

(No Model.)

M. H. PALMER.

DOOR LATCH.

No. 292,042.

Patented Jan. 15, 1884.

*Fig. 1.*

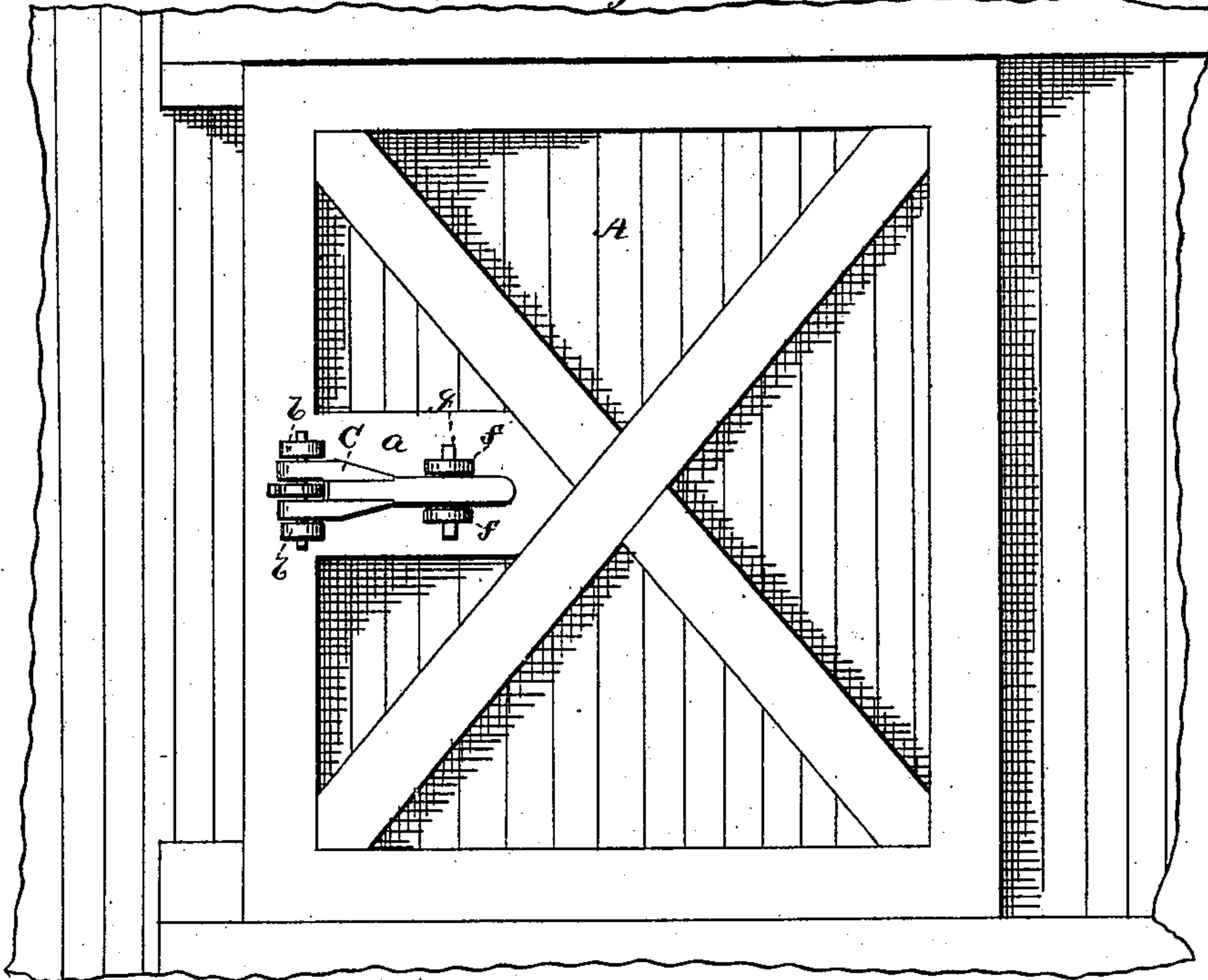


Fig. 2.

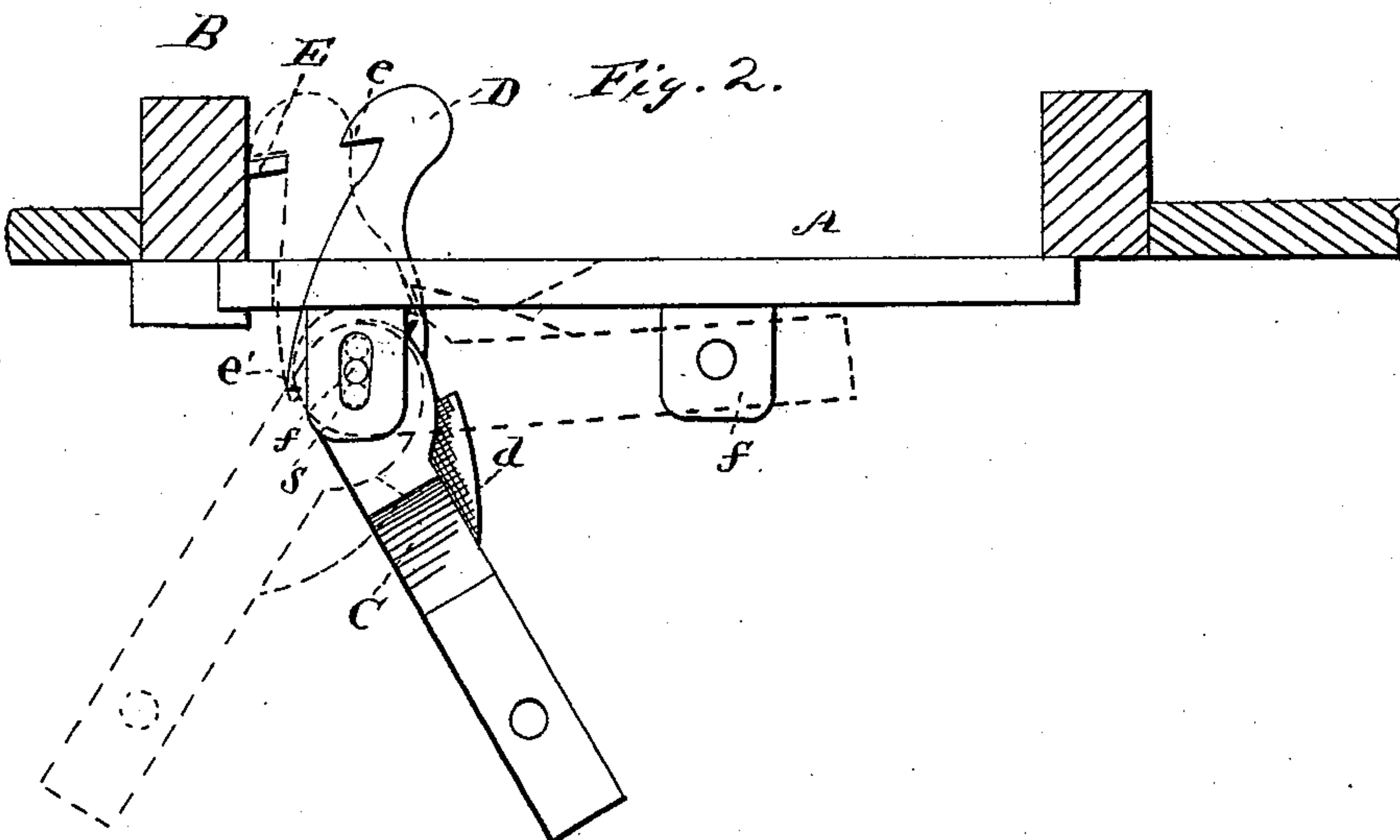
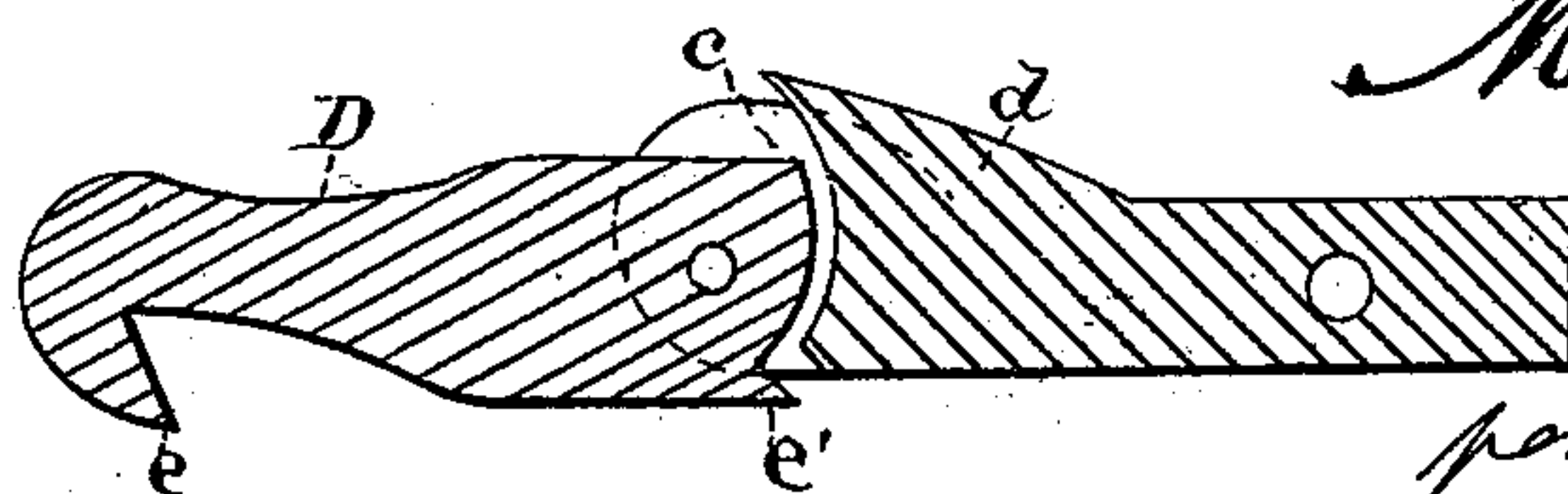


Fig. 3.



WITNESSES  
Chas. R. Burr  
W. E. Bowen

INVENTOR

per O.E. Duffey  
Attorney



# UNITED STATES PATENT OFFICE.

MELVIN HARRY PALMER, OF ST. LOUIS, MISSOURI.

## DOOR-LATCH.

SPECIFICATION forming part of Letters Patent No. 292,042, dated January 15, 1884.

Application filed April 26, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, MELVIN H. PALMER, of St. Louis, in the county of St. Louis and State of Missouri, have invented certain new and useful Improvements in Car-Door Fastening Devices; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My improvements relate to that class of inventions known as "locking devices for car-doors," it having for its object to provide means whereby the door of a car can be secured against the entrance or access of unauthorized persons to the interior of the car, to prevent loss by theft of any of the cargo or freight which may be therein contained; and to this end my invention consists in the combination of the car door and frame with a slotted plate having pivotally hinged thereto a bifurcated arm or lever, between which is held a latch which passes through the slot in the plate and a corresponding communicating slot in the door, and is adapted by the manipulation of the lever to engage a keeper on the door-frame when the lever is turned against the plate and secured, by which movement the door is locked, all of which will be more particularly described and pointed out hereinafter.

Referring to the annexed drawings, Figure 1 is a side elevation of a car-door embodying my improved locking device. Fig. 2 is a plan of the device, showing in dotted lines the movement of the lever by which the door is locked and unlocked. Fig. 3 is a section in detail of the latch and lever.

Reference being had to the letters of reference marked thereon, A represents a car-door and B the door-frame. The device by which the door is locked consists of a slotted plate, *a*, which is secured on the outside of the door over a corresponding communicating slot made therein, on which plate is provided above and below the slot a lug, *b*, also slotted, and between which is held on a pin the bifurcated

end of a lever, C, said lever being slightly concave at the end between the bifurcates, as at *c*, and having a shoulder, *d*, at the same end, on its inner side. Between the bifurcated end of the lever is held, on the same pin, a latch, D, which latch is formed like a hook at the end *e*, while at its other end it is rounded and provided with a shoulder, *e'*. E is a keeper or fastener secured to the door-frame, by which the latch is held. On the opposite end of the plate are lugs *f*, between which the solid end of the lever is held when it is closed against said plate, it being therein secured by a bolt, *g*; but, for safety, in use a lock is employed, or any sort of seal now in use.

The operation of the locking mechanism is as follows: The plate, with this arrangement of the lever and latch, is placed over a slot in the door of the car, on the outside, and preferably secured thereto from the inside. The latch projects through the slot in the door, within the car, and when desired to be locked the lever is turned and brought against the plate and secured by a bolt, as explained. By this movement of the lever the shoulder *d* abuts against the latch and securely holds it to the keeper E. When an unlocking is desired, the lever is unfastened and turned out and around in the opposite direction, when the shoulder *e'*, on the rounded end of the latch, is struck by the edge of the concave portion of the lever between the fork, and released from the keeper, thus allowing the door to be opened. Instead of holding the lever against the plate by a bolt, an ordinary seal is used for safety.

I am aware that, broadly, my arrangement of lever and hook with the base-plate is not new; but my device differs from those heretofore used in that the lever is provided with a shoulder whereby the hook can be thrown into and out of engagement with the catch or keeper, and also that both lever and hook are pivotally held to the plate.

Having thus described my invention, what I claim is—

1. In a locking device for car-doors, the combination of the door and frame with the slotted plate having arranged thereto the lever

and latch, as described, said plate being provided with the lugs by which the lever and latch are pivotally held, and corresponding lugs at its opposite end, between which it is  
5 turned and secured, by which movement of the lever the latch is made to engage a keeper on the frame, as set forth.

2. In car-door locks, the combination of the slotted plate *a*, provided with the lugs *f*, having  
10 holes for the passage of a pin, and the slotted lugs *b*, with the forked lever *C*, having on its inner edge the shoulder *d*, and the latch

having projection *e'*, said latch and lever being held between the slotted lugs by a pin, as shown, and the whole adapted substantially 15 for the purpose described.

In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnesses.

MELVIN HARRY PALMER.

Witnesses:

JNO. T. FINEGAN,

JAS. P. FINEGAN.