J. CAPRON.

Latch for Car Door.

No. 196,741. Patented Nov. 6, 1877.

Fig. 1.

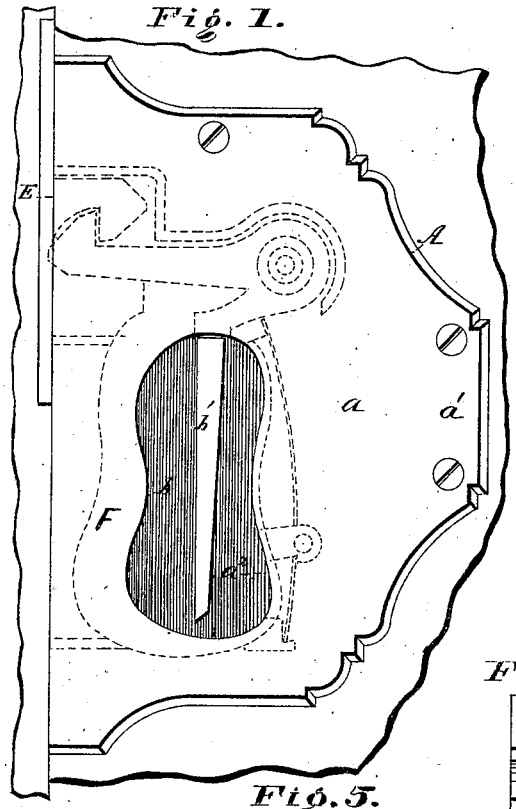


Fig. 2.

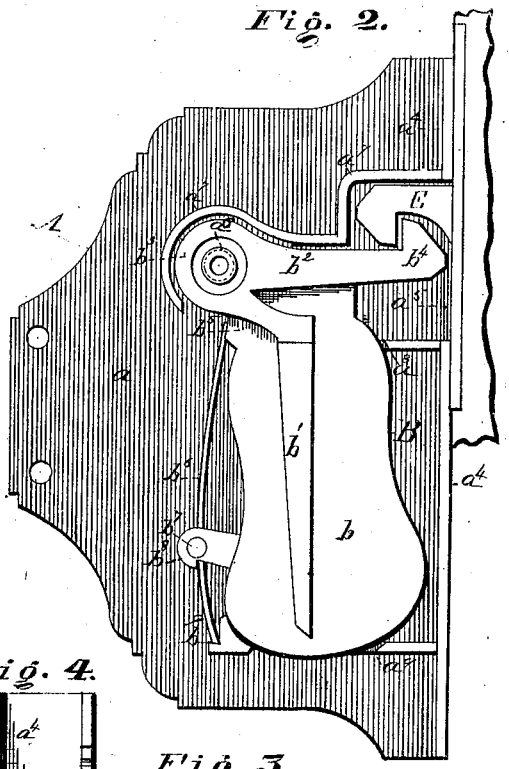


Fig. 4.

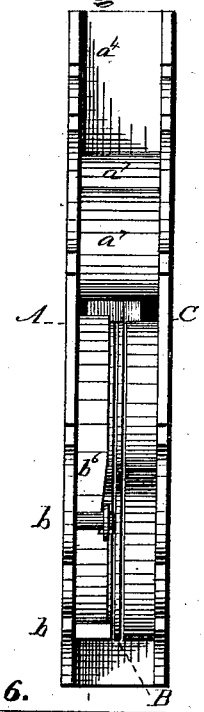


Fig. 3.

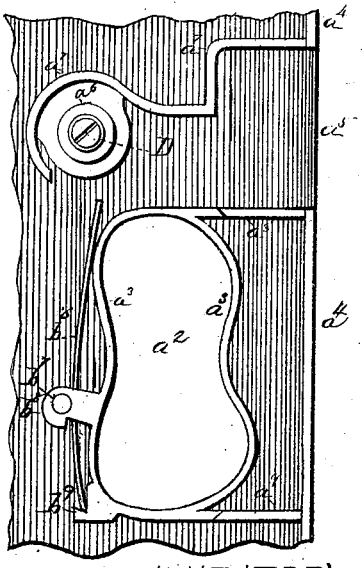


Fig. 5.

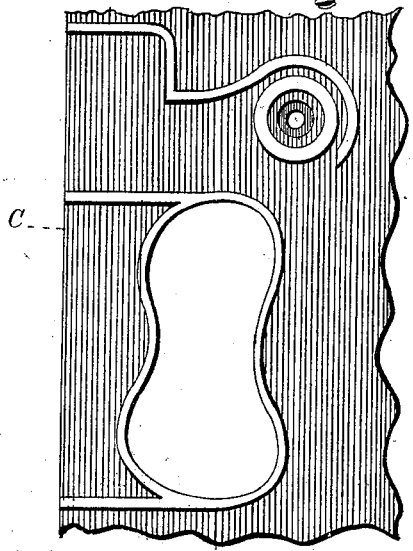
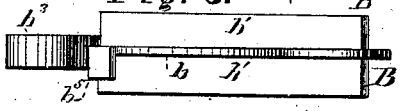


Fig. 6.



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UNITED STATES PATENT OFFICE.

JACOB CAPRON, OF NEW YORK, N. Y.

IMPROVEMENT IN LATCHES FOR CAR-DOORS.

Specification forming part of Letters Patent No. **196,741**, dated November 6, 1877; application filed June 1, 1877.

To all whom it may concern:

Be it known that I, JACOB CAPRON, of New York, in the county of New York and State of New York, have invented a new and useful Improvement in Car-Door Locks; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention is a flush car-door lock; and its novelty consists in the combination, with the casing of the lock, of a web or fan-tailed latch-handle of special construction.

In the drawings, Figure 1 represents a side elevation of the lock as applied to a car-door; Fig. 2, a side elevation of the main plate and interior parts, the fellow-plate being removed; Fig. 3. an inside view of the main plate with the latch-handle removed; Fig. 5, a similar view of the fellow-plate; Fig. 4, a rear end elevation; and Fig. 6, an edge view of the latch-handle.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction and manner of operation.

A represents the main plate of the casing of the lock, consisting of the plane surface a, having the projecting portion a^1, the oval opening a^2, with boundary-flange a^3, as shown, and the right-angled edge flange a^4, Fig. 2, having the notch or slot a^5 for the play of the latch, as shown. a^6 represents a stud rising from the inner face of the plate, which serves as the pivot upon which the latch-handle turns. a^7 a^8 a^9, Fig. 3, represent flanges which, in connection with corresponding flanges upon the fellow-plate, serve to inclose the interior parts, and also to give proper strength to the casing.

B, Figs. 1, 2, and 6, represents the latch-handle, consisting of a central web or fan-tail, b, adapted to cover the oval openings in the side plates in all positions of the latch-handle bars b^1 b^1 upon each side of the web, as shown, and the latch-shank b^2, Fig. 2, having at one end the pivot-socket b^3, and at the other the latch proper, b^4, as shown. b^5 represents a stud or arm projecting from the web, as shown, which is adapted to be acted upon by the free end of the spring b^6, as shown. This spring may be of any proper construction, and be held in place in any suitable way; but it preferably consists of a metal strip held in place by the stud and plate b^7 b^8 and the recess b^9, as shown.

C, Figs. 4 and 5, represents the fellow-plate of the casing, which corresponds, in its general construction, with plate A, and is adapted to unite with the same to complete the lock, as shown.

D represents the securing-screw, by means of which the plates are securely fastened together.

E represents the catch, of any proper construction.

The operation will be readily understood. The latch is operated on either side of the door by grasping the handle, and moving the same in the usual well-known manner. The web of the latch-handle serves to strengthen the latch, and also to close the necessary opening through the case. If desired, however, this web may be made stationary, and the latch-handle be slotted, to permit its proper movement.

Some of the advantages of construction are as follows: There are no projecting handles to be in the way. The projecting portions a^1 of the plates extend over and are secured to the rail of the door, for the purpose of giving strength to the latter, which would otherwise be weakened by the mortise cut for the lock. The construction of the lock is simple, and it can be produced at less cost than the ordinary locks now in use.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In combination with the casing of the lock having the opening a^2, the web b, having handles b^1 b^1, as described.

This specification signed and witnessed this 1st day of March, 1877.

JACOB CAPRON.

Witnesses:
W. M. POWELL,
ELIAS. H. UNDERHILL.