

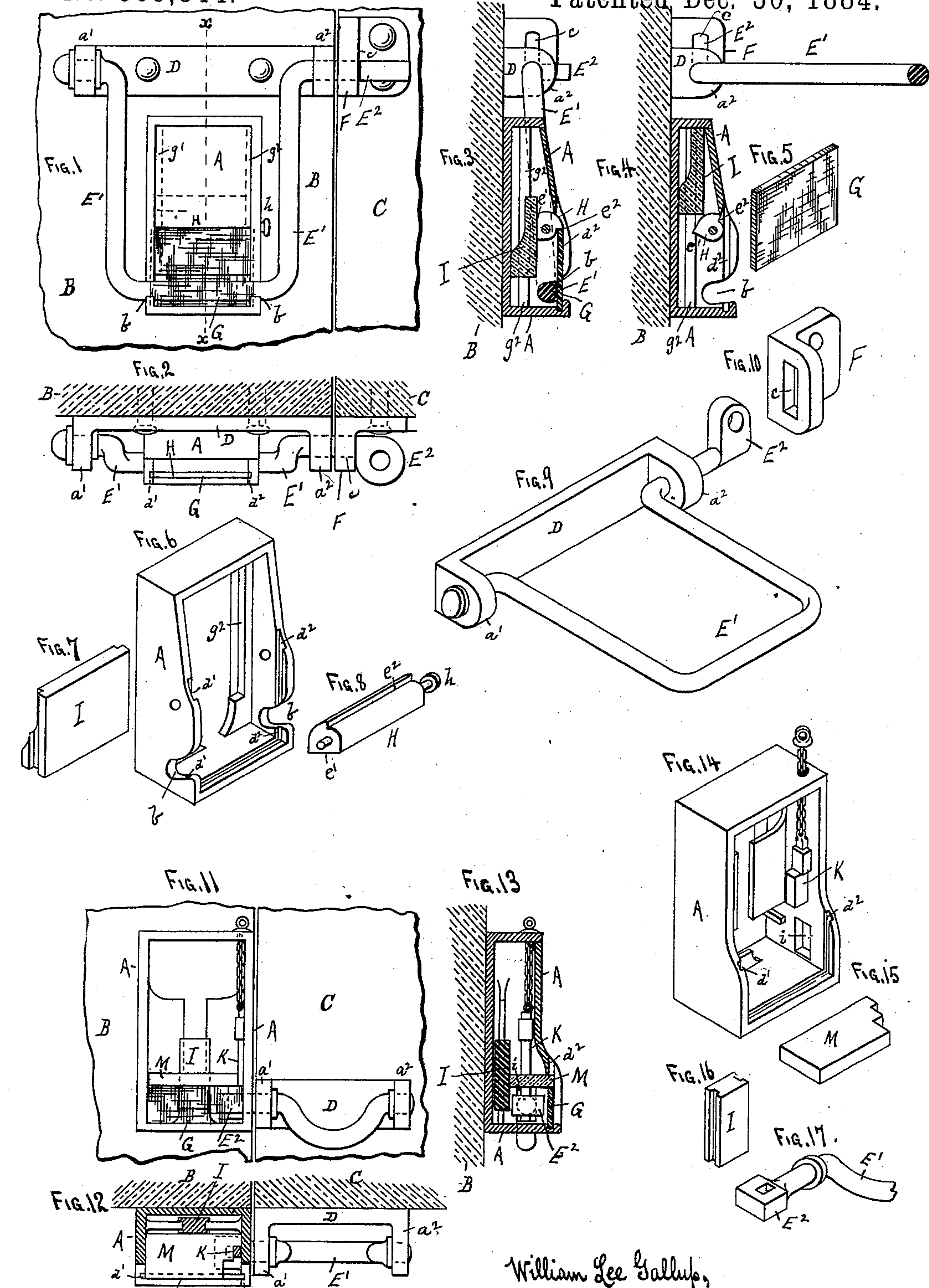
(No Model.)

W. L. GALLUP

SEAL LOCK.

No. 309,844.

Patented Dec. 30, 1884.



Louis Fisser Jr.
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WITNESSES.

William Lee Gallup,
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UNITED STATES PATENT OFFICE.

WILLIAM LEE GALLUP, OF ST. PAUL, MINNESOTA.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 309,844, dated December 30, 1884.

Application filed May 3, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LEE GALLUP, a citizen of the United States, and a resident of St. Paul, in the county of Ramsey, in the State of Minnesota, have invented certain new and useful Improvements in Seal-Locks, of which the following specification is a full, clear, and exact description, reference being also had to the accompanying drawings, in which—

Figure 1 is a front view, and Fig. 2 is a plan view, of sections of a car-door and its frame, showing one of my improved seal-locks attached thereto. Fig. 3 is a sectional view on the line *xx* of Fig. 1, showing the lock "sealed," and Fig. 4 is a similar view showing the lock unsealed. Fig. 5 is a detached perspective view of one of the glass "seals." Fig. 6 is a perspective view of the lock-frame. Fig. 7 is a similar view of the locking-bolt, and Fig. 8 is a similar view of the locking-cam. Fig. 9 is a perspective view of the hasp or locking bar, and Fig. 10 is a perspective view of the slotted staple or socket. Figs. 11, 12, and 13 are views similar to Figs. 1, 2, and 3, showing a slight variation in the manner of holding the locking hasp or bolt in the lock. Fig. 14 is a perspective view of the lock-casing. Figs. 15 and 16 are perspective views of the locking bars or plates, and Fig. 17 is a perspective view of one end of the hasp or bolt as used in the modification shown in Figs. 11, 12, and 13.

This device will be used generally in locking and "sealing" the doors of freight-cars, but may be used in other places, if desired.

A is the casing or frame containing the locking mechanism, which will usually be attached to the casing B against which the car-door C abuts, but may be attached to the door itself, if preferred.

D is a hasp-plate attached horizontally to the casing B above the frame A, and having ears *a'* *a''* upon its ends in which a hasp or U-shaped bar, E', is pivoted and adapted, when turned down, as shown in Figs. 1, 2, and 3, to fit into open slots *b* across the lower part of the frame A. The pivot of the hasp E', next to the edge of the door C, is extended beyond the ear *a''* and formed into an enlarged flattened head, E², at right angles to the hasp E', said head being adapted, when the hasp is

turned outward at right angles to the casing B, to pass through a perpendicular slot, *c*, in a staple or socket, F, attached to the door C. When the door C is to be closed the hasp E' is turned outward, as shown in Figs. 4 and 9, which will enable the head E² to pass through the slot *c*, and then when the hasp is turned down again, as shown in Figs. 1, 2, and 3, the head E² will also be turned down across the slot *c* and prevent the door from being opened until the hasp is again raised up. The front face of the frame A slopes backward from above the center, leaving the lower half projecting somewhat, so that small upright grooves *d'* *d''* may be formed in the sides of the casing to receive a glass plate, G, as shown in Figs. 1, 2, 3, 4, 6, 11, 12, 13, and 14. The slots *b* will be deep enough to enable the hasp E' to enter deeply enough into the frame A to permit this glass plate G to be dropped down in front of the hasp, as shown in Figs. 1, 2, and 3, so that the hasp cannot be removed without removing the glass.

About opposite the rear of the upper edge of the glass plate G is pivoted, in the sides of the frame A, a cam-roller, H, formed with a flat rear side, *e'*, and a notched front edge, *e''*, the said notched edge adapted to fit over the upper edge of the glass plate G, when the flat rear side, *e'*, is in an upright position, as shown in Fig. 3.

I is a bolt or stop sliding up and down in the rear of the roller H, in ways *g'* *g''* on the inside of the casing A, and adapted to slip down behind the flat side *e'* of the roller H, when the latter is turned with its notched side *e''* resting on the glass G, as shown in Fig. 3. The part of the cam-roller H between the notch *e''* and flat side *e'*, is farther from the center of the roller than the notch or flat side, so that when the bolt I is raised up and the roller turned back, the latter will form a stop to hold the bolt elevated, as shown in Fig. 4.

In Fig. 4 the lock and hasp are shown ready to be connected, which is done (after the staple F is properly set over the head E², as before described,) by lowering the hasp E' down into the slots *b*, and dropping the glass G down into the grooves *d'* *d''*. The roller H is then turned down by means of a knob, *h*, on one of its pivots, which will cause the notched side *e''* to rest upon the upper edge of the glass G and bring

the flat side e' in an upright position and permit the bolt I to drop down behind it, as shown in Fig. 3. By this means the hasp is securely held in the frame A, and cannot be removed unless the glass G be broken and the bolt I elevated above the roller H. The casing A is so constructed that the bolt I can only be reached through that part of the front of the casing A covered by the glass G, and as the latter is held down by the roller H, the only access to the bolt is by breaking the glass, which is the end sought by this invention.

In Figs. 11, 12, and 13 a slight modification is shown, consisting in attaching the frame A to the door and the hasp E' to the casing, or vice versa, and elevating the hasp E' and passing the head E^2 through an upright slot, i , in the side of the casing A, and turning the hasp down again to "lock" them together. The glass plate is then dropped down in front of the head E^2 , as in Figs. 11, 12, and 13. A bolt or pin, K, will be arranged to be dropped down through a slot in the head E^2 and the roller H adapted to hold both this pin and the glass G down in place. A sliding plate, M, may be used in place of the roller H, if preferred, said plate adapted to hold both the glass G and pin K down in place, and be held outward by the bolt I dropping down behind it. This plate M will also be arranged, when pushed backward, to hold the bolt I elevated similar to the roller H in Fig. 4. The pin K may be dispensed with, and the head E^2 held from turning by the plate M. By this arrangement, after the cars are once sealed and the record made, the person or persons having them in charge can ascertain at a glance whether they have been tampered with or not, and by noting the condition of the seals at designated stations if an unlawful opening of the cars occurs the place can be promptly and accurately located, and the responsibility placed upon the proper person or agent. The glass seals will be suitably marked, either by "blowing" into them, when manufactured, the initials of the railroad company owning the cars, or some mark denoting the contents or ownership of the goods in the car; or a slip of paper with the proper writing upon it may be pasted upon the rear surface of the

glass before it is inserted into the frame; or the required information may be printed or written upon a card and placed behind the glass before it is locked.

In Figs. 1, 2, 3, 4, and 7 the bolt I is shown the full width of the inside of the casing A, and in Figs. 11, 12, 13, and 16 it is shown of a less width; but the operation is substantially the same in both forms.

Springs may be used in place of the bolt I under some circumstances, but the results and action would be the same.

I do not wish to confine myself to the form of hasp shown. Neither do I wish to be confined to the use of the head E^2 , as I am aware that many other suitable means may be used to accomplish the same result.

Some other substance than glass might be used for the plates G; but I prefer glass as possessing peculiarly advantageous qualities for the purpose.

Having described my invention and set forth its merits, what I claim is—

1. In a seal-lock, the combination of a case attached to a door or casing, a swinging hasp or bolt adapted to be held in the case by a seal-plate, and provided with a locking-head, the door or casing provided with a staple, in which the locking-head turns for locking the door, a glass seal-plate closing the open side of the sealing-case around the hasp or bolt, and means, substantially as described, for locking the said plate in the case, inaccessible for unlocking except by breaking the seal-plate, substantially as and for the purpose herein specified.

2. The combination of the sealing-case A, attached to the casing B, door C, provided with the staple F, hasp E' , provided with the locking-head E^2 , glass seal-plate G, eccentric roller H, and sliding-bolt I inside of the sealing-case, substantially as and for the purpose herein specified.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILLIAM LEE GALLUP.

Witnesses:

C. N. WOODWARD,
H. E. RANDALL.