(No Model.)

D. S. SWARBRIG.

DOOR LATCH.

No. 427,808. Patented May 13, 1890.

FIG. 1

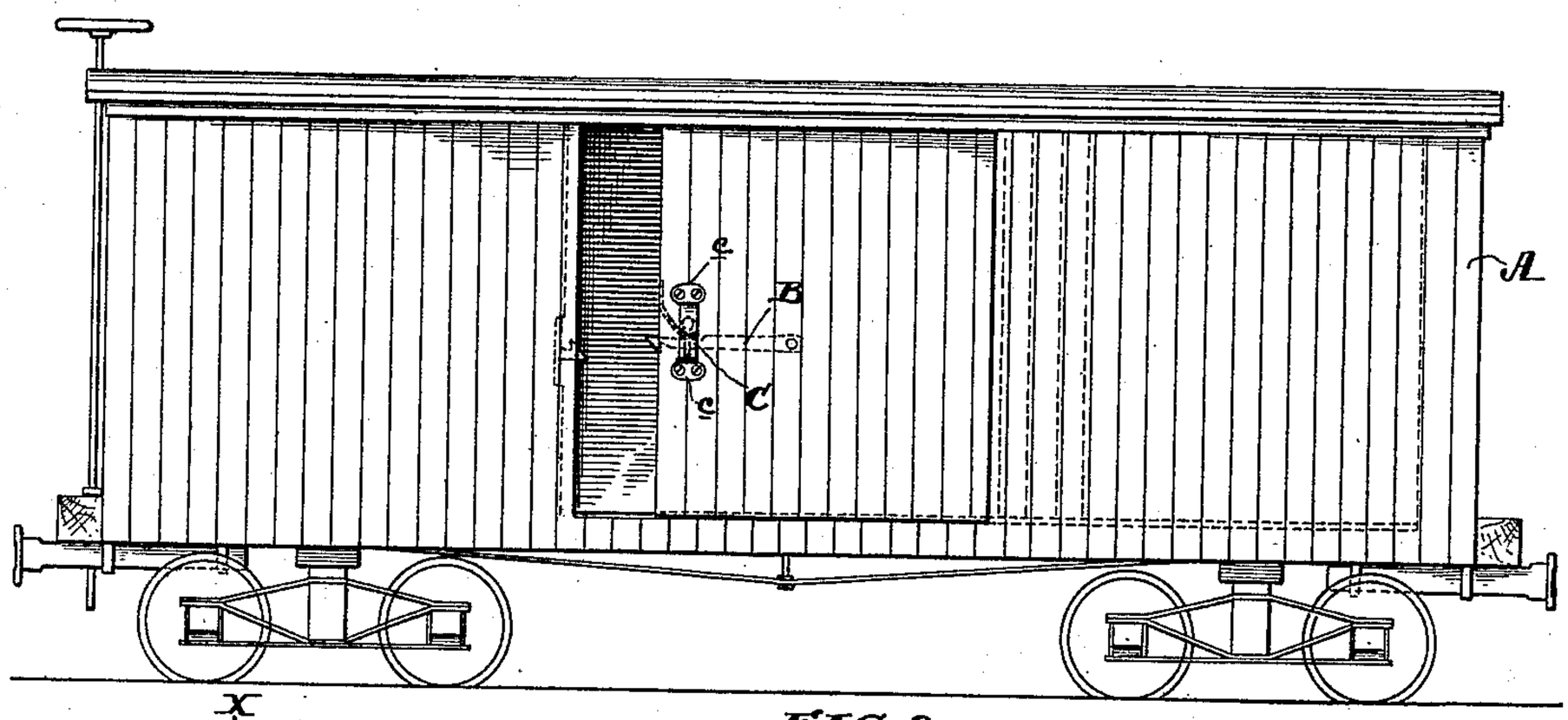


FIG. 2.

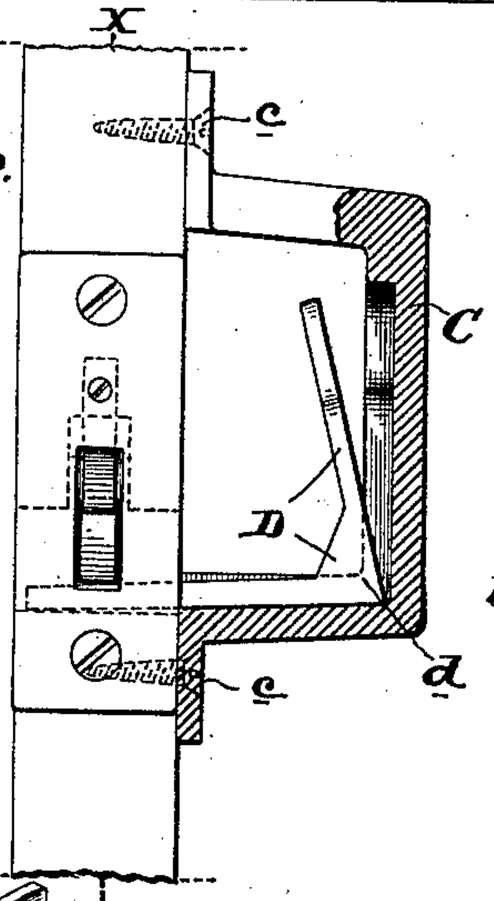


FIG. 3.

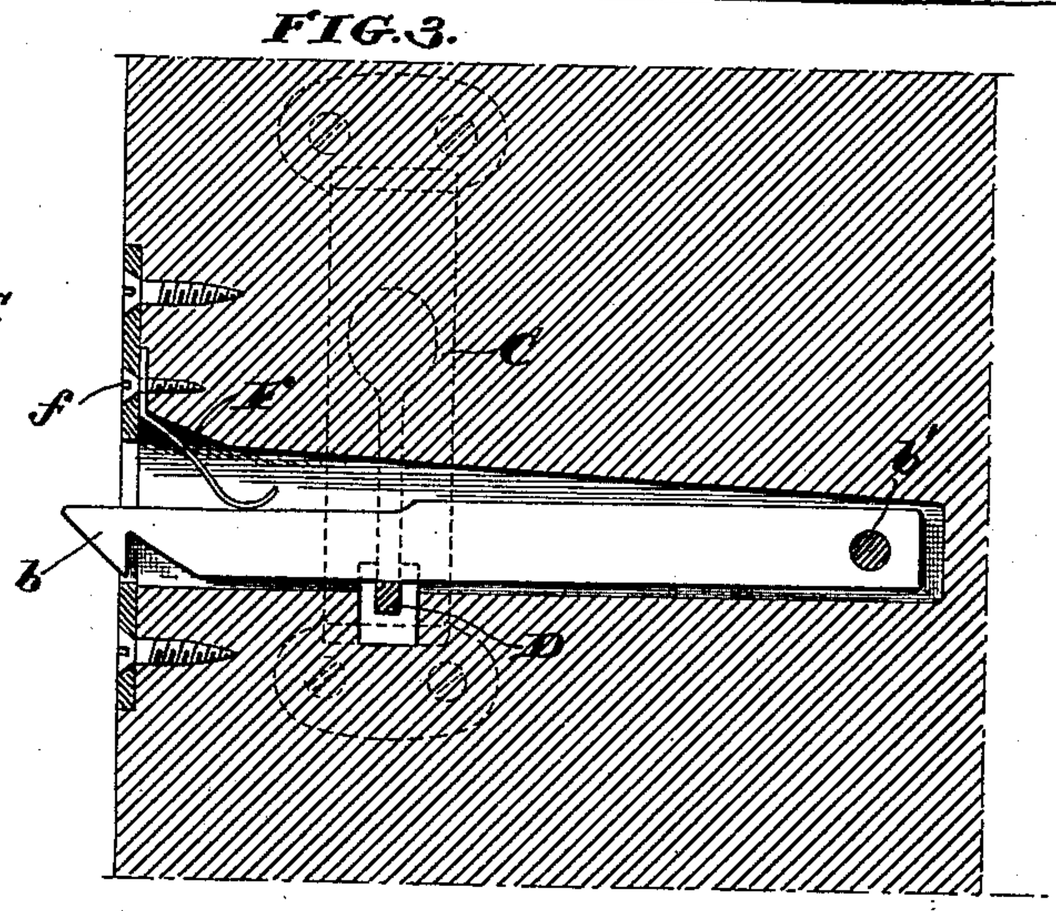


FIG. 7.

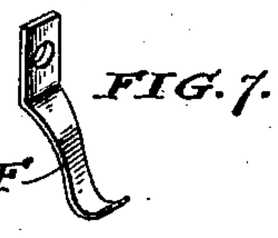


FIG. 8.

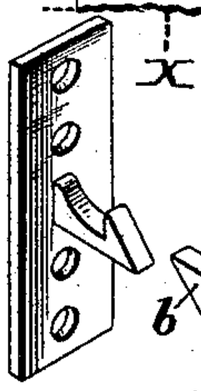


FIG. 6.

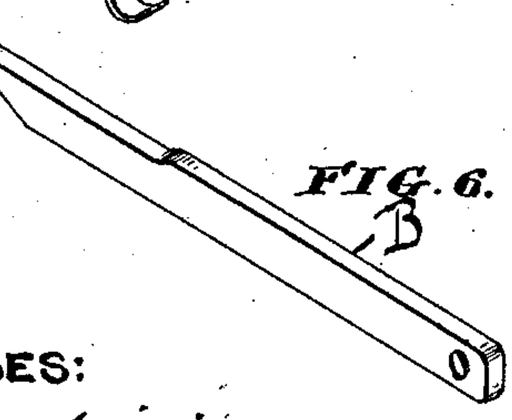


FIG. 4.

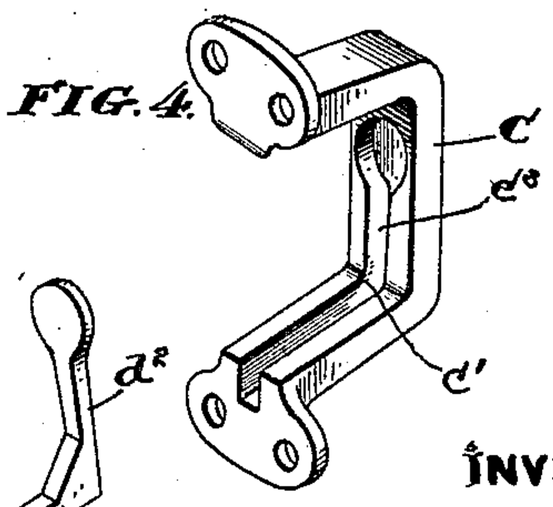
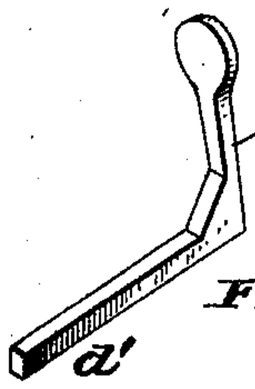


FIG. 5.



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UNITED STATES PATENT OFFICE.

DAVID S. SWARBRIG, OF PHILADELPHIA, PENNSYLVANIA.

DOOR-LATCH.

SPECIFICATION forming part of Letters Patent No. 427,808, dated May 13, 1890.

Application filed February 13, 1890. Serial No. 340,293. (No model.)

To all whom it may concern:

Be it known that I, DAVID S. SWARBRIG, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Door-Latch Devices, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object to combine with the handle of the door a latch which will operate to release or lift the locking-bolt, the latch being so arranged with reference to the handle that when the handle is grasped to slide or open the door the latch will operate upon the locking-bolt, so that the locking-bolt will be released and the door may be opened.

In the drawings, Figure 1 is a side elevation of a freight-car door, showing my improved device. Fig. 2 is a front elevation, partly in section. Fig. 3 is a longitudinal section on line *x x*, Fig. 2. Fig. 4 is a perspective view of handle or clasp. Fig. 5 is a perspective view of latch. Fig. 6 is a perspective view of locking-bar. Fig. 7 is a perspective view of spring pressing against locking-bar. Fig. 8 is a perspective view of fixed portion of locking device.

I have illustrated my invention in use with a freight-car door, but it is applicable to any other door.

A represents the car; B, the locking-bolt having the serrated or notched end *b*. This locking-bolt is secured to the car-door at *b'*.

C is the handle or clasp secured to the car-door at *c*. The handle is shown in detail in Figs. 2 and 4. Resting in the inner surface of this handle is the latch D, which is an angle-bar resting in the guides *c'* and c^3 in the handle or clasp C, (shown in Fig. 4,) the latch having a movement on the point *d*, so that when the portion *d'* rests in the guide *c'* the portion d^2 is out of the guide c^3, and vice versa. The portion *d'* of the latch projects under the locking-bolt, so that when the handle is grasped to open the door the latch D is moved so that the end *d'* is lifted up out of the guide *c'* and strikes the locking-bolt B, lifting it out of engagement with the fixed portion of the locking device and the door can be readily opened. The spring F, secured at *f*, rests upon the locking-bolt, and when the latch is released the spring forces the bolt back to its ordinary position, and in turn forces the latch so that the portion *d'* rests in the guide c^3.

As hereinbefore stated, the device is described and shown as applied to a freight-car door.

Having now fully described my invention, what I claim and desire to protect by Letters Patent, is—

In a bolt-releasing device for doors, in combination, a locking-bolt, a handle, guides on the inner surface of said handle, and an elbow-latch resting in said guide, said latch being so constructed that when one portion of the latch is in the guide the other portion is out, and vice versa, one end of said latch projecting under said locking-bolt, and said latch being adapted to rock.

In testimony of which invention I have hereunto set my hand.

DAVID S. SWARBRIG.

Witnesses:

ERNEST HOWARD HUNTER,

FREDERICK DAKENWADEL.