

S. A. OTIS & E. PARKER.
Street-Car Draw-Bar.

No. 218,189.

Patented Aug. 5, 1879.

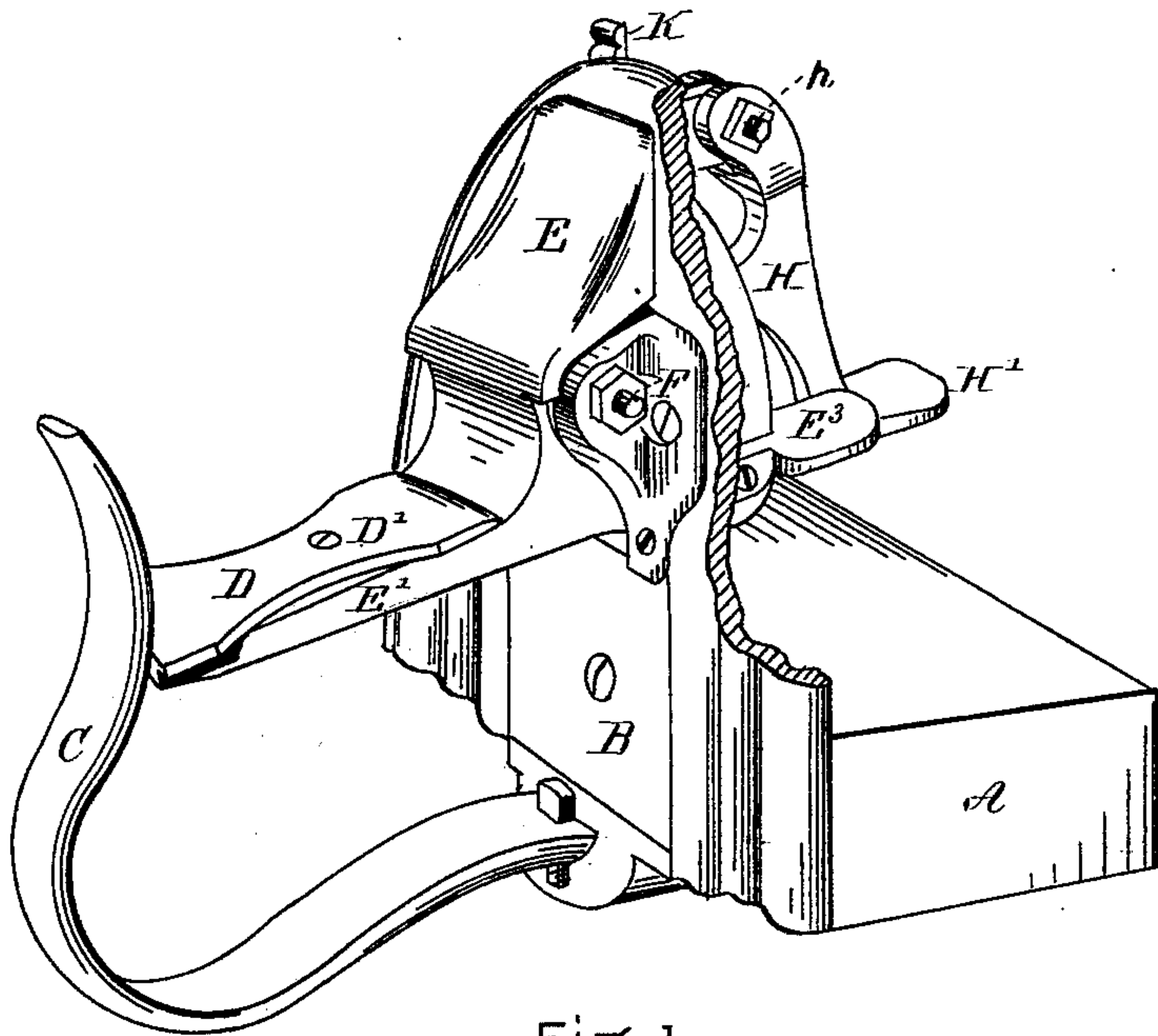


Fig. 1.

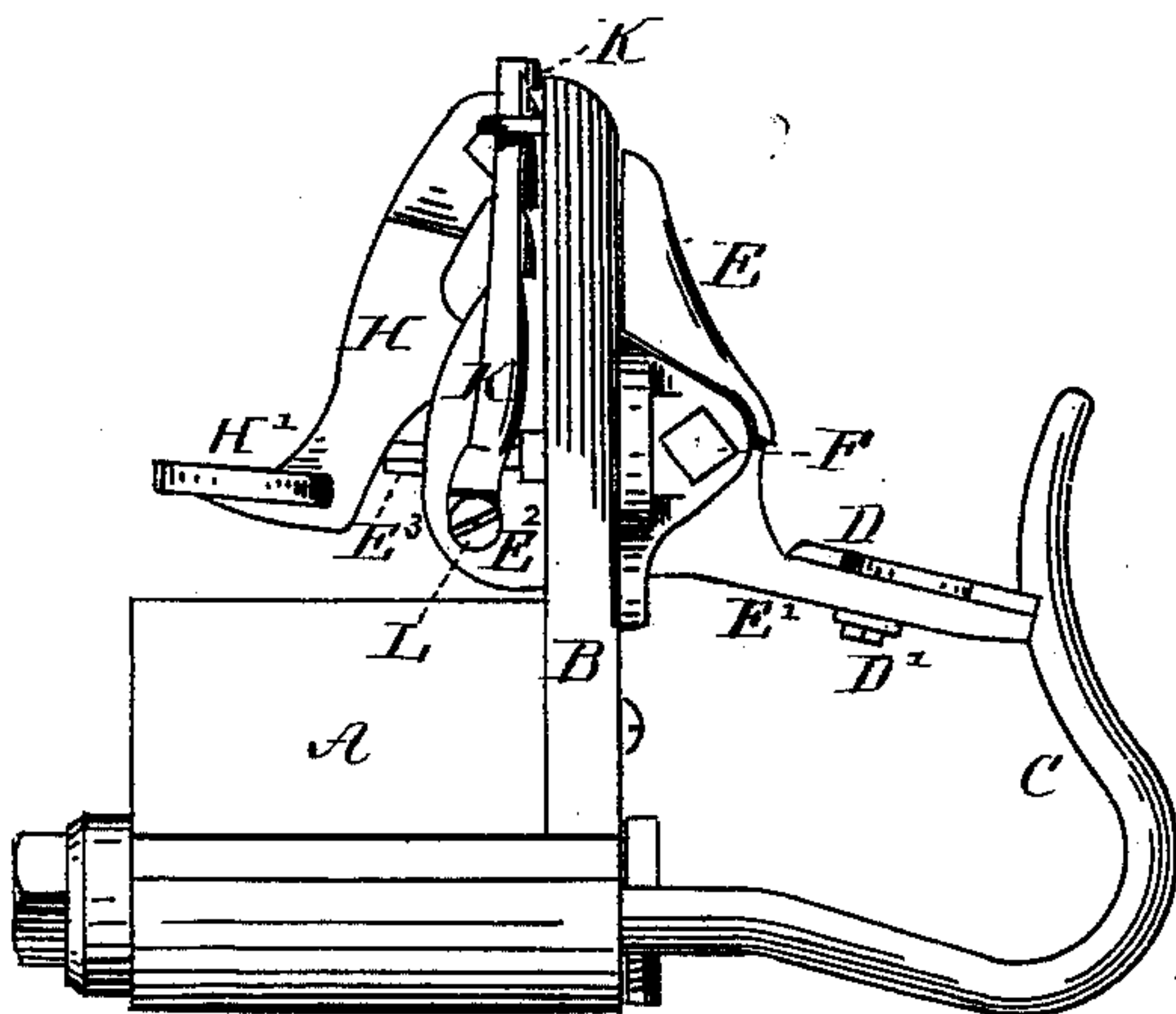


Fig 2

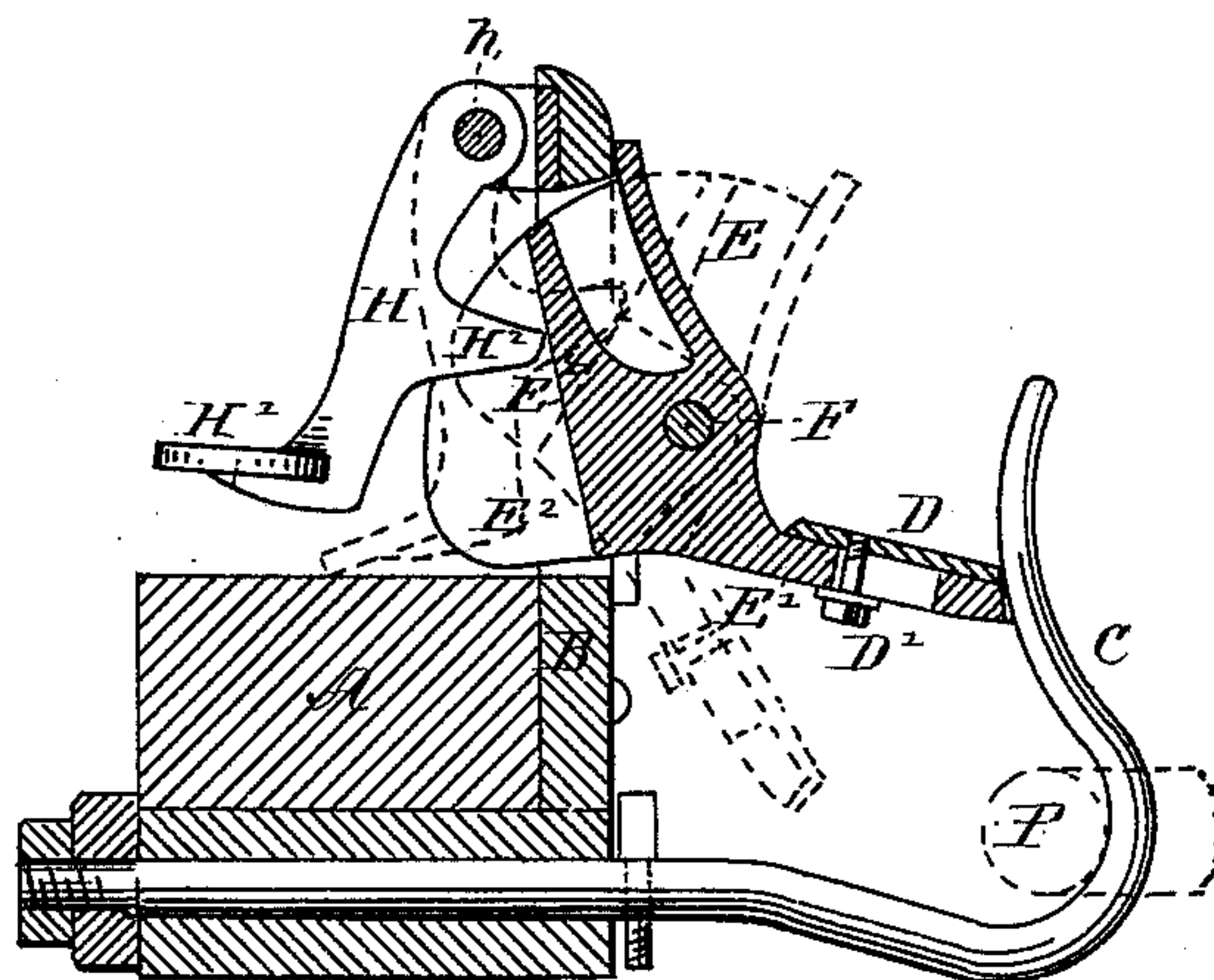


Fig 3

WITNESSES.

William Edson
Frankly Parker.

INVENTORS

Samuel A. Otis.
Ephraim Parker.

UNITED STATES PATENT OFFICE.

SAMUEL A. OTIS AND EPHRAIM PARKER, OF BOSTON, MASSACHUSETTS;
SAID PARKER ASSIGNOR TO CHARLES E. POWERS, OF SAME PLACE.

IMPROVEMENT IN STREET-CAR DRAW-BARS.

Specification forming part of Letters Patent No. **218,189**, dated August 5, 1879; application filed April 17, 1879.

To all whom it may concern:

Be it known that we, SAMUEL A. OTIS and EPHRAIM PARKER, both of Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Car-Pole Attachments, of which the following is a specification.

Our invention relates to that class of car-pole attachments in which the connection is made to a hook projecting from the dasher or platform of the car; and consists in combining with the car-hook a balanced lever-latch, said latch being so pivoted that the loop of the pole in being placed onto the hook will throw down the front end of the latch, and thus have a free passage onto the hook, and as the loop passes down it will go beyond the length of the latch, and allow it to assume its normal position, and thus lock the loop onto the hook.

Our invention also consists in devices for adjusting and operating the lever-latch, the exact nature of which may be best understood by reference to the drawings and specification.

Figure 1 is a perspective view of our invention, the dasher not being shown. Fig. 2 is an elevation taken on the opposite side from that shown in the perspective view, Fig. 1. Fig. 3 is a vertical section longitudinal to the line of the car.

Let A represent a part of the platform of a car, and B a casting attached to the same, said casting B serving to securely hold the draw-hook C and the locking device which forms our invention.

E E¹ E² is a bent weighted lever pivoted to the casting B at F. The forward part, E¹, is provided with an adjustable piece, D, which is held in place by a screw-bolt, D', said screw-bolt passing through an elongated hole in E¹, (see Fig. 3,) and admits of the adjustment of the piece D, so that the same may be fitted to any hook, or be readjusted in case the hook C is bent out of place.

The part E² of the lever is made so heavy that it will hold the forward or latch end, E, as shown in all the figures.

E³, Figs. 1 and 2, is a foot-piece attached to

the rear end of the lever E¹ E², and may be used by the driver for throwing down the forward end of the lever. This he can do by simply placing the toe of his boot under it (the foot-piece) and raising it up, this action throwing the forward end, E¹, of the lever down and allowing the loop P of the pole to be raised off from the hook C.

The toggle H is pivoted at h, and has a foot-piece, H¹, and a projection, H², Fig. 3, which rests against the rear, E⁴, of the lever E E¹ E², and serves to push the upper part of the same forward, and thus to throw the forward end, E¹, down, as indicated by the dotted lines in Fig. 3. This toggle is operated by the foot of the driver.

K K is a rod attached to the rear end of the lever E E¹ E², as shown in Fig. 2, and is provided with notches, which serve to hook onto the upper part of the casting B, and thus, when desirable, hold the rear end of the lever E E¹ E² up, and, consequently, the front end down. The rod K K may be extended upward so as to form a handle to be used by the driver to operate the lever E E¹ E².

By using our invention all danger of the poles being accidentally detached from the hook is avoided. When desirable to remove or attach the pole the operation of the locking-lever E E¹ E² is very easy, as has been set forth.

We claim—

1. The combination of the lever E E¹ E², weighted at its rear end, with the hook C, all operating together, substantially as described, and for the purpose set forth.

2. The toggle H H¹ H², with the lever E E¹ E² and the hook C, all operating together, substantially as described, and for the purpose set forth.

3. The combination of the notch-rod K K with the lever E E¹ E² and the casting B, all operating together, substantially as described, and for the purpose set forth.

SAMUEL A. OTIS.
EPHRAIM PARKER.

Witnesses:

WILLIAM EDSON,
FRANK G. PARKER.