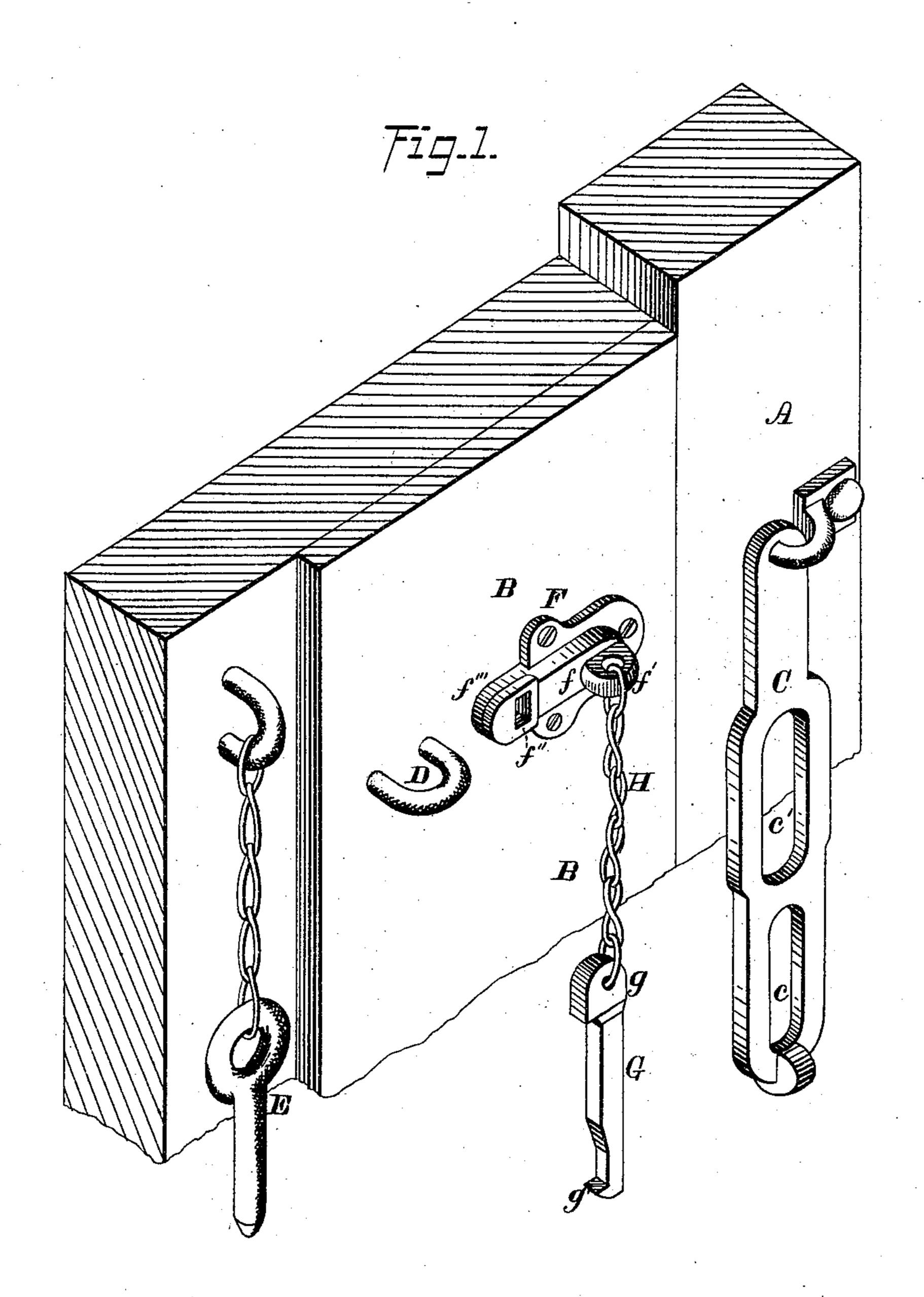
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T. A. SLACK & J. G. FISHER.

SEAL-LOCK.

No. 179,073.

Patented June 20, 1876



WITNESSES= Jas. E. Houtchinson. INVENTORS

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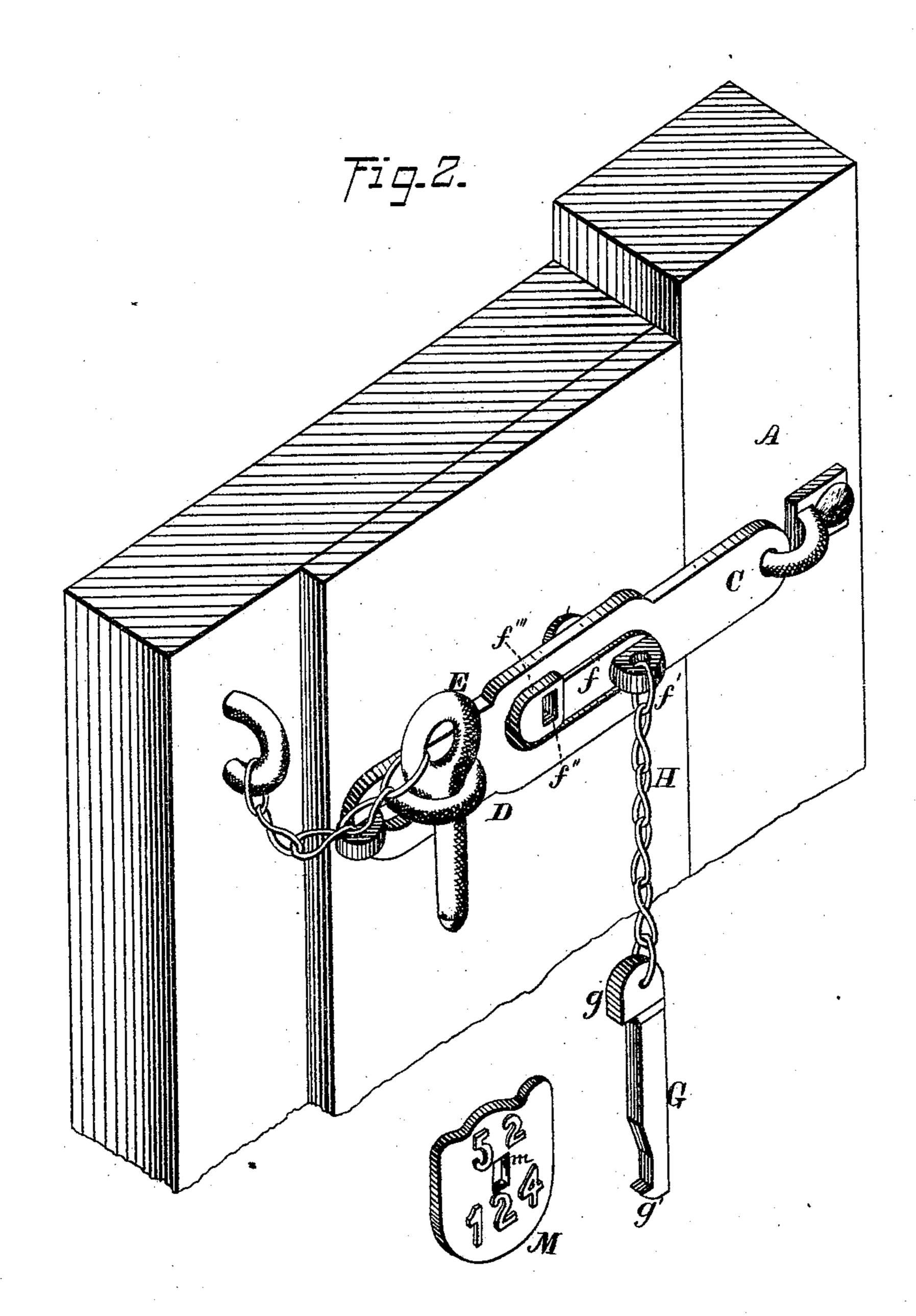
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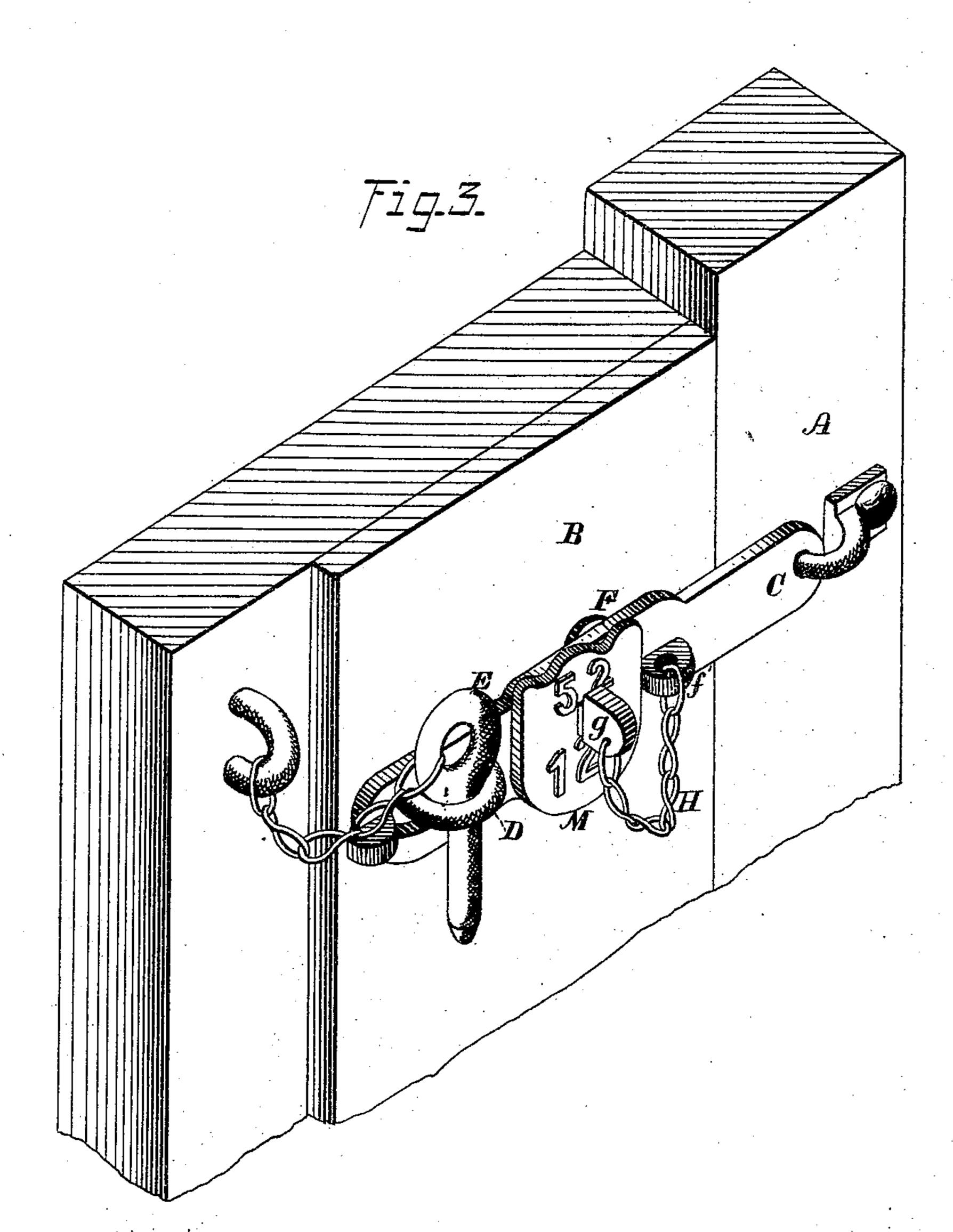
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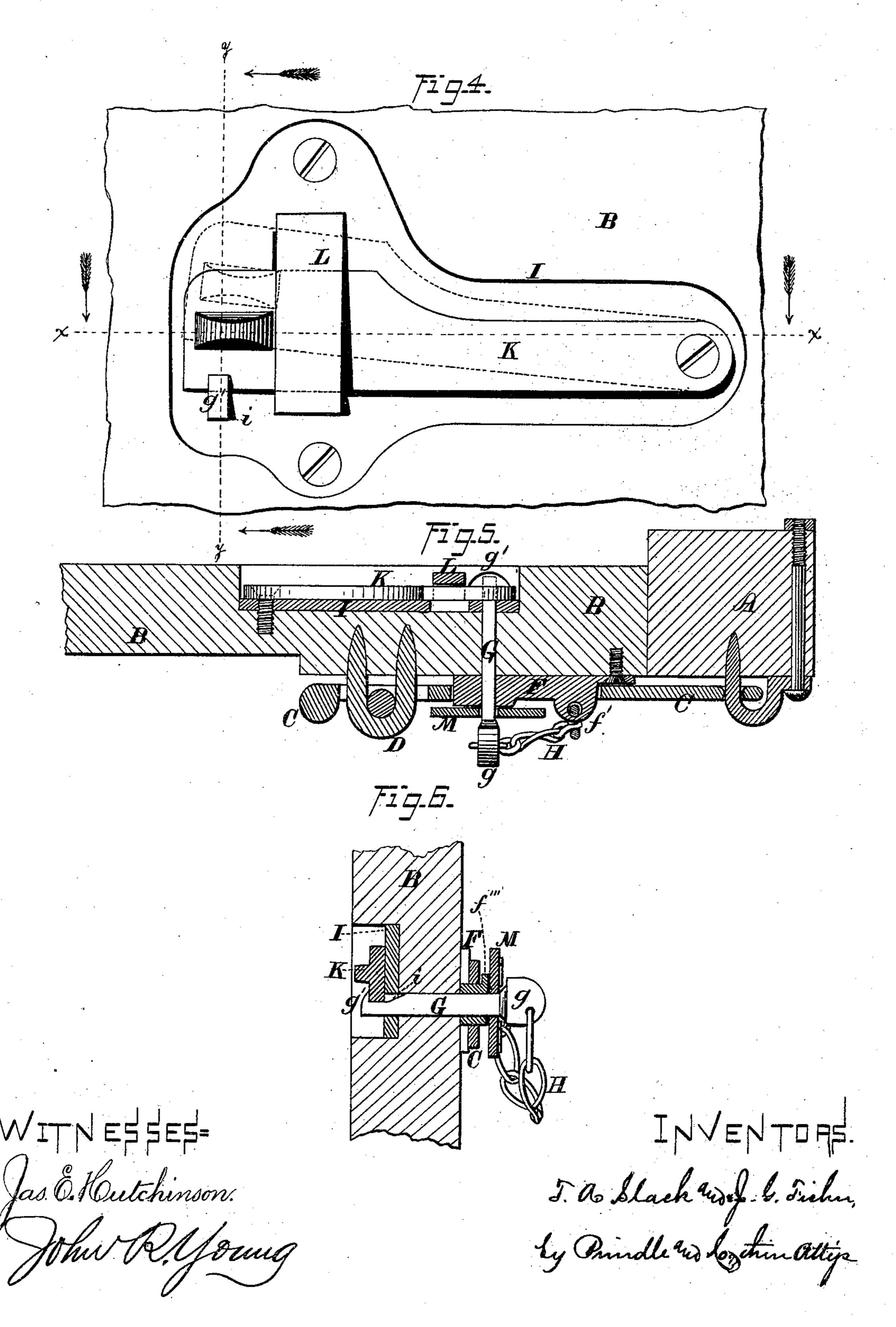
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No. 179,073.

Patented June 20, 1876.



UNITED STATES PATENT OFFICE.

THOMAS A. SLACK AND JOSEPH G. FISHER, OF TOLEDO, OHIO.

IMPROVEMENT IN SEAL-LOCKS.

Specification forming part of Letters Patent No. 179,073, dated June 20, 1876; application filed February 10, 1876.

To all whom it may concern:

Be it known that we, Thos. A. Slack and Jos. G. Fisher, of Toledo, in the county of Lucas and in the State of Ohio, 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—

Figure 1 is a perspective view of our improved apparatus applied to the outer side of a car and its door, said door being unfastened. Fig. 2 is a like view of the same, showing the hasp and usual locking-pin in position. Fig. 3 is a perspective view of said parts in the position last shown, with the locking-key and seal in place. Fig. 4 is an elevation of the inner face of the door, and shows the latch employed for locking the key in place. Fig. 5 is a horizontal section upon lines x x of Figs. 3 and 4; and Fig. 6 is a vertical section upon line y y of Fig. 4.

Letters of like name and kind refer to like

parts in each of the figures.

The design of our invention is to prevent the contents of railroad freight-cars from being tampered with, during the interval between the loading of the same and their arrival at their destination, and the delivery of the goods to the consignees, without such mutilation of the locking devices as will enable the fact to be instantly detected and the loss located; and to this end it consists, principally, in combining with the detachable key, provided with a head and arranged to pass through the hasp and to engage with the detent, a seal-plate constructed to fit over said key, and to be contained between its head and the outer face of the hasp, substantially as and for the purpose hereinafter shown. It consists, further, in the combination of the hasp. staple, locking-pin, key-plate, key, latch, and seal, in the manner and for the purpose substantially as is hereinafter set forth.

In the annexed drawings, A represents the side of a car; and B a door arranged to slide horizontally within a suitable opening in the same, all in the usual manner. Pivoted loosely upon the car side or door-jamb A is one end of a metal hasp, C, which near its

opposite end is provided with a longitudinal opening, c, that permits said hasp, when raised to a horizontal position, to be passed over a staple, D, that is secured within and projects horizontally outward from the face of the door B, after which operation a pin, E, may be inserted within said staple outside of said hasp, so as to lock the latter in engagement with the former, and prevent said door from being opened, such construction and combination of parts being as commonly used. Within the central portion of the hasp C is provided an oblong opening, c', which, when said hasp is in engagement with the door B, passes over a correspondingly-shaped projection, f, that is formed upon the face of a metal plate, F. which plate is secured to or upon the face of said door directly behind said hasp. Near one end of the projection f is provided an eye, f', while near its opposite end is formed an oblong opening, f'', which passes inward through the plate F and through the door B. is placed with its greatest diameter in a vertical line, and receives a correspondinglyshaped key, G, that is provided upon its outer end with a head, g, and is connected to or with said eye f' by means of a chain, H. The length of the key G is such as to cause its inner end to extend nearly through the door B, and/upon said inner end is provided an upward-projecting lip, g', which is vertical upon its outer side, while its inner side extends inward and downward at an angle of about thirty degrees. Within a corresponding recess provided in the inner face of the door B is secured a metal plate, I, which has the form shown in Fig. 4, and has pivoted at one end one end of a latch, K, that from thence extends horizontally to or near the opposite end of said plate, and is contained within a strap or guide, L, that confines said latch in position upon the face of said plate, while allowing to its free end certain vertical motion. The plate I and latch K, described, are placed so that the free end of the latch will just engage with the lip g' of the key G, which latter projects through an opening, i, that is provided in and through said plate. As thus arranged, the inward passage of the key G will cause the latch K to rise until the lip g'has passed beneath the latter, after which

said latch will drop to place, and effectually prevent the withdrawal of said key. The vertical dimensions of the head g of the key G is less than the width of the opening c' within the hasp C, so that, when said key is in position within the plate, said head does not interfere with the engagement or disengagement of said hasp with the staple D. In order that the hasp C may be sealed when placed in engagement with the staple D, a thin plate, M, constructed from cast-iron, glass, or other brittle material, and provided with a suitable opening, m, for the insertion of the key G, is placed upon said key just within its head g, and when the latter is in position within the plate F extends vertically and laterally outward over the face of said hasp, as shown by Figs. 3, 5, and 6. As thus arranged it will be seen that as the key G cannot be released and removed until after the car door B is opened, the hasp C cannot be disengaged from the staple D, so as to permit of the opening of said door, until the plate or seal M is removed, and that, as the last-named operation can only be effected by the breaking or cutting of said seal, the car could not be opened without making such fact apparent. By providing certain figures, letters, or marks upon the seals employed, or in other manner rendering the same peculiar and difficult to be counterfeited, little danger would exist that the car would be opened and again sealed by the substitution of a fraudulent or counterfeit seal. In order that the hasp C may be prevented from moving laterally, when the car is locked, the opening c' is made somewhat wider than

the projection f of the plate F, and upon the upper edge at the front side of said projection is formed an upward-projecting lip, f''', behind which said hasp is contained. To disengage said hasp, it is necessary that it be raised until the upper side of its opening c' is above said lip f''', after which it may be moved outward.

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

1. In combination with the detachable key G, provided with the head g, and arranged to pass through the opening c' of the hasp C, and to engage with the latch K upon the inner face of the door B, the seal M having an opening, m, to enable it to be passed over the body of said key, and be contained between said head g and the outer face of said hasp, substantially as and for the purpose shown.

2. The hasp C, provided with the openings c and c', the staple D, the pin E, the plate F provided with the projection f and opening f', the key G having the head g and lip g', the latch K pivoted upon the inner side of the door B, and the seal M, all constructed and combined to operate in the manner and for the purpose substantially as set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 29th day of January, 1876.

THOMAS A. SLACK. JOSEPH G. FISHER.

Witnesses:

JOHN F. KUMBER, LAFAYETTE S. MEDFORD.