

No. 847,930.

PATENTED MAR. 19, 1907.

H. FRANCE.
LOCK.

APPLICATION FILED SEPT. 17, 1906.

Fig. 1.

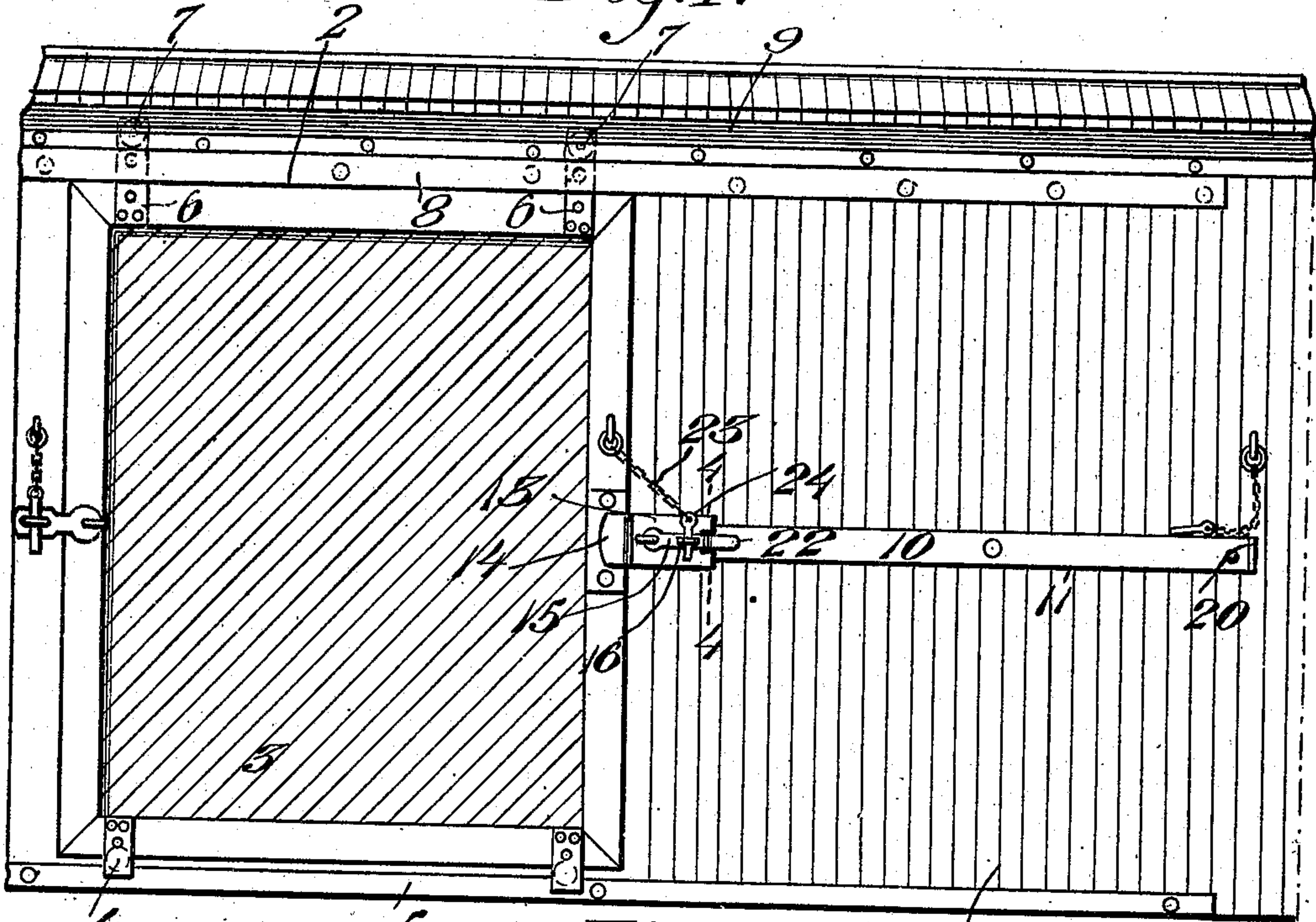


Fig. 2.

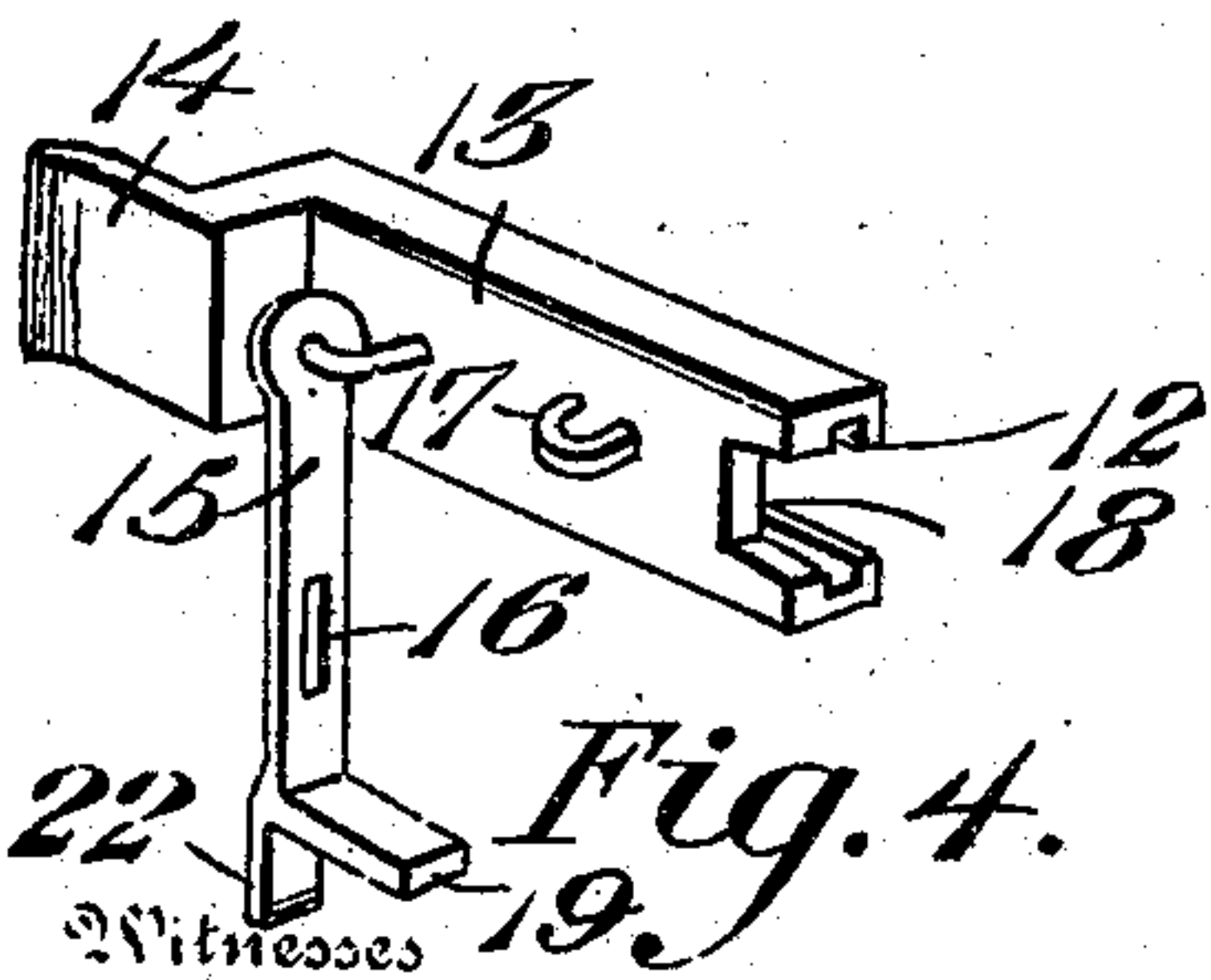
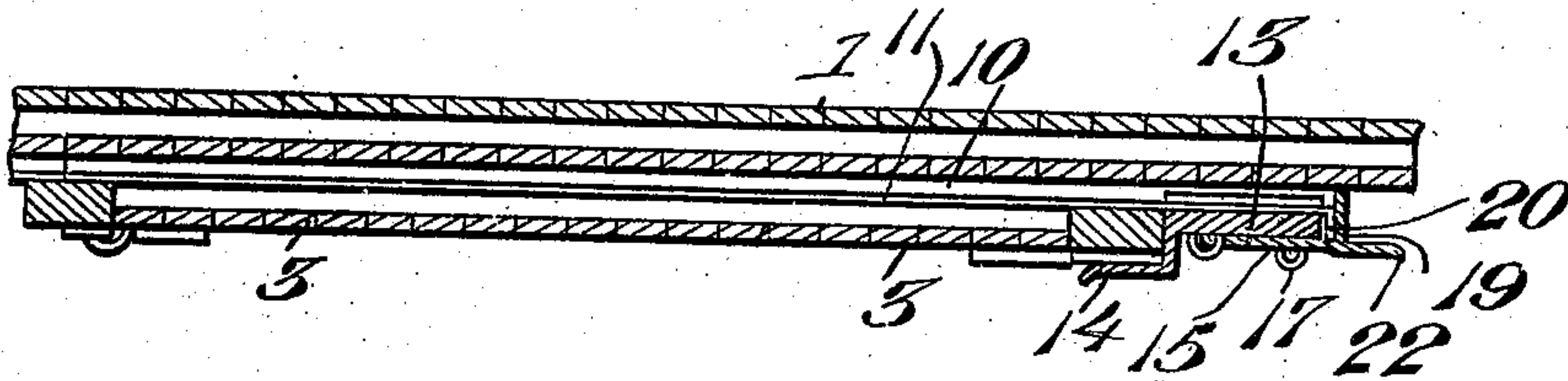


Fig. 4.

Witnesses

Phil. C. Barnes
F. J. Elmore

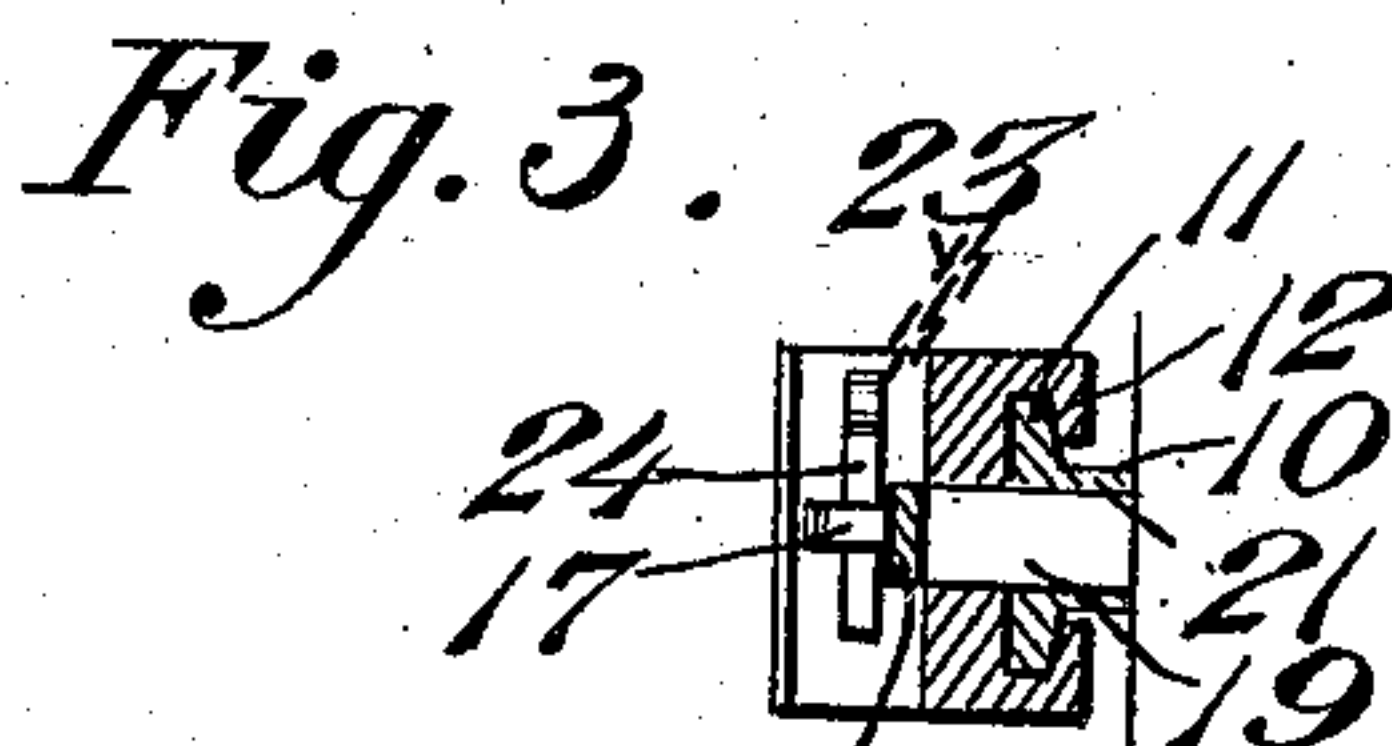


Fig. 3.

Inventor

H. France.

By

Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

HARVEY FRANCE, OF CHICAGO, ILLINOIS.

LOCK.

No. 847,930.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed September 17, 1906. Serial No. 334,828.

To all whom it may concern:

Be it known that I, HARVEY FRANCE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Locks, of which the following is a specification.

This invention relates to locks designed especially for use on car or other sliding doors, and has for its objects to produce a comparatively simple inexpensive device of this character through the medium of which the door may be readily locked in either open or closed position and one which may be conveniently manipulated in the operations of locking or unlocking the door.

With these and other objects in view the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a side elevation of a portion of a car having a sliding door equipped with a lock embodying the invention, the door being shown in closed condition. Fig. 2 is a horizontal section taken on a plane centrally of the guide-rail, the door being shown in open position. Fig. 3 is a detail sectional view taken on the line 4 4 of Fig. 1. Fig. 4 is a detail perspective view of the lock.

Referring to the drawings, 1 designates the side wall of a car having a doorway 2, adapted to be closed by a door 3, provided at its lower end with rollers 4, which travel on a horizontal base-rail 5 and equipped at its upper end with hangers 6, in which are journaled rollers 7, adapted for travel on an overhead rail 8, there being attached to the wall above the rail 8 a shield 9, designed to protect the parts from rain and snow.

Attached to the wall 1, preferably at a point centrally between the rails 5 and 8, is a horizontal guide-rail 10, having edge flanges 11, adapted for engagement by portions or flanges 12, provided on a locking member or bolt 13, slidably arranged on said rail and having at its forward end a forwardly-projecting portion or lip 14, which in practice engages the edge of the door 3, there being pivoted on the member 13 a hasp 15, provided between its ends with a slot 16, designed to receive a U-shaped shackle 17, fixed on the locking member 13, which has its rear end recessed, as at 18, to accommodate engaging portion or finger 19, formed on the

hasp 15. The rail 10 is provided at its rear end with an outwardly-projecting lip or keeper 20, adapted for engagement by the portion 19 of the hasp when the door is in open position, there being also provided in the rail 10, at a point adjacent its forward end, an opening or socket 21, constituting a keeper for the reception of the portion 19 when the door is in closed condition. The hasp 15 has a forwardly-projecting finger-piece 22, which may be engaged for moving the hasp to releasing position, while attached to the door 3 by means of a chain 23 is a locking-pin 24, designed to seat in the shackle 17 for holding the hasp in locking position.

In practice when the door is closed the locking member 13 is moved along the rail 10 to the position seen in Fig. 1, with the portion or lip 14 engaged over the edge of the door, and is locked in such position by means of the hasp 15, the portion 19 of which is entered into the socket 21 in the manner heretofore explained, after which the pin 24 is inserted through the shackle 17 for holding the hasp in locking position. When the door is moved to open position, the projection 20 on the rail 10 enters the recess 18 of the locking-bolt, after which the hasp is arranged, as in Fig. 2, with the portion thereof in engagement with the keeper 20, thus to hold the door in open position.

Having thus described my invention, what I claim is—

1. In a device of the class described and in combination with a movable door, of a guide-rail extended in the rear thereof, a locking-bolt slidably mounted on said rail and adapted for engagement with the door, and a hasp carried by the bolt and operable for locking the same against movement on the rail.

2. In a device of the class described and in combination with a movable door, of a guide-rail extended in the rear thereof and provided with a keeper, a locking-bolt slidably mounted on said rail and a hasp carried by the bolt and having a portion for engagement with the keeper to lock the bolt against movement.

In testimony whereof I affix my signature in presence of two witnesses.

HARVEY FRANCE.

Witnesses:

Wm. J. Ross,
C. H. Coons.