(Model.)

M. C. HARNEY.

SEAL LOCK.

No. 346,157. Patented July 27, 1886.

Fig. 1.

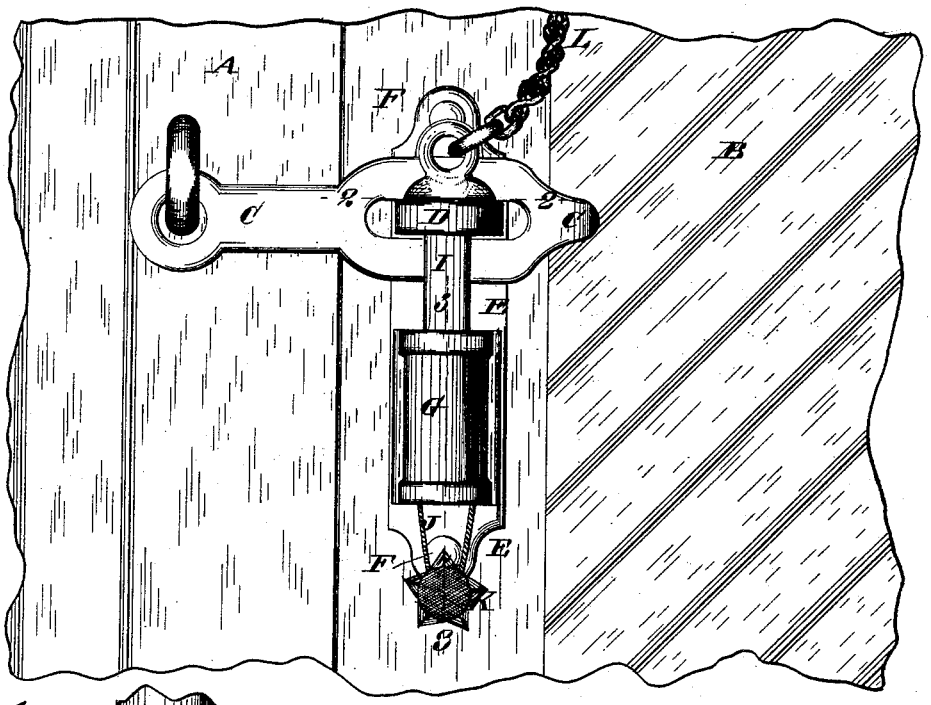


Fig. 4

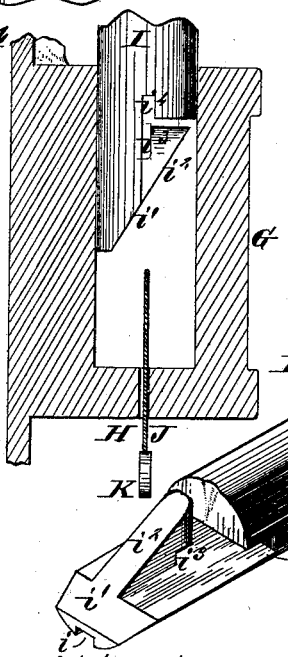


Fig. 2

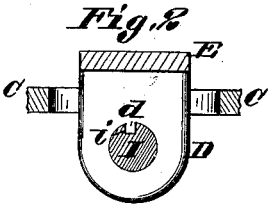


Fig. 3.

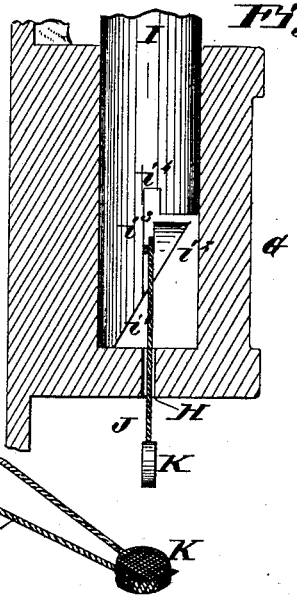


Fig. 5.

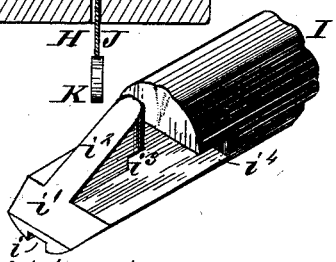
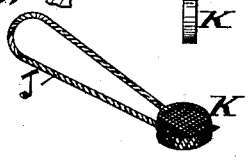


Fig. 6.



Attest:
F. A. Hopkins
Geo. L. Wheelock

Inventor:
Michael Clarmont Harney
By Knight Bros.
Attys.

UNITED STATES PATENT OFFICE.

MICHAEL CLARMONT HARNEY, OF ST. LOUIS, MO., ASSIGNOR OF ONE-HALF TO WILLIAM N. BRENNAN AND MRS. ANN BRENNAN, OF SAME PLACE.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 346,157, dated July 27, 1886.

Application filed July 27, 1885. Serial No. 172,789. (Model.)

To all whom it may concern:

Be it known that I, MICHAEL CLARMONT HARNEY, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Seal-Locks for Car-Doors and other Purposes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a front view showing the device applied to a car-door and in locked condition. Fig. 2 is a transverse section at 2 2, Fig. 1. Fig. 3 is an enlarged vertical section at 3 3, Fig. 1; and Fig. 4 is a section taken on the same line, with the pin lifted above the bottom of the socket. Fig. 5 is a perspective view of the end of the pin. Fig. 6 is a perspective view of the endless loop.

My invention relates to certain improvements in seal-locks for car-doors and other purposes; and my invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

The lock will be shown and described as applied to a car-door; but it will be seen that it can be applied generally in places where a tell-tale lock is required, which will indicate whether or not the lock has been tampered with. The purpose of these locks is not so much to prevent access being had to the interior of the place they guard—for this may be done more effectually by other means—but to indicate whether or not the door has been opened.

A is part of a closed car, and B part of the car-door.

C is a hasp hinged to the car, and D is a staple upon the door, over which the hasp engages. The staple is upon a bracket, E, secured to the door by bolts F.

G is a socket closed at the bottom, except for a narrow slot, H, but open at top for the reception of the pin I, said pin passing through the staple outside the hasp, and the lower part of the pin entering the socket, which is in line with the staple. The pin has in it a key seat or groove, *i*, and the staple has a tongue or fixed key, *d*, entering the groove and preventing the turning of the pin. The pin is beveled at *i'*, and extending from the beveled part is an inclined tooth or hook, i^2, whose lower end fades into the face of the bevel, but whose upper end extends almost to the side of the socket, so as just to allow the loop J, which is formed of springy material, to pass when it is pushed up through the slot H. The elasticity of the loop J enables it to spring aside as it passes up the inclined edge of the hook, and to regain its vertical position as soon as it has passed the top of the hook, so that it cannot be disengaged therefrom.

i^3 is a notch in the top of the hook, close to the face of the bevel i^2, and i^4 is a somewhat wider notch over the notch i^3, the purpose of the notches being to render it practically impossible to so manipulate the loop as to disengage it from the hook.

K is a knob or seal, which is firmly fixed to the loop, so as to make it endless, and to make it impossible to withdraw the pin from the socket without first breaking or cutting the loop.

The seal or knob may be attached to the loop in any manner, and may have any desired shape, or may be formed with any mark or symbol upon it, so as to make it distinctive. My present preference is to cast the knob upon the loop.

The most suitable metal for the knob on the score of economy and hardness is iron; but I do not confine myself to this material nor means of attachment.

In use the hasp is put on the staple and the pin dropped into the staple and socket, the groove *i* and tongue *d* assuring that the pin shall be in the proper position to receive the loop. Then the loop is pushed upward through the slot and slides up the inclined edge of the hook *i'*, being deflected until it reaches the top, when it springs inward and engages on the hook. The pin cannot now be lifted out until the loop J has been cut or broken.

I have shown the loop made of wire; but it may be made of one or more wires or rods of any shape in transverse section.

I show the pin secured to the door by a chain, L; but this, of course, is not essential.

I am aware that it has been proposed to construct a seal-lock of a case open at one end for

the reception of a hooked pin, and slotted at the other for the passage of a wire loop, which is adapted to be forced and held in engagement with said hooked pin by a separate spring; but such is not the equivalent of my invention, and I hereby disclaim any features which my said invention may have in common therewith. In my device the elasticity of the metal of which the loop is formed is utilized for forcing and holding said loop in engagement.

I claim—

1. The combination of a locking-pin having its end beveled and cut away so as to form a hook, substantially as described, a socket closed at one end, except a narrow slot, and a spring-loop adapted to be inserted through said slot and engage said hook, substantially as set forth.

2. The locking-pin having an inclined hook, i', with a notch, i^3, in combination with a socket having a slotted end and a spring-loop, substantially as and for the purpose set forth.

3. The locking-pin I, having an inclined hook, i' i^2, and notches i^3 and i^4, in combination with a socket, within which said pin fits, having a slot in one end, and a spring-loop, substantially as and for the purpose set forth.

MICHAEL CLARMONT HARNEY.

Witnesses:

SAML. KNIGHT,

BENJN. A. KNIGHT.