

(No Model.)

2 Sheets—Sheet 1.

M. E. KANALY.  
SLIDING DOOR FASTENER.

No. 549,673.

Patented Nov. 12, 1895.

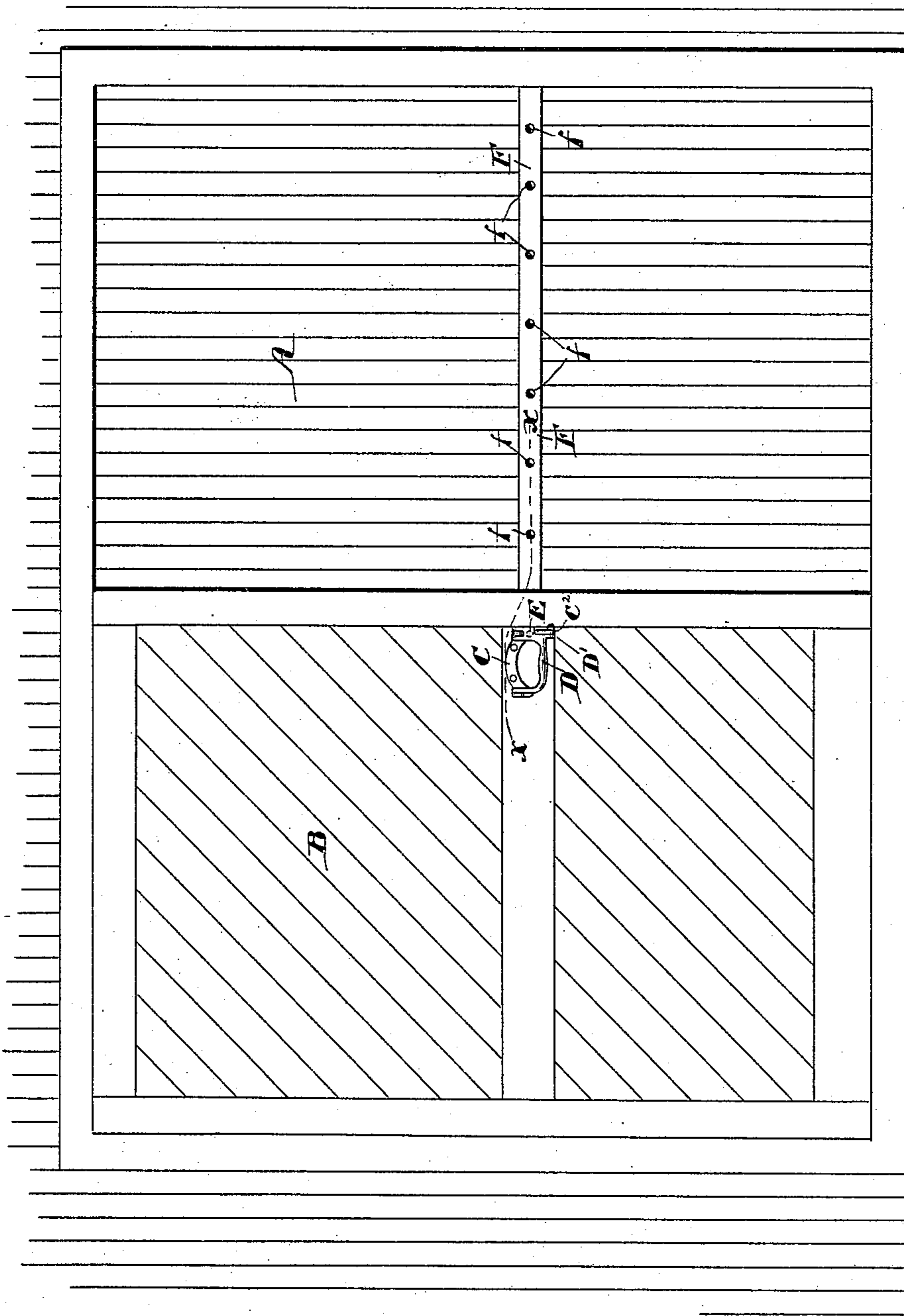


Fig. 1.

**Witnesses:**  
Walter E. Lombard.  
A. Theodore Fletcher

*Inventor:*  
*Morris E. Kanaly,*  
*by N. C. Lombard*  
*Attorney.*

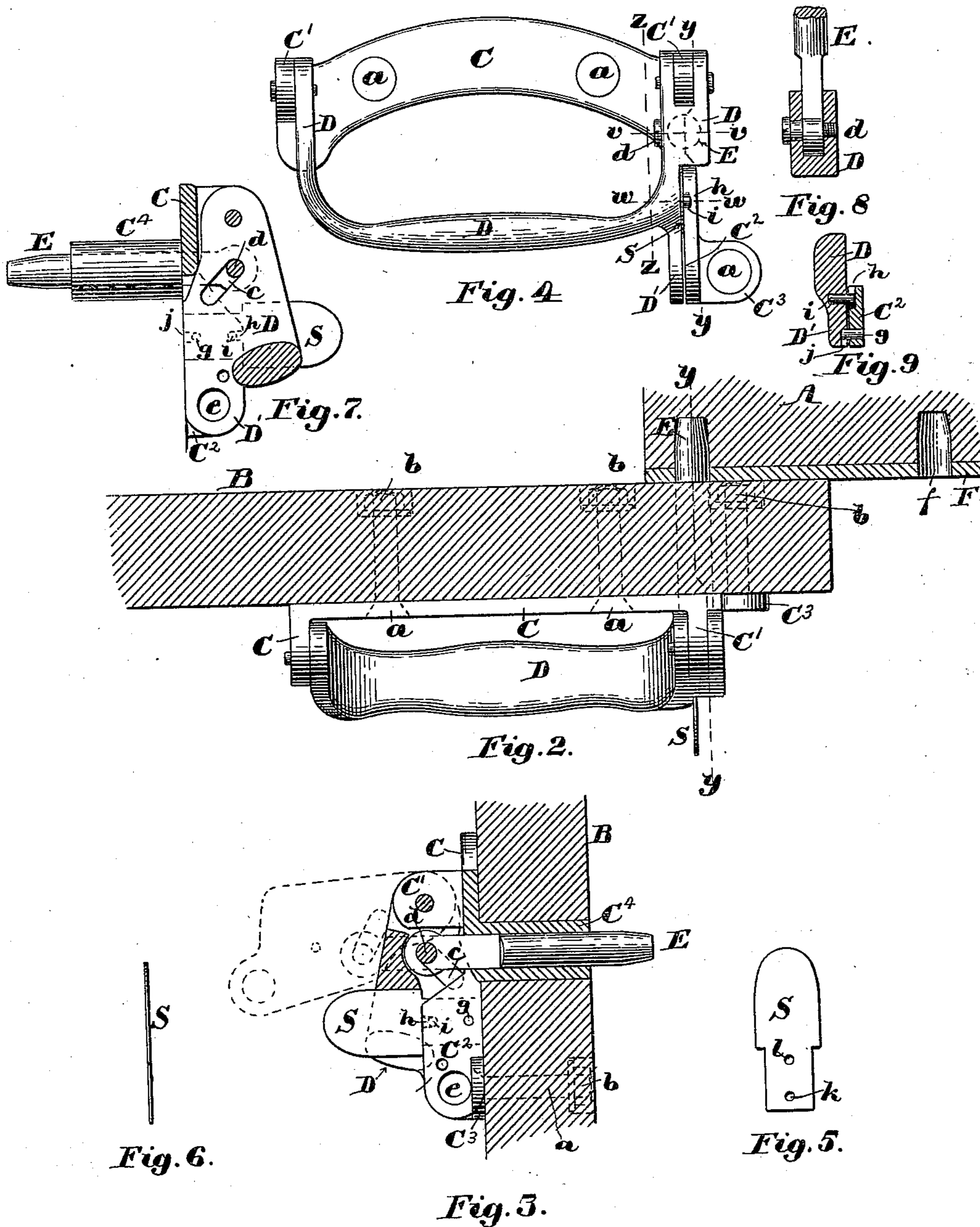
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# UNITED STATES PATENT OFFICE.

MORRIS E. KANALY, OF SOMERVILLE, ASSIGNOR TO THE M. E. KANALY COMPANY, OF CAMBRIDGE, MASSACHUSETTS.

## SLIDING-DOOR FASTENER.

SPECIFICATION forming part of Letters Patent No. 549,673, dated November 12, 1895.

Application filed July 6, 1895. Serial No. 555,112. (No model.)

*To all whom it may concern:*

Be it known that I, MORRIS E. KANALY, of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in a Combined Car - Door Bolt, Handle, and Seal - Lock, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to combined car-door bolts, handles, and seal-locks; and it consists in certain novel features of construction and arrangement and combination of parts, which will be best understood by reference to the accompanying drawings and to the claims hereto appended, and in which my invention is clearly pointed out.

Figure 1 of the drawings is an elevation of a portion of a freight-car with its door closed and illustrating my invention. Fig. 2 is a partial sectional plan drawn to an enlarged scale, the cutting-plane being on line  $x x$  on Fig. 1. Fig. 3 is a vertical section on line  $y y$  on Figs. 2 and 4 and looking toward the left of said figures. Fig. 4 is an elevation of the handle, bolt, and seal detached from the door of the car. Figs. 5 and 6 are respectively a side elevation and an edge view of the seal-plate. Fig. 7 is a section on line  $z z$  on Fig. 4, looking toward the right. Fig. 8 is a section on line  $v v$  on Fig. 4, and Fig. 9 is a section on line  $w w$  on Fig. 4.

In the drawings, A represents a portion of the side of a car, and B is a sliding door closing the opening to the interior of the car, which door may be hung in any well-known manner, so that it may be opened or closed by sliding it along suitable ways parallel to the side of the car.

C is a plate provided with the ears  $C'$   $C'$  and the pendent arm  $C^2$ , which has formed thereon the laterally-projecting ear  $C^3$ , said plate being firmly secured to the outer face of the door B by means of the bolts  $a a$  and the nuts  $b b$ , as shown.

D is the door-handle, pivoted to the ears  $C'$  and having formed therein the inclined slot  $c$ , into which projects the pin  $d$ , fixed in the outer end of the bolt E, fitted to and movable endwise in a bearing in the boss  $C^4$ , formed upon the inner face of the plate C, as shown.

The handle D has formed thereon the short arm  $D'$ , which projects outward or downward

beyond the bow of the handle, with its right-hand face in near proximity to and parallel with the left-hand side of the pendent arm  $C^2$  of the plate C when the handle D is in the position indicated in full lines in the drawings. The arms  $D'$  and  $C^2$  have formed therein holes  $e$ , which coincide with each other when the parts are in the positions shown, so that said arms may be secured together by passing the bolt of a padlock through the same.

When the handle D is in the pendent position indicated in the drawings, the bolt E is projected through the door B into one of the holes  $f f$ , formed in the side of the car, and may or may not be strengthened by the metal plate F, set in and secured to the face of the car, which holes are so arranged that the door may be locked in closed position, wide open, or more or less open, as may be desired.

When the handle D is raised to a horizontal or nearly horizontal position, as indicated by dotted lines in Fig. 3, the bolt E will be withdrawn from the hole  $f$  and the door may be moved from its former position to open or close it, as may be desired.

The arm  $C^2$  has set in its left vertical face a small pin  $g$ , which projects outward therefrom, and the upper edge of said arm has formed therein directly above said pin and in its left side the open slot  $h$ , into which the small pin  $i$ , set in and projecting from the right-hand end of the handle D, enters when the handle is in its pendent position, and said handle has an open slot  $j$  formed in its lower right-hand corner in position to receive the pin  $g$  when said handle is in its pendent position.

S is the seal-plate, made of sheet metal or other suitable material and of the form shown in Fig. 5, and has formed therein the two holes  $k$  and  $l$ , adapted to engage the pins  $g$  and  $i$ , respectively.

The arms  $C^2$  and  $D'$  are separated from each other by a space just equal to the thickness of the seal S, and when it is desired to apply the seal the handle D is raised into its horizontal position, as shown in dotted lines in Fig. 3, and the seal-plate S is placed in contact with the left face of the arm  $C^2$ , with the pin  $g$  projecting through the hole  $k$ , the portion of said plate above the hole  $l$  being curved

transversely, when if the handle be moved downward to slide the bolt to secure the door in position the pin *i* will press said curved portion of the plate *S* into the slot *h* until  
 5 said pin passes into the hole *l*, when the bolt cannot be withdrawn without tearing the seal.

To adapt my handle and bolt to use in combination with other seals now in common use, I form in the arms *C*<sup>2</sup> and *D*' perforations *o*,  
 10 which register with each other when the handle is in its pendent position, so that a wire seal may be passed through said holes and secured together in a well-known manner.

What I claim as new, and desire to secure  
 15 by Letters Patent of the United States, is—

1. In combination with a sliding car door, a plate secured to the outer face of the door and provided with a perforated hub to extend through the door; a handle pivoted to said  
 20 plate so as to be movable about an axis parallel to the side of the door and provided with an inclined or cam slot; a bolt fitted to and movable endwise in a bearing in said perforated hub; and a pin set in said bolt and extending laterally therefrom into said cam slot.  
 25

2. In a seal lock for sliding doors the combination of a plate secured to the outer face of the door and provided with a perforated hub to extend through said door, and with a pendent arm; a bolt fitted to and movable endwise in a bearing in said perforated hub; a  
 30 handle pivoted to said plate and movable about an axis parallel to the side of the door and provided with an inclined or cam slot for operating said bolt, and with an arm, which,  
 35 when said handle is in its pendent position

will be in near proximity to and parallel with the pendent arm of said plate; a pin set in the outer end of said bolt and engaging said cam slot; and means for applying a seal to  
 40 said two parallel arms to secure them together and prevent their being separated without breaking the seal.

3. In combination with the sliding door of a car, the plate *C*, provided with the ears *C'*,  
 45 the hub *C*<sup>4</sup> and the arm *C*<sup>2</sup> having the pin *g* and slot *h*; the handle *D* provided with the cam slot *c*, and the arm *D*' having the pin *i* and slot *j*; the bolt *E*; the pin *d* set in said bolt and projecting laterally into said cam slot;  
 50 and the seal *S* all constructed, arranged and operating substantially as described.

4. In a seal lock the combination with a sliding door of a plate secured to the outer face of the door; a handle pivoted to said  
 55 plate and movable about an axis parallel to the face of said door; a bolt fitted and movable endwise in a bearing in said door with its axis at right angles to the face of said door; means of connecting said bolt to said handle  
 60 whereby a movement of said handle about its axis will project or withdraw said bolt; and means for attaching a seal to said handle and plate to secure them together.

In testimony whereof I have signed my  
 65 name to this specification, in the presence of two subscribing witnesses, on this 29th day of June, A. D. 1895.

MORRIS E. KANALY.

Witnesses:

N. C. LOMBARD,  
 F. F. NESDELL.