

(No Model.)

E. STEBBINS.

BRAKE SHOE.

No. 256,067.

Patented Apr. 4, 1882.

fig. 1

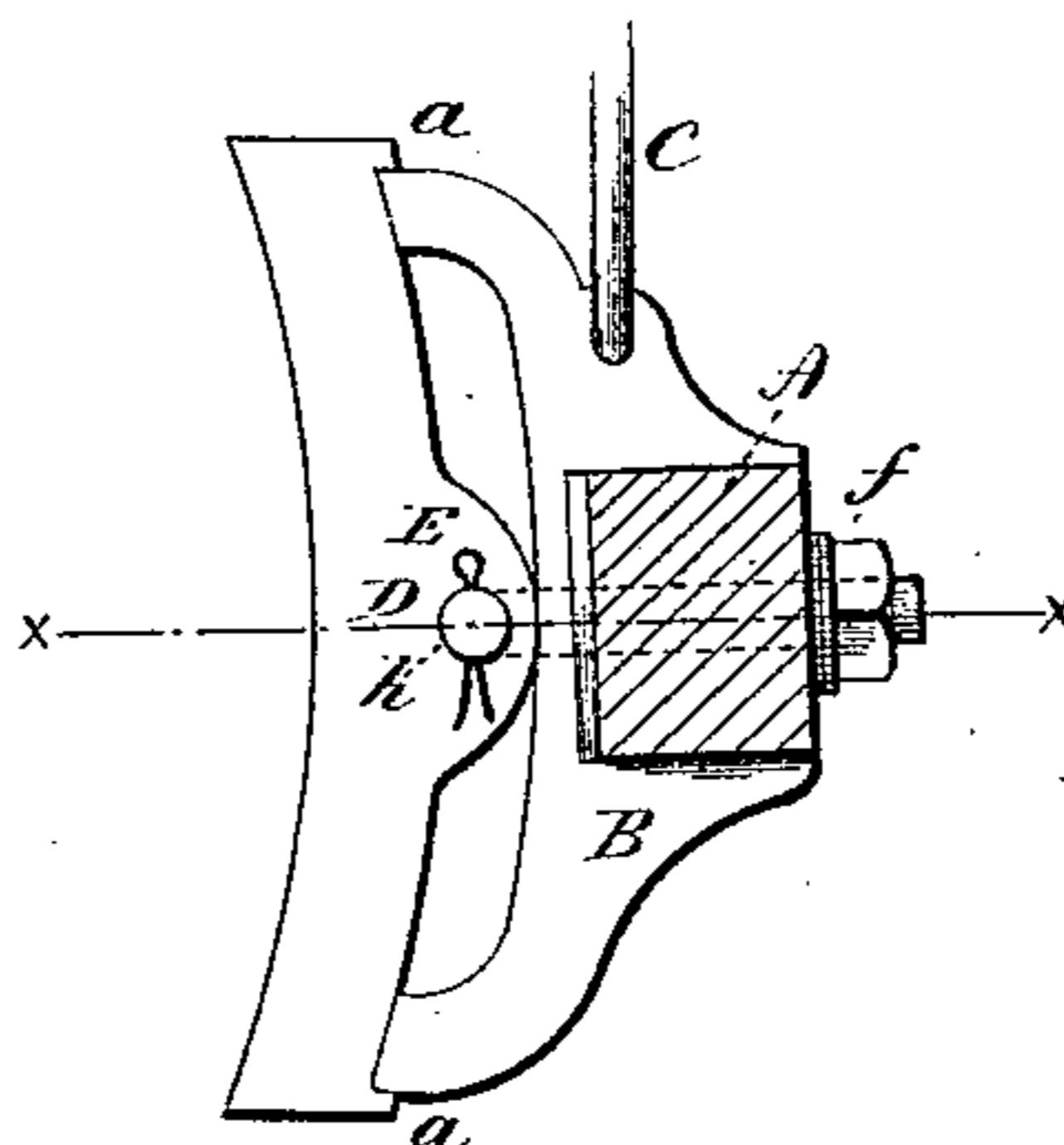


fig. 2

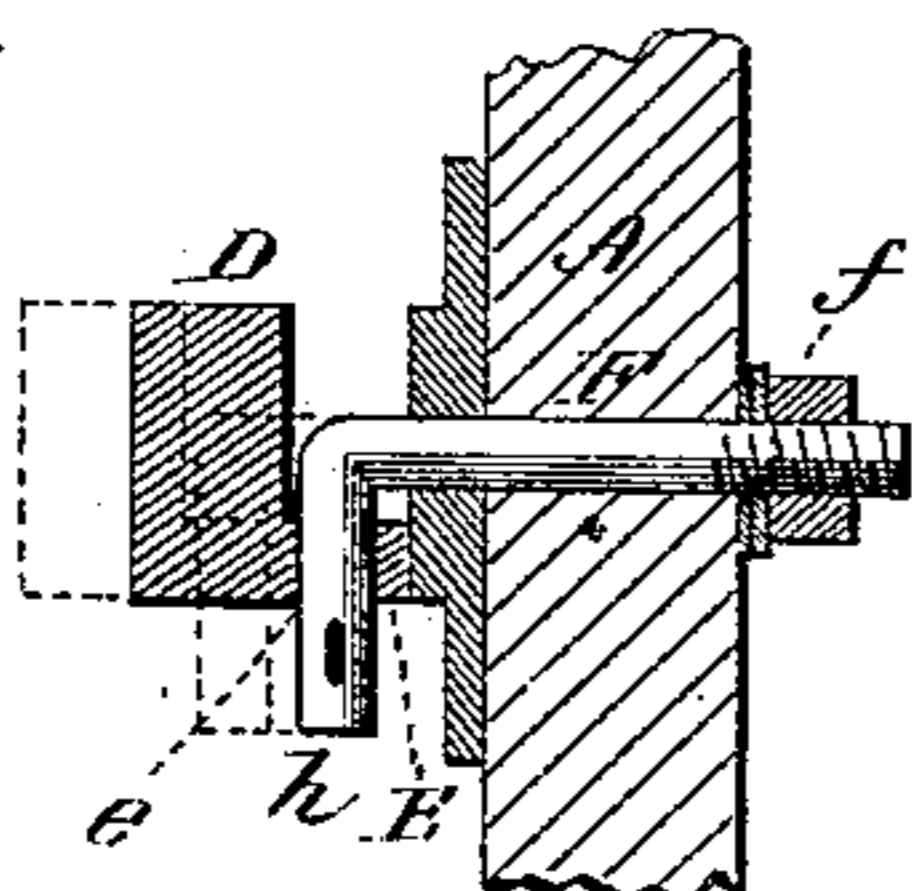


fig. 3

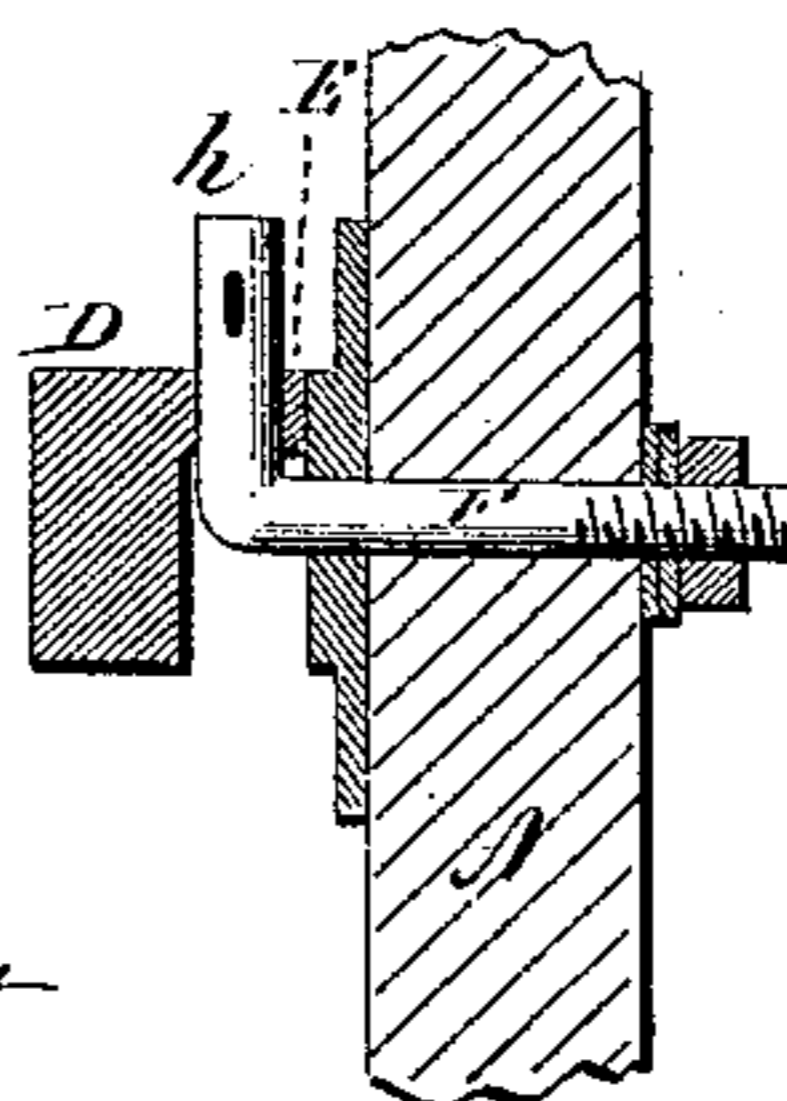


fig. 4

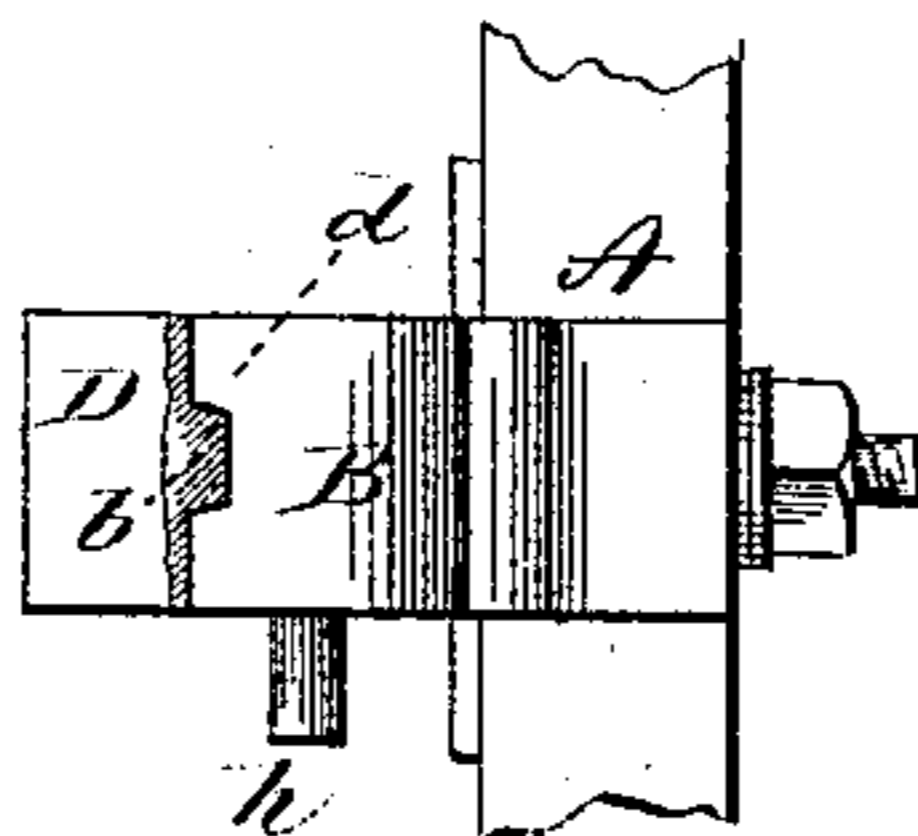
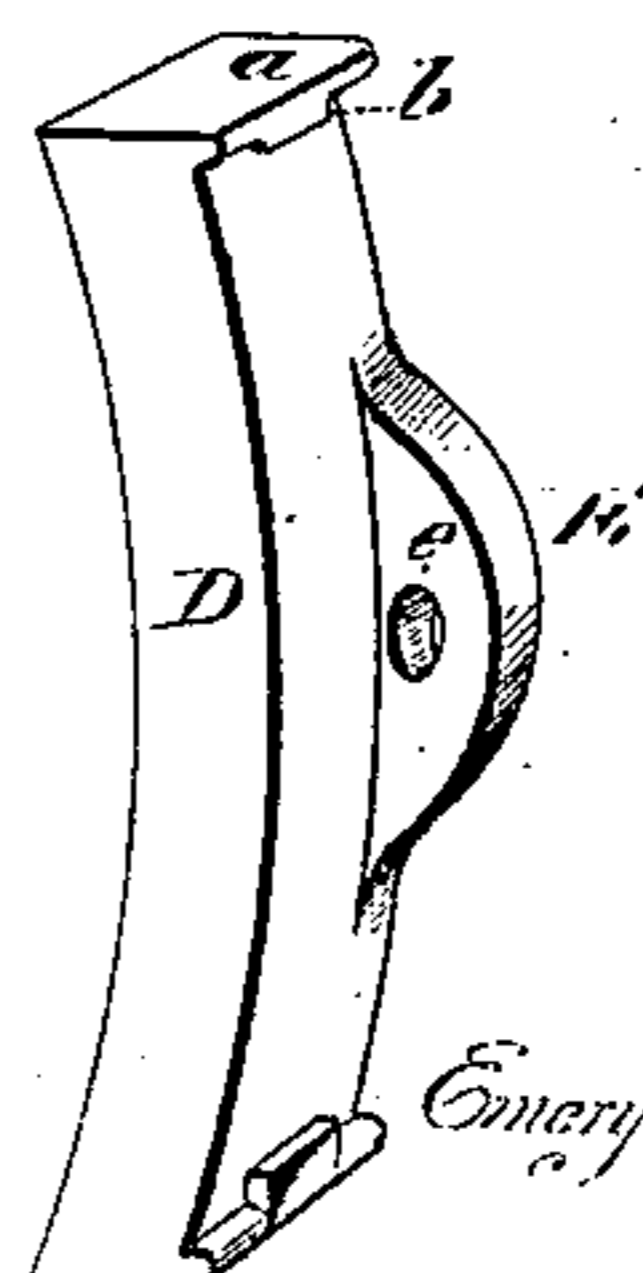


fig. 5



Witnesses.  
J. H. Shumway  
J. C. Earle

Emory Stebbins  
Inventor  
By Atty. J. C. Earle

# UNITED STATES PATENT OFFICE.

EMERY STEBBINS, OF NEW YORK, N. Y.

## BRAKE-SHOE.

SPECIFICATION forming part of Letters Patent No. 256,067, dated April 4, 1882.

Application filed February 16, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, EMERY STEBBINS, of New York, in the county of New York and State of New York, have invented a new Improvement in Car-Brake Shoes; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view; Fig. 2, a transverse section on line *xx*; Fig. 3, the same section, the parts reversed; Fig. 4, a top view; Fig. 5, a perspective view of the shoe.

This invention relates to an improvement in the construction and method of attaching brake-shoes for railway purposes, the object being to construct the shoe so that it may be readily removed and replaced without removing the bolt which secures it, and also so that the same shoe may be used on either side; and it consists in the construction hereinafter described, and more particularly recited in the claim.

A represents the transverse bar, to which the shoe-holders B are applied and secured in the usual manner, C representing the link by which the brake is hung.

D is the shoe, (shown detached in perspective, Fig. 5.) The face of the shoe is curved corresponding to the periphery of the wheel, in the usual manner. At its two ends is a flange, *a*, from the rear side, and so as to set over the corresponding ends of the holder, as seen in Fig. 1; and on the back of the shoe, at the points of bearing upon the holder, is a lug, *b*, which fits into a corresponding recess, *d*, in the holder. This lug is on the central line of the shoe, so as to fit the recess in the holder, either end up. This lug prevents transverse movement of the shoe on the holder.

On the back of the shoe, at one side of the center, is an ear, E, projecting backward, and through which is a perforation, *e*.

Centrally through the holder, and on the central line of the shoe, is an L-shaped bolt, F, the L on the shoe side, the other end provided with a nut, *f*. The arm *h* of the bolt corresponds to the perforation *e* through the ear E of the shoe, and so that the shoe may be freely passed onto the arm *h*.

To apply the shoe, the nut is loosened until the bolt may be drawn out sufficiently far (as indicated in broken lines, Fig. 2) to permit the

shoe to pass onto the holder and the ear onto the arm of the bolt, and when it has reached its proper position the lugs *b* will enter their respective recesses in the holder. Then the nut turned on will bind the shoe back onto its holder. The flange *a* at the top and bottom and the lugs *b* prevent the movement of the shoe on its holder either vertically or transversely, the bolt being simply required to hold the shoe in its seat.

As the shoe naturally wears at one end more than the other, after it has been worn a little while, it may be reversed, as seen in Fig. 3, by simply loosening the nut so as to remove the shoe, then turning it over to bring the ear E upon the opposite side, and also rotating the bolt to turn the arm *h* to the same side. Then the shoe is replaced and secured as before.

It will be observed that this construction makes the shoe in itself right and left, so that it may be applied to either wheel of the brake—that is to say, the one shoe is adapted to all positions and to be reversed in those positions.

The L-shaped bolt taking into the ear of the shoe avoids the necessity of removing the bolt entirely, as in the more general construction, and the seating of the shoe in its holder avoids the usual strain brought upon that bolt. As an additional security, a key is introduced through the end of the arm of the bolt, as seen in Fig. 1; but this is not essential.

Instead of constructing the shoe with the flanges *a* and the lug *b*, the holder may be constructed with these flanges and the shoe rest between the flanges; or the lugs may be made on the holder and recesses on the shoe, it only being essential that there shall be an interlocking between the holder and the shoe.

I claim—

The shoe D, constructed with a transversely-perforated ear, E, on its back, combined with the holder B, the two constructed with recesses and projections on the bearing-points between them to prevent transverse movement of the shoe upon its holder, and the L-shaped bolt F, one arm of which extends through the holder, the other arm through the perforation in the ear E, whereby the said shoe is clamped upon its bearings on the holder, substantially as described.

EMERY STEBBINS.

Witnesses:

J. S. SCOFIELD,  
W. H. HYNES.