G. B. PHILLIPS.

SEAL-LOCK.

No. 180,371. Patented July 25, 1876.

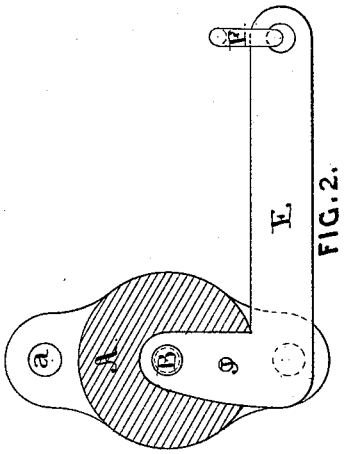

FIG. 2.

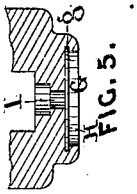

FIG. 5.

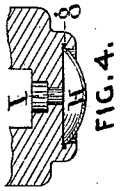

FIG. 4.

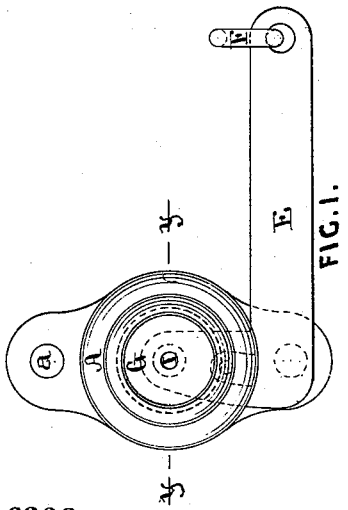

FIG. 1.

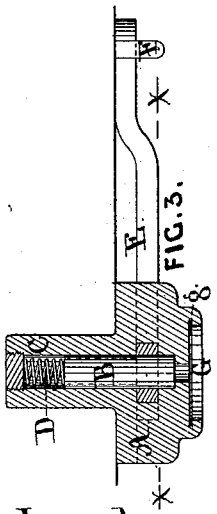

FIG. 3.

Witnesses.

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UNITED STATES PATENT OFFICE.

GEORGE B. PHILLIPS, OF BATH-ON-THE-HUDSON, ASSIGNOR OF ONE-HALF HIS RIGHT TO PATRICK J. SHEVLIN, OF ALBANY, NEW YORK.

IMPROVEMENT IN SEAL-LOCKS.

Specification forming part of Letters Patent No. **180,371**, dated July 25, 1876; application filed March 16, 1876.

To all whom it may concern:

Be it known that I, GEORGE B. PHILLIPS, of Bath-on-the-Hudson, in the county of Rensselaer and State of New York, have invented a new and useful Improvement on Seal-Locks, of which the following is a full and exact description, reference being had to the accompanying drawing, making a part of this specification, in which—

Figure 1 is a front elevation; Fig. 2, a vertical section at the line *x x;* Fig. 3, a horizontal section at the line *y y;* and Figs. 4 and 5, horizontal sections through a part of the casing of the lock.

My invention relates to seal-locks for securing the doors of cars for freight and other similar purposes where a fastening is required that cannot be opened without visible marks remaining that can be readily detected; and it consists of the devices constructed and arranged to operate substantially as herein shown and described.

As shown in the drawing, A is the casing of the lock, which I preferably make in the form shown. It is secured to the body of the car by the bolts *a*. B, a spring-bolt inserted in an opening formed in the hub C of the casing A. It is provided with a spring, D, which I preferably place in a chamber formed in the body of the bolt, for the purpose of obtaining greater elasticity in a limited space. E, a hasp, secured to the car-door by the staple F, or by any analogous means. Its outer end is bent upward at a right angle to the body, as shown in Figs. 1 and 2, which enters a mortise formed in the under side of the casing A for receiving it. Its extremity is provided with an eye, into which the spring-bolt B enters, and, passing entirely through the hasp, it projects into a recess formed in the casing A, by which means a bearing is obtained for it on each side of the hasp, thereby adding to the strength of the lock at this point. In the face of the casing A a chamber, G, is made, at the bottom of which a groove, *g*, is cut, extending outward, so as to form an overhanging flange around the entire periphery of the chamber, for the purpose of holding the sealing-disk H, which consists of a circular disk, of sheet-lead or other ductile metal, which, for the purpose of facilitating its insertion into the chamber G, I press into a cup-shaped form, as shown in Fig. 4. I, a key-hole formed in the bottom of the chamber G, by means of which access is obtained to the head of the spring-bolt B; J, a stud fixed to the hasp E, for the purpose of attaching a tag or card of direction for indicating the stations of departure and destination of the cars, or for any other desirable information. This stud is placed on a part of the hasp that passes into the mortise of the casing, into which a proper notch is cut for its reception, as shown by the dotted lines in Fig. 1. By this means the tag is securely held in place, and all danger of its accidental loss avoided.

The car-door is secured by inserting the elbow of the hasp E into the mortise of the casing A, the spring-bolt B being depressed by means of a pin inserted in the key-hole I, so as to permit the hasp to pass it. When the eye of the hasp is coincident with the spring-bolt the spring D forces the bolt outward through the eye into the recess in the face of the casing. When in this locked position, it will be seen that the only duty imposed upon the spring-bolt B is to sustain the weight of the hasp, the strain of the door being taken on the elbow of the hasp, which has a bearing along its entire length against the side of the mortise of the casing, as shown in Fig. 2, whereby great strength is obtained beyond that secured by the use of a straight hasp.

To seal the lock, the soft-metal disk is inserted into the chamber G, and by means of a flat-faced stamp it is flattened down, as shown in Fig. 5, whereby its diameter is sufficiently expanded to enter the groove *g*, by which it is retained as a cover over the key-hole I. After this, to insure detection of its removal, the sealing-disk may be stamped with any name or device desired.

To open the lock, the seal is punctured over the key-hole by means of a pointed punch, (which act either destroys the seal or leaves such indelible marks thereon as will expose the fact of its having been tampered with,) after which the spring-bolt B may be de-

pressed, so as to release the hasp E, which will then readily drop out of the mortise, leaving the door free to move.

It is manifest that a straight hasp may be substituted for the bent one herein shown and described by forming the mortise at the side of the casing instead of at the bottom; but I prefer the bent form, for the reason that thereby, and by making the mortise at the bottom of the casing, I am enabled to protect the interior of the lock from snow and ice, and obtain much greater strength from the same weight of material.

Instead of a cup-shaped sealing-disk, as herein described, a flat disk of soft metal may be used, and the expansion of its diameter produced by either hammering or pressing its center until the metal is forced into the groove *g;* but preferably I use the disk made in the form shown in Fig. 4.

I claim as my invention—

1. In a seal-lock, the combination of the casing A, provided with a chamber, G, and groove *g*, for holding the sealing-disk H over the key-hole I, with the spring-bolt B and detachable hasp E, when constructed and arranged to operate in the manner and for the purpose herein described.

2. The cup-shaped metallic sealing-disk H, in combination with the seal-holding recess of a seal-lock, as and for the purpose herein specified.

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Witnesses:

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