(No Model.)

E. L. WEBB.

PUSH BAR.

No. 589,767. Patented Sept. 7, 1897.

Fig. 1

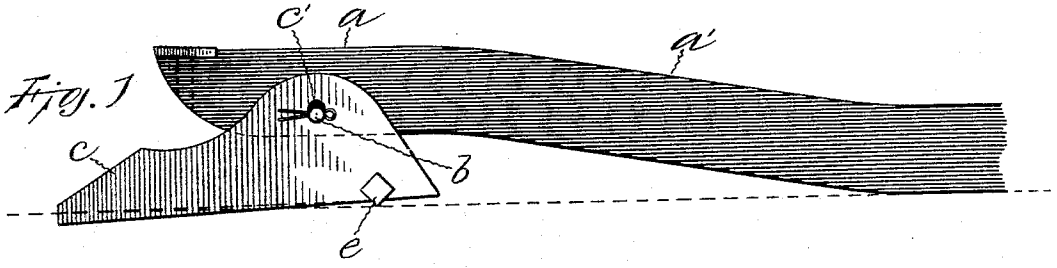


Fig. 2

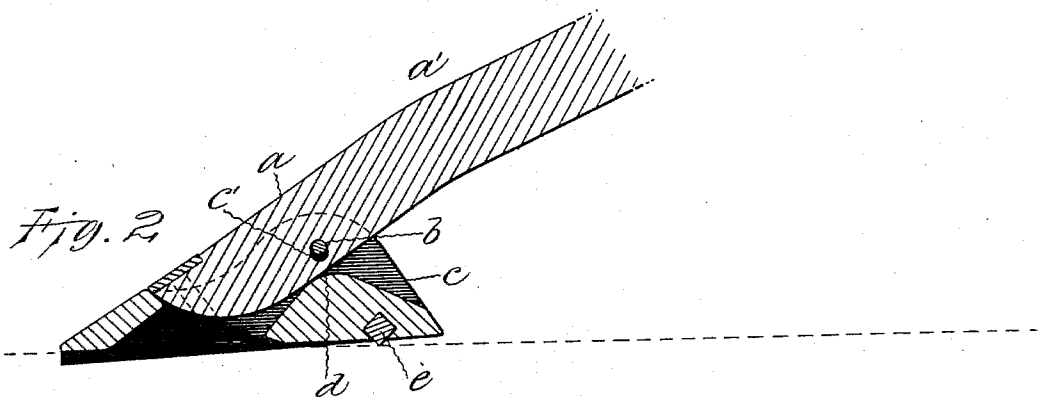
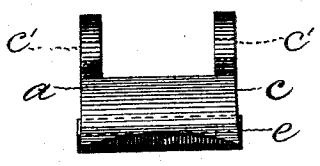


Fig. 3



Witnesses
Andrew Ferguson
C. E. Buckland.

Inventor
Edward L. Webb.
By W. E. Simonds
Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EDWARD L. WEBB, OF HIGGANUM, CONNECTICUT.

PUSH-BAR.

SPECIFICATION forming part of Letters Patent No. 589,767, dated September 7, 1897.

Application filed February 12, 1897. Serial No. 623,057. (No model.)

To all whom it may concern:

Be it known that I, EDWARD L. WEBB, a citizen of the United States of America, residing at Higganum, in the county of Middlesex and State of Connecticut, have invented a certain new and useful Improvement in Push-Bars, of which the following is a description, reference being had to the accompanying drawings, wherein—

Figure 1 is a side view of a push-bar embodying said improvement. Fig. 2 is a view of the same in lengthwise central vertical section. Fig. 3 is an end view of the front end of the shoe.

The object of the improvement is the production of a push-bar for moving heavy cars and the like on railway-tracks.

In the accompanying drawings the letter *a* denotes the hand-lever, which some little distance back from the point is curved downwardly, that downward curve being denoted by the letter *a'*.

The letter *b* denotes a pivot-shaft which serves to connect the hand-lever to the shoe, shortly to be described, but it in no wise serves as a fulcrum.

The letter *c* denotes the shoe, and *c'* denotes the mortises for the ends of the pivot-shaft, they being so shaped as to give the parts what may be termed "loose action" with reference to each other. This shoe has an open bottom, as shown in Fig. 2, to permit dirt and small obstacles to fall away. This shoe is so shaped on the bottom near the front as to be adapted in a general way to the contour of a railway-rail. This correspondence in form between the two parts serves to keep the shoe in place upon the track.

The letter *d* denotes a fulcrum for the hand-lever, forming a part of the shoe. It has a curved surface, and that form is essential. The hand-lever rocks wholly upon this fulcrum and not at all upon the pivot-shaft.

The letter *e* denotes a separable hardened bearing-bar situated in the rear of the center of the fulcrum. It projects below the bottom of the shoe, so as to always form the essential bearing-point of the device in use, and it is practically made of extremely hard steel that it may resist wear. It is many-angled, preferably square in cross-section, to the end that when one edge or angle is worn the bar may be pulled out sidewise and inserted so as to bring another angle into working position.

In the use of this device the shoe is placed upon the railway-track and near the car-wheel to be operated on, but not in immediate contact therewith. It is a distinctive feature of this push-bar (it not being a pinch-bar) that it has a curved fulcrum for the lever highest in the center. It results that in throwing the handle of the lever downward and bringing the toe or front end of the lever against the car-wheel the tendency to throw the wheel forward is far more marked than in the use of an ordinary pinch-bar, and the tendency to lift the wheel and what it carries off the track is very much less than in the use of a pinch-bar. Moreover, the friction of the lever upon the curved fulcrum highest at the center is only a fraction of that which results from the use of a pinch-bar.

I claim as my improvement—

1. In combination, the shoe provided with the curved fulcrum highest in the center, the loose-action pivot-shaft, and the hand-lever adapted to rock on said curved fulcrum, all substantially as described and for the purposes set forth.

2. In combination, the shoe provided with the curved fulcrum highest in the center, the hardened and raised bearing in the rear of the center of the fulcrum, the loose-action pivot-shaft and the hand-lever adapted to rock on said curved fulcrum, all substantially as described and for the purposes set forth.

3. In combination, the open-bottomed shoe provided with a curved fulcrum highest in the center, the many-angled bearing-bar on the rear of the center of the fulcrum, the loose-action pivot-shaft, and the hand-lever adapted to rock on said curved fulcrum, all substantially as described and for the purposes set forth.

EDWARD L. WEBB.

Witnesses:
CLINTON R. DAVIS,
JOHN C. CONLEY.