A. H. PALMER & A. D. BARBER, Jr.
Hasp-Lock for Car-Doors.

No. 197,399. Patented Nov. 20, 1877.

Fig. 1.

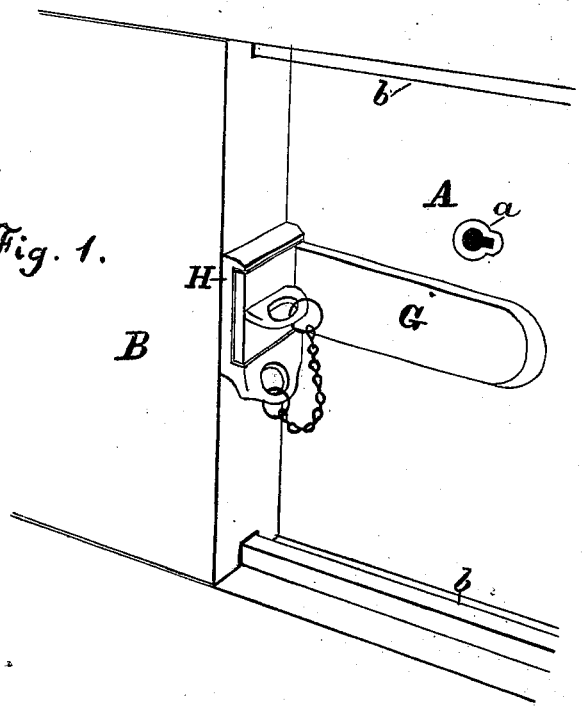


Fig. 2.

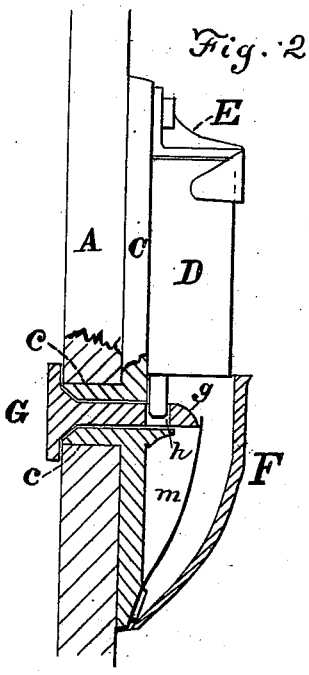
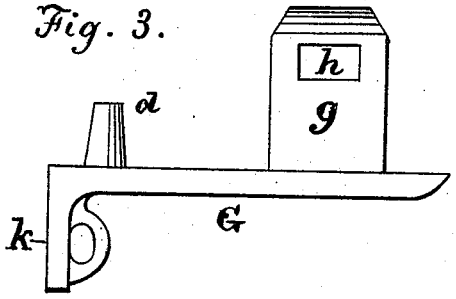


Fig. 3.



Witnesses
R. B. Turpin,
A. P. Lacey.

Inventors:
A. H. Palmer
A. D. Barber Jr
by L. L. Knox
Attorney.

UNITED STATES PATENT OFFICE.

AUGUSTUS H. PALMER AND AMAZIAH D. BARBER, JR., OF UTICA, N. Y.

IMPROVEMENT IN HASP-LOCKS FOR CAR-DOORS.

Specification forming part of Letters Patent No. **197,399**, dated November 20, 1877; application filed September 10, 1877.

To all whom it may concern:

Be it known that we, AUGUSTUS H. PALMER and AMAZIAH D. BARBER, Jr., of Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Locking and Fastening Sliding Doors of Cars and other structures; and we do hereby declare that the following is a full, clear, and exact description thereof, 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 letters of reference marked thereon, which form a part of this specification, in which said drawings—

Figure 1 represents, in side view, a portion of the casing of a car and door provided with our fastening device. Fig. 2 is an edge view of same, partially in section. Fig. 3 represents an upper edge view of the fastening-plate detached.

Our invention relates to locks and fastenings for sliding doors of cars and other structures to which it may be adapted; and consists in certain improvements in the construction of the same, as hereinafter shown and described.

The principal object of our invention is to provide a lock and fastening which will securely fasten the door when closed, and also hold firmly in position and protect from dislocation or injury the locking parts of our device.

In the drawings referred to, A designates the wall or casing of a car, and B the sliding door, which moves on ways *b*. C indicates a metallic plate, firmly attached to the casing A, on the inside thereof, and near the opening to be closed by the sliding door. This plate C is attached at the left-hand side of the door, if the latter, in opening, is moved to the left, and is provided with a tenon or projection, *c*, which passes through a mortise in the casing, fitting therein, and having its outer end flush with the outside of the casing. The tenon *c* is made hollow, or with an opening through it, to admit the tongue of the fastening-plate herein described.

A spring-lock, D, is firmly secured to the plate C, within the car, as shown, the lock being placed so that its bolt is in an upright position, and moves up and down, being actuated by the spring.

A clasp, E, fastened to plate C, holds the lock at the upper end, and another clasp or guard, F, is fastened to the plate at its lower end, as shown.

G is a fastening-plate which, when in position, is adjusted to the outside of the casing A. A tongue, *g*, projects from the inner side of plate G, as shown, and is beveled at its point for the purpose of entering the opening in the tenon *c*, and for impinging against the lower end of the lock-bolt.

The aperture *h* through the tongue is of suitable size and form to readily receive the said lock-bolt.

The fastening-plate G has a rectangular formation at one end, so that when the plate is fastened in place a stop or bar, *k*, is formed for the sliding door. The plate G is also usually formed with a projection, *d*, on its inner side, which passes through a thimble fixed in the casing of the car.

A plate, H, conforming somewhat to the stop *k* to receive the same, is screwed or otherwise fastened to the edge of the door B, a chain connecting the plates H and G, so that the latter may be suspended when not in use.

In operation, the plate G is placed against the casing, with the stop *k* against the plate H, the projection *d* passing through the thimble fixed in the casing, and the tongue *g* passing through the opening in the tenon *c*, and raising the lock-bolt, the latter being then pressed downward into the aperture *h* in the tongue *g*, when the fastening is effected.

When it is desired to remove the fastening, the lock-bolt is raised by a key through the key-hole *a*, and the plate G is immediately pushed forward by a spring, *m*, placed within the guard F, and which presses against the tongue *g*.

Having described our invention, we claim—

1. The spring-lock placed with its bolt in a perpendicular position, the plate C, provided

with the hollow tenon *c*, and secured to the casing A, the guard F, covering spring and end of tongue *g*, substantially as and for the purposes described.

2. The plate G, provided with tongue *g*, having aperture *h*, in combination with lock D and spring *m*, substantially as set forth.

In testimony that we claim the foregoing as our own we affix hereto our signatures in presence of two witnesses.

AUGUSTUS H. PALMER.
AMAZIAH D. BARBER, JR.

Witnesses:
WILLIAM H. PHILLIPS,
F. W. H. SHEFFIELD.