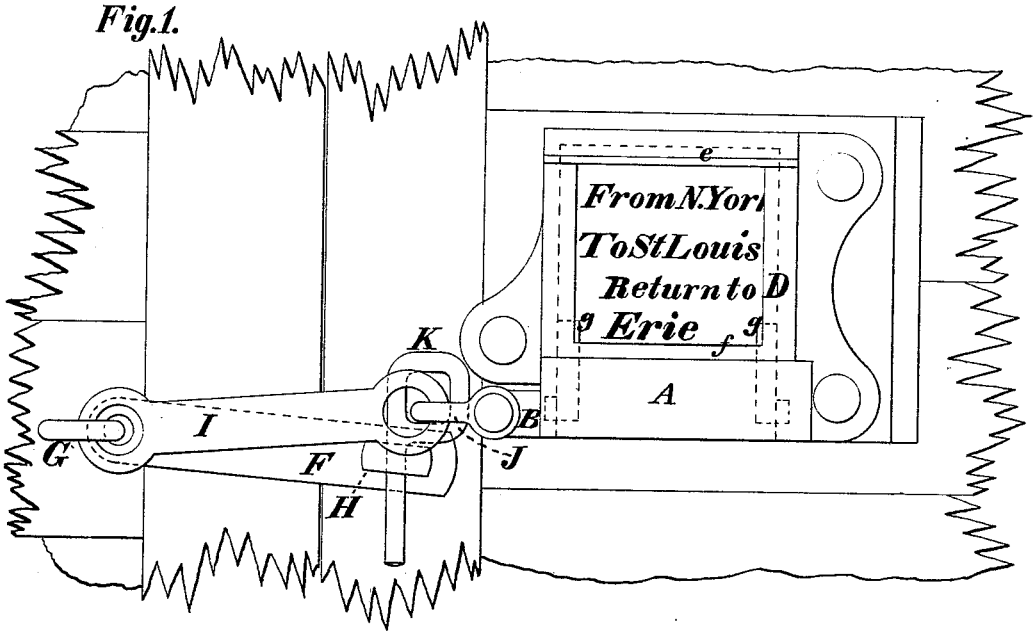


Fig.2.

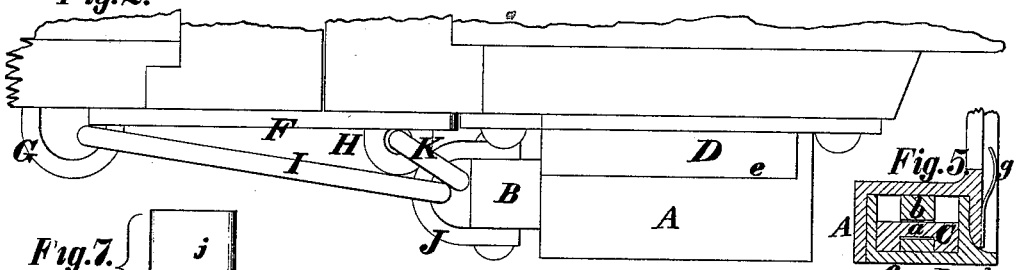


Fig.5.

Fig.7.

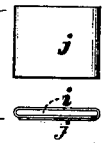


Fig.3.

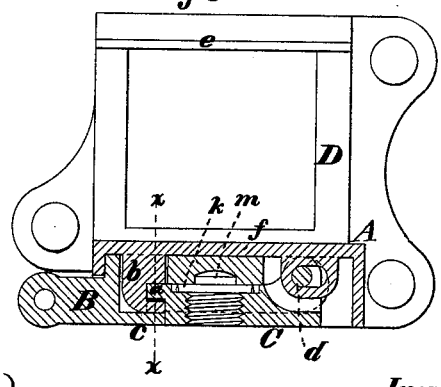


Fig.6.

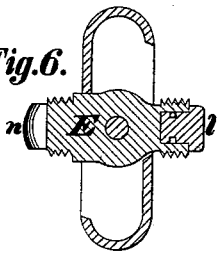
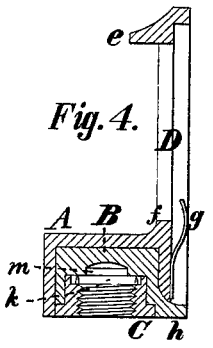


Fig.4.



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UNITED STATES PATENT OFFICE.

J. NOTTINGHAM SMITH, OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN SEAL-LOCKS.

Specification forming part of Letters Patent No. **189,582**, dated April 17, 1877; application filed October 2, 1875.

To all whom it may concern:

Be it known that I, J. NOTTINGHAM SMITH, of Jersey City, in the county of Hudson, and State of New Jersey, have invented an Improved Seal-Lock, of which the following is a specification:

My invention is more particularly designed for securing the doors of freight-cars, especially while in transit, and to furnish a means for holding the proper officials or other employés of railroad companies responsible for the safety of goods inclosed in such cars; but it may be made equally available for securing trunks, mail-bags, closets, &c.

The lock proper consists of three principal parts, viz., the shell or case, the clasp or catch, and the sliding hinged bolt or locking-piece, which fastens the catch in the lock, and which is held in place by the seal.

My invention consists, first, in a casing, provided with a notched bracket or catch, in combination with a removable clasp constructed to fit within the said casing, and a pivoted bolt, having a limited sliding movement to engage it with the notched bracket or catch, to lock the clasp in the casing, substantially as hereinafter specified; also, in providing the said clasp to be locked in the said casing with a sealing-socket, in combination with the said pivoted and sliding bolt having a cavity for the reception of a seal and stamp to be forced into the said sealing-socket, substantially as hereinafter specified; also, in the combination of a casing, as above specified, provided with a frame to hold a direction card or label, with a clasp locked in the casing by a pivoted and sliding bolt, as set forth, and having a projecting flange to securely retain the card or label in the frame, substantially as hereinafter specified; also, in the combination with a casing, a clasp, and a locking-bolt, forming together a seal-lock, as set forth, and with a seal and stamp to be applied thereto, of a sealing-tool or key, substantially as hereinafter specified; also, in certain novel devices and details of construction, whereby the strain arising from the swaying of the car while in motion is wholly removed from the lock proper, and the door is kept closed wholly by these devices.

In the accompanying drawings, which illustrate a seal-lock which embodies my invention, Figure 1 is a side elevation of a portion of a car and door, with my seal-lock properly secured to the same, and fastening them together, so that the door is held and securely sealed. Fig. 2 is a top view or plan of the same. Fig. 3 is a side elevation, partly in section, of the seal-lock, in a plane passing vertically through the center of the seal. Fig. 4 is a vertical cross-section of the seal-lock, through the center of the seal. Fig. 5 is a vertical cross-section of the same, on the line *x x*, Fig. 3. Fig. 6 is a section through the center, parallel to one of the sides, of the tool or key with which the seal is applied or removed. Fig. 7 is a side and edge view of the seal itself, with the stamp or ticket wrapped around it, ready for insertion in the lock.

A is the shell of the lock; B, the clasp or catch; and C, the sliding hinged bolt or locking-piece. In the drawings the lock is represented as closed, but not sealed. In order to open it the bolt C is pushed to the right, so as to release its point *a* from the notch in the short bracket *b*, and also from the edge of the plate *c*, which forms part of the clasp B. The bolt C is thus released, and it falls down (swinging on the pin *d*,) and permits the clasp B to be removed from the lock. From the inside edge of the casing A a projecting frame, D, is carried up. This frame is designed to receive the card or direction label, commonly tacked on the side of the car. It lies snugly up against the side of the car, so as to exclude the rain and snow, and has a roof-like projection, *e*, at the top, and a coaming, *f*, at the bottom for the same purpose. The card is pushed up into this frame from below, when the lock is open, and is held in place before the lock is closed by the springs *g g*. Upon closing the lock the projecting flange *h*, on the clasp B, closes the opening through which the card was inserted, and thus, when the lock is sealed, the card is at the same time sealed in its frame.

In Fig. 7 is shown the seal *i*, of lead or other suitable material, around which is wrapped the ticket or stamp *j*. The stamp is of thin, flexible, water-proof paper, and may have one or both faces printed with any desired design and tint, to prevent counterfeit-

ing. The party who seals the lock signs his name to the stamp, and writes the date, and any other matter desired, on the face of it. He then wraps it around the lead seal, and inserts it into the cavity or seat *k* in the bolt C, while the lock is open, pressing it down on the pins seen in Figs. 3 and 4. He next closes the lock, slides the bolt C into the position shown, and inserts the right-hand end of the tool E into the hole in the bolt, and screws it home. The swivel-piece *l*, which may contain any desired incription or design, presses the lead into the socket *m* in the clasp B, and thus securely seals the lock, which cannot afterward be opened without breaking the seal and tearing the stamp. In order to open the lock, the left-hand end of the tool is screwed into the hole in the bolt C, and the cutters *n* are thus caused to cut away the center of the seal and stamp and release the bolt C, when the lock may readily be opened. By a proper system of accounting for the stamps, a perfect control of the employés who are responsible for the loading and sealing of the cars may be maintained.

This lock may readily be adapted for mail-bags, express-trunks, &c., by suitable modifications in its form, and in the devices for securing it to the article to be sealed. In the present form I employ a hasp, F, secured to the car-door by a staple, G, and closing over another staple, H, in the ordinary manner. To the same staple which secures the hasp F to the car-door I attach a link, I, and fasten the other end of the link by means of a clevis, J, to the clasp B. Attached to the clevis J is a pin or eyebolt, K, which passes through the staple H, and locks the door of the car. It will be seen that the pin K cannot be withdrawn from the staple H so long as the lock remains closed, and also that the whole strain of the door, in its tendency to slide or jolt open, is borne by the hasp F and the staples G and H. The lock-case is so formed and placed that no rain, snow, or sleet can reach its interior, nor can dust and dirt find any lodgment ther e to interfere with its proper working. The sealing tool or key E, Fig. 6, may be folded into its case and carried in the pocket without inconvenience.

Having thus fully described my invention, I claim—

1. The casing A, provided with the notched bracket *b*, in combination with the removable clasp B, constructed to fit within said casing, and the pivoted bolt C, having a limited sliding movement and a point, *a*, for engaging with the notch of the bracket, substantially as and for the purpose herein specified.

2. The casing A, notched bracket *b*, removable clasp B, provided with the socket *m*, in combination with the pivoted sliding bolt C, having the cavity *k* for the reception of the seal *i*, and stamp *j*, substantially as and for the purpose herein specified.

3. The combination of the casing A, provided with the frame D, and the removable clasp B, having the projecting flange *h*, with the pivoted and sliding bolt C, substantially as and for the purpose herein specified.

4. In combination with the casing A, clasp B, and bolt C, forming a seal-lock as described, and the seal *i j*, the sealing tool or key E, substantially as and for the purpose set forth.

5. In combination with the casing A, clasp B, and bolt C, forming a seal-lock as described, and the hasp F, staple G, and staple H, the link I, pin K, and clevis J, substantially as and for the purpose set forth.

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