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SEAL-LOCKS.

No. 192,768. Patented July 3, 1877.

Fig. 1.

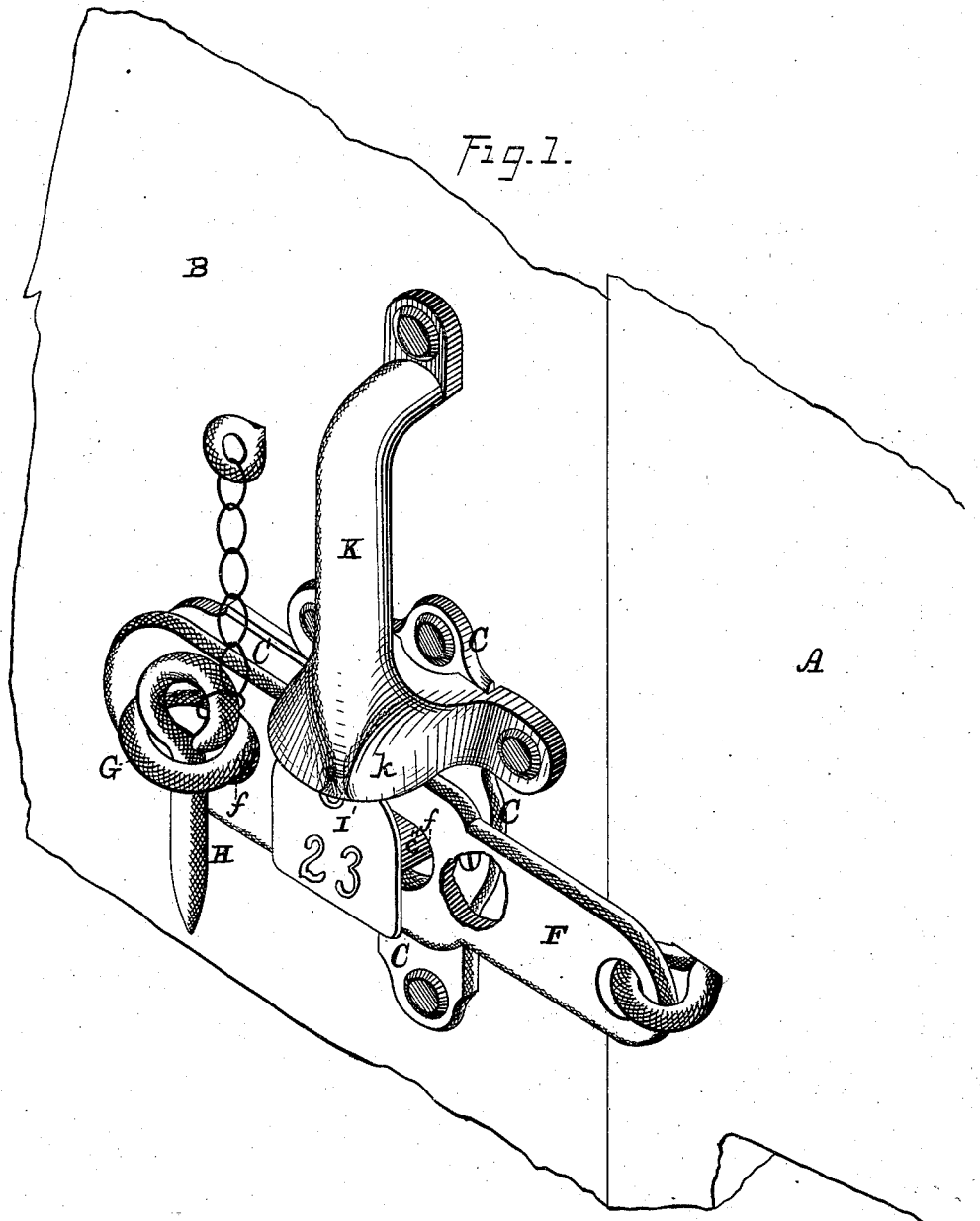

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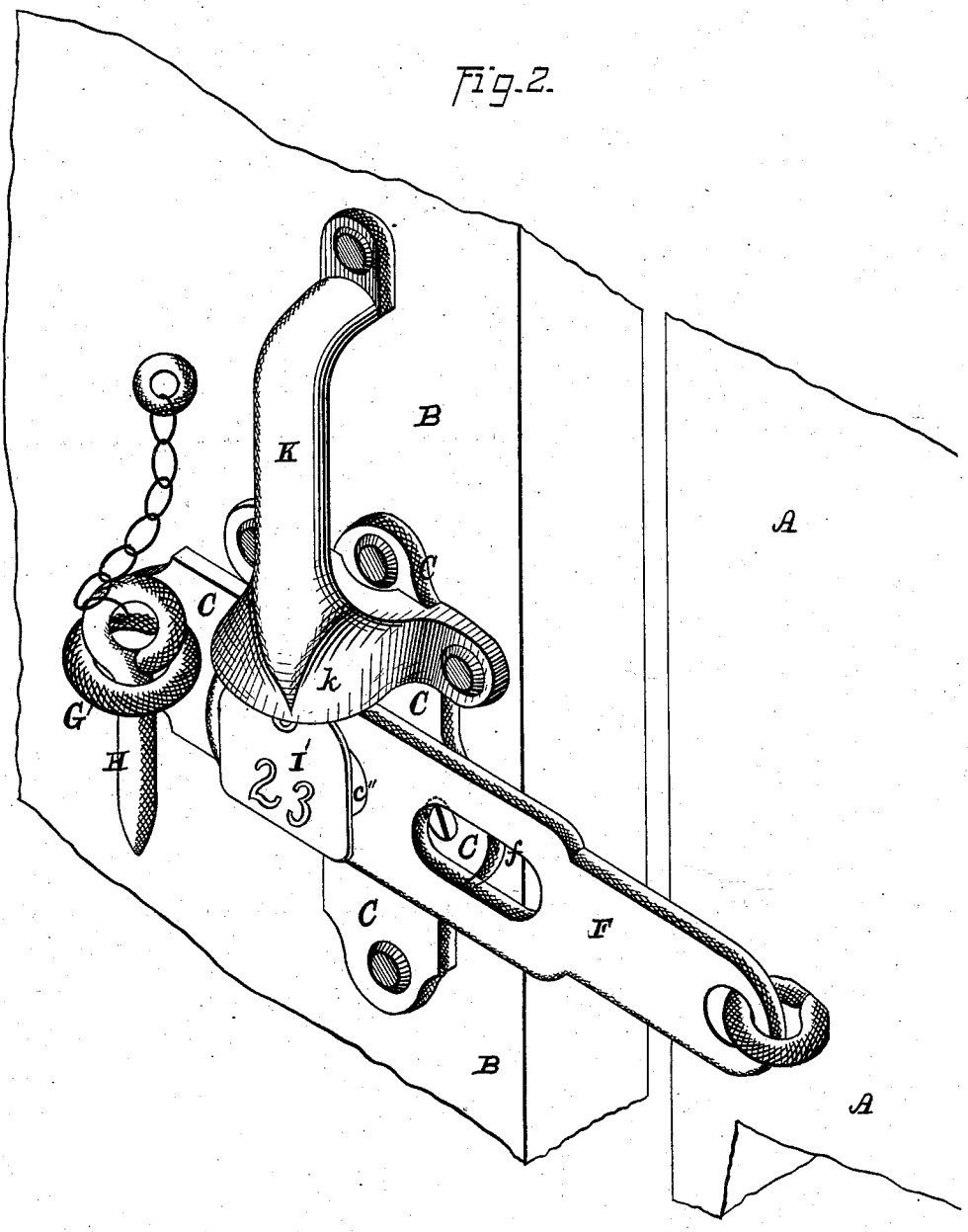
Fig. 2.



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5 Sheets—Sheet 3.

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Fig. 3.

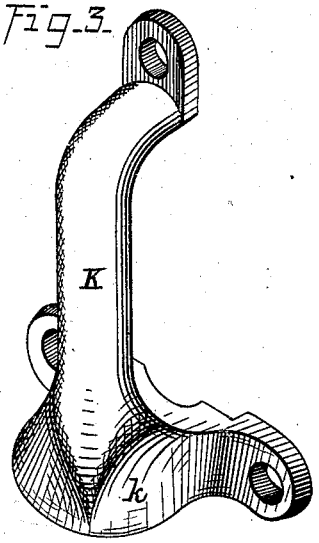

Fig. 6.

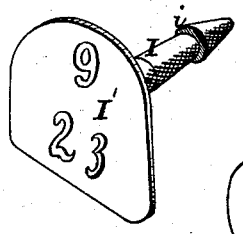

Fig. 7.

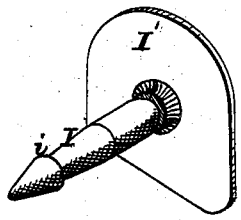

Fig. 4.

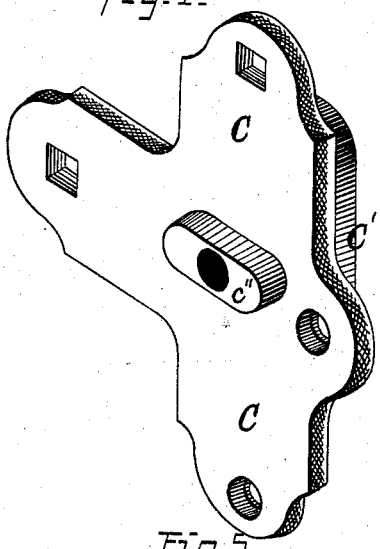

Fig. 5.

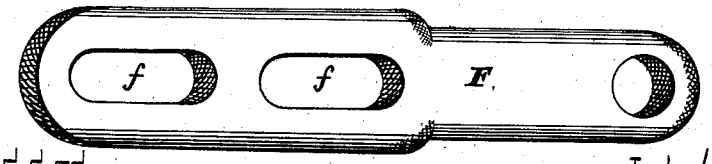

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Fig. 8.

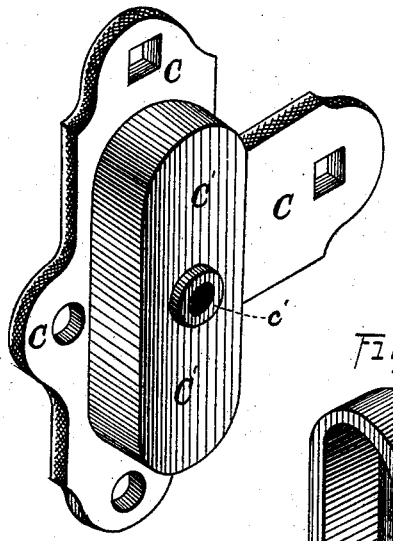

Fig. 10.

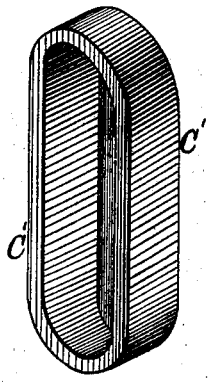

Fig. 11.

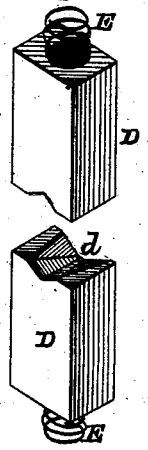

Fig. 9.

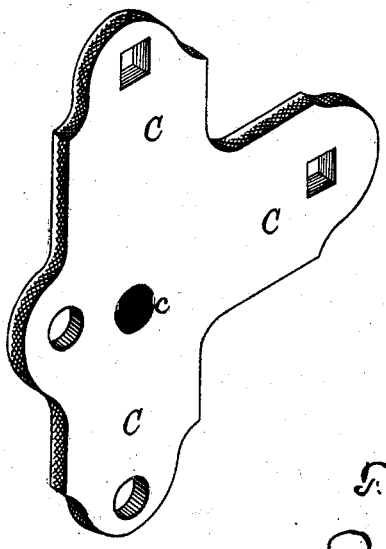

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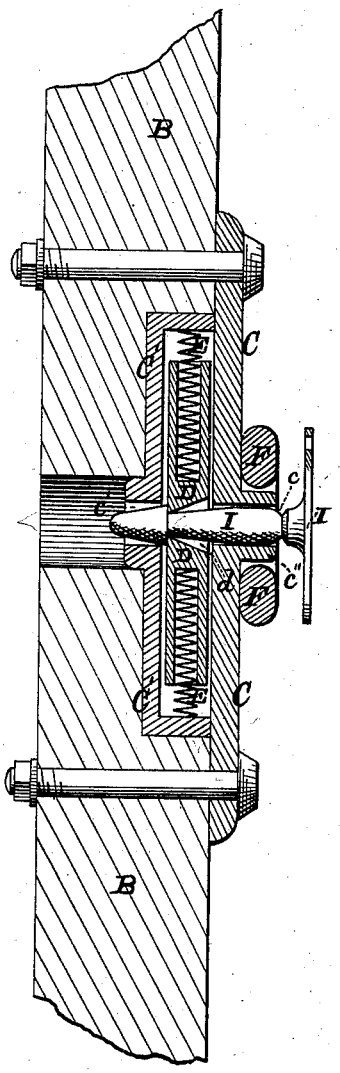
Fig. 12.



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UNITED STATES PATENT OFFICE.

FREDERICK J. KIMBALL, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN SEAL-LOCKS.

Specification forming part of Letters Patent No. **192,768**, dated July 3, 1877; application filed September 4, 1875.

To all whom it may concern:

Be it known that I, FREDERICK J. KIMBALL, of Philadelphia, in the county of Philadelphia, and in the State of Pennsylvania, have invented certain new and useful Improvements in Seal-Locks; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figures 1 and 2 are perspective views of my improved lock as applied to and arranged for sealing a car-door. Figs. 3, 4, and 5 are, respectively, perspective views of the hooded handle, the lock, and the hasp, separated from each other, and from the car. Figs. 6 and 7 are like views of the sealing-key. Fig. 8 is a perspective view of the rear side of said lock. Figs. 9 and 10 are, respectively, perspective views of the front and rear sections of the casing of said lock separated from each other. Fig. 11 is a like view of the spring-latches employed for locking the sealing-key in position, and Fig. 12 is a vertical central section of said lock, hasp, and sealing-key in position upon a door.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is to simplify and render more efficient devices which are employed for locking and sealing railroad-cars, for the purpose of preventing their contents from being tampered with without such fact being made apparent; to which end it consists, principally, in a device for sealing cars in which the hasp is provided with two or more openings for engagement with the lock, so as to enable the car-door to be locked and sealed in a closed or in a partially-open position, substantially as and for the purpose hereinafter shown.

It consists, further, in the combined hood and handle employed for moving the door, and for shielding the sealing-key from rain and snow, substantially as is hereinafter set forth.

In the annexed drawings, A represents the side of a car or its door-post, and B a door, which is arranged to slide edgewise over or away from the doorway.

Secured to or upon the outer face of the door B, near one of its side edges, is a lock, which consists of an outer plate, C, having the form shown in Fig. 9, and a housing, C′, (shown in Fig. 10,) that is secured upon the inner face of said plate.

At the center of the housing C′ is provided a round opening, *c′*, while within the plate C, in a line with said opening *c′*, is formed a second opening, *c*, that corresponds therewith in size and shape.

Within the housing C′ is placed two blocks, D, which loosely fill the space horizontally, while vertically said blocks have each about one-fourth of an inch play, and are held in a central position by means of a spring, E, that is placed between the outer end of each and the contiguous end of said housing.

Within the inner end of each block or latch D is provided a V-shaped notch or groove, *d*, which increases in depth and width from front to rear, as seen in Fig. 11.

Pivoted at one end, to or upon the outer face of the door-post A, is a hasp, F, which is provided with two or more longitudinal slots, *f*, as seen in Fig. 5, each of which slots corresponds to, and is capable of passing over, a boss, *c″*, that is formed upon the outer face of the lock-plate C, surrounding the opening *c*. When the inner of said slots is in engagement with said boss, the next outer slot passes over an eyebolt, G, which passes inward through said lock-plate and the door, and, when said hasp is in place, receives a pin, H, as seen in Fig. 1.

In order that the hasp F may be locked in place, so as to prevent the door from being opened without detection, a sealing-key, I, (shown in Figs. 6 and 7,) is employed as follows:

The key I consists of a round shank, which loosely fills the openings *c* and *c′*, and a head, I′, that is flat and thin, and has such size as to cause it to extend over the outer face of the hasp F upon the upper and lower sides of the openings *f*.

Near the inner end of the key-shank is formed a shoulder, *i*, which engages with the latches D as said key is inserted within the lock, and prevents the withdrawal of the former from the latter.

When the sealing-key is in place over the hasp, as shown in Fig. 1, the latter cannot be

disengaged from the lock without breaking from said key its head or seal, to facilitate which breakage the shank of said key is reduced in size near its junction with said head.

After the seal or head is broken from the shank the latter may be removed by being pushed inward through the lock.

In order that the lock may not be detached from the door when the latter is locked, one of the four fastenings which pass through said parts is placed directly beneath the hasp, and is only accessible when the latter is removed from engagement with said lock, while a second fastening consists of the eyebolt G, which passes through said lock and door, and is prevented from being turned by the engagement of said hasp.

In winter the seal might become obstructed by ice or snow, so as to interfere with the operation of the device unless suitable protection was furnished. Such protection is afforded by a handle, K, which is secured to the door B, directly above the lock C, and at its lower end is provided with a hood *k*, that flares outward and downward, and forms a covering or roof for the boss *c''*, the projecting portion of the sealing-key I, and the slotted portion of the hasp F, which engages with said boss. By this means rain and snow are prevented from falling upon said parts, and much trouble and annoyance are avoided.

In addition to the use named, the handle K is useful for moving the door B, its location being most convenient for such purpose.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

1. A seal-lock for use upon cars, in which a rigid hasp is pivoted to or upon the side of the car, and is provided with two openings for engagement with the lock of the door, substantially as and for the purpose shown.

2. In combination with the sealing devices, and with the door B, the door-handle K, provided with the hood *k* at its lower end, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 24th day of August, A. D. 1875.

FREDERICK J. KIMBALL.

Witnesses:
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WM. D. CHAPIN.