

No. 644,201.

Patented Feb. 27, 1900.

H. S. GOUGHNOUR.

CAR BRAKE.

(Application filed Aug. 24, 1899.)

(No Model.)

Fig. 1

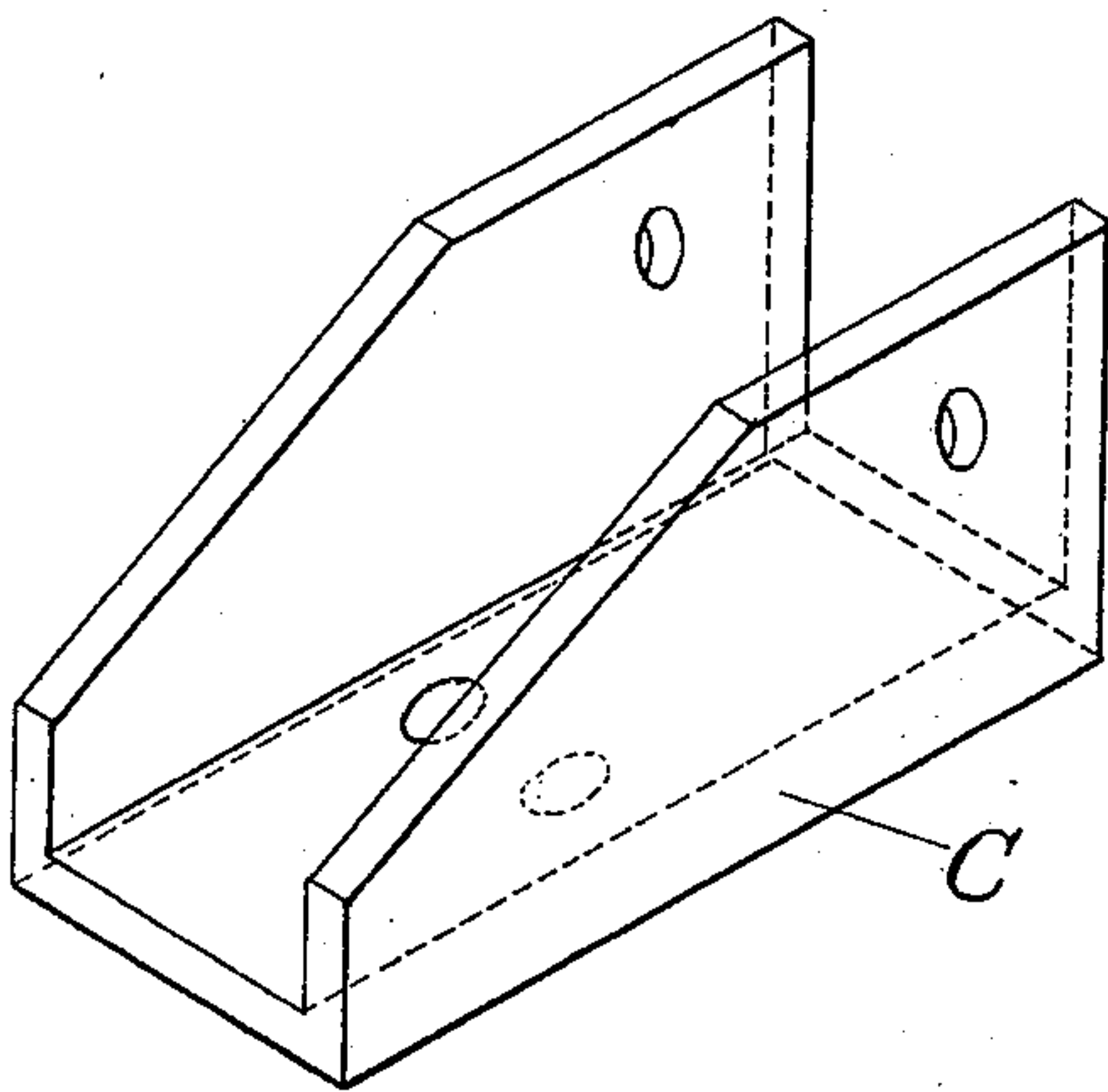


Fig. 3

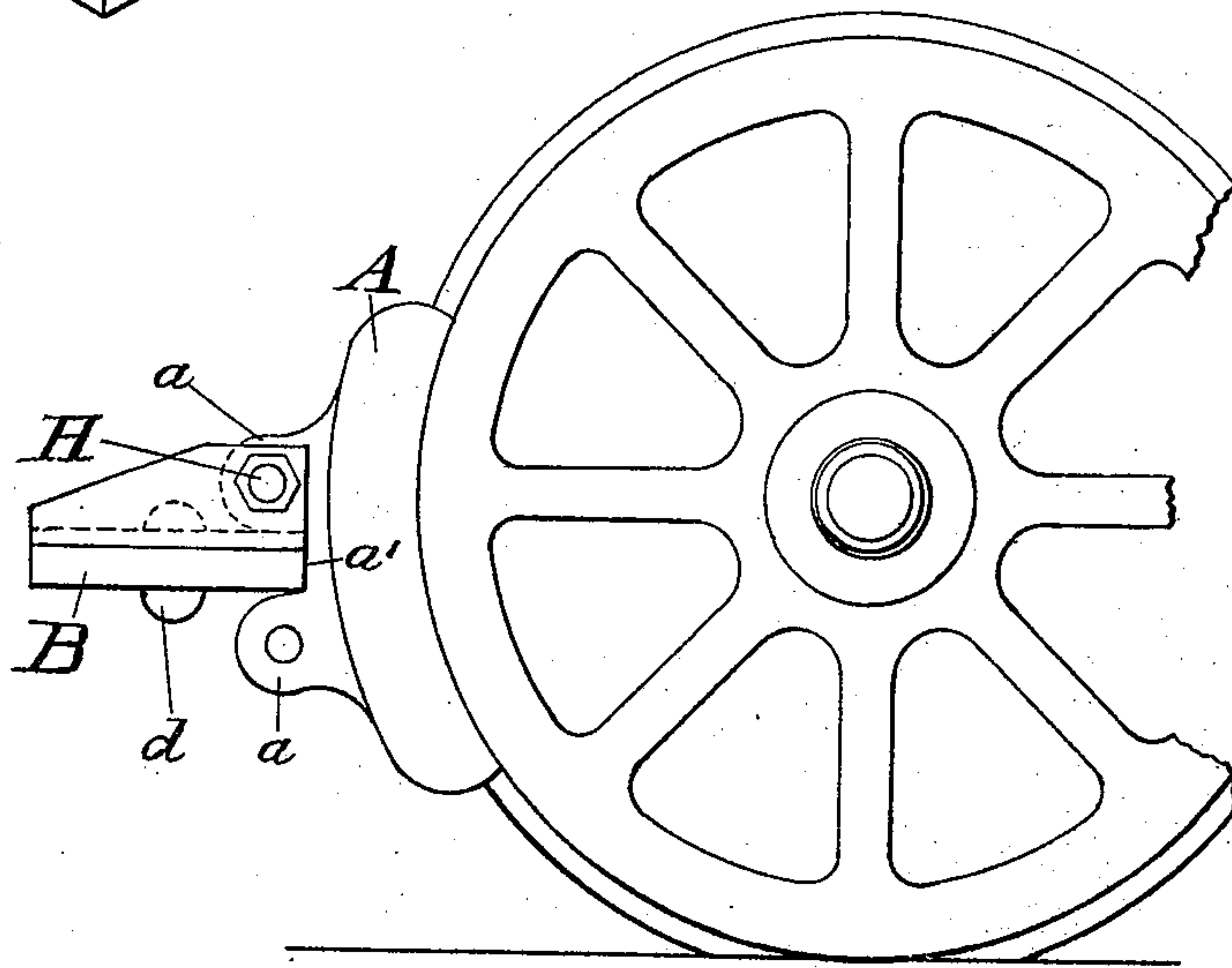
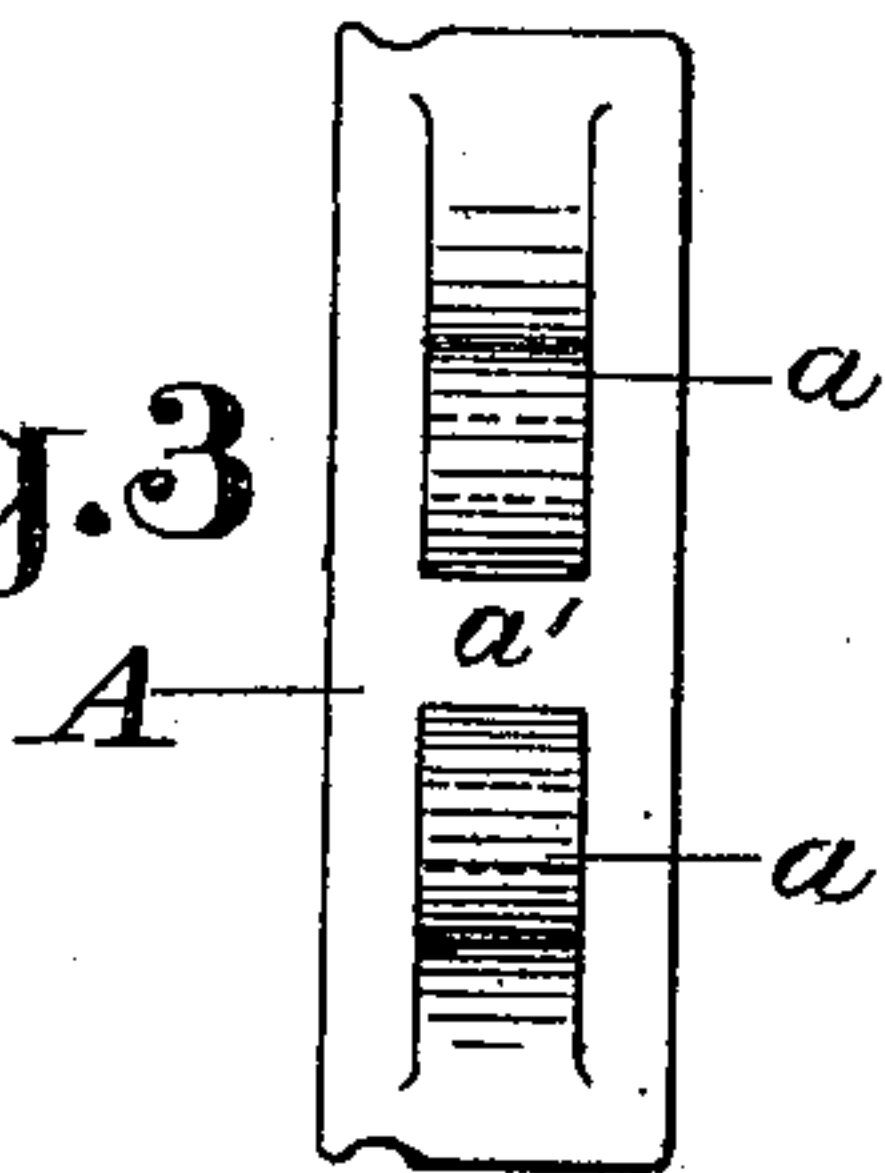


Fig. 2

WITNESSES:

Blanche M. Smith.
Aunie M. Moses.

INVENTOR

H. S. Goughnour

BY

Geo. H. Parmelee
his ATTORNEY.

UNITED STATES PATENT OFFICE.

HENRY S. GOUGHNOUR, OF JOHNSTOWN, PENNSYLVANIA, ASSIGNOR TO
THE LORAIN STEEL COMPANY, OF PENNSYLVANIA.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 644,201, dated February 27, 1900.

Application filed August 24, 1899. Serial No. 728,382. (No model.)

To all whom it may concern:

Be it known that I, HENRY S. GOUGHNOUR, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented a new and useful Improvement in Car-Brakes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention has relation to certain new and useful improvements in car-brakes, and is designed to provide a novel means of connection between the brake-shoes and brake-beams which is less expensive to construct than the brake-heads commonly employed, which obviates the employment of wedges or keys in fastening the shoe and also looseness and play of the parts under wear, and which permits the shoe to be readily reversed end for end, if desired, and used until worn through.

With these objects in view my invention consists in the novel construction and combination of parts, all as hereinafter described, and pointed out in the appended claims.

Referring to the accompanying drawings, Figure 1 is a perspective view of the device for attaching the brake-shoe to the beam. Fig. 2 is a side view showing the invention applied, and Fig. 3 is a detail view of the brake-shoe detached.

The letter A designates a brake-shoe, B a brake-beam, and C a device for attaching said shoe to the beam. The shoe A, which is in general of the usual character, is formed on its rear face with a pair of lugs *a*, separated from each other by an intervening space having a straight inner wall *a'*. The attaching device or member C preferably consists of an integral forging having a flat base portion and parallel vertical side flanges. This forging is securely fastened to the upper side of the brake-beam, preferably by means of rivets *d*. One of the lugs *a* of the shoe is inserted into the open end of the said member between its side flanges and is secured therein by a through-bolt H. The distance between the adjacent faces of the two lugs *a* is substantially the same as the combined thickness of the brake-beam and base portion of the member *c*, thereby giving said lugs *a* sup-

port or bearing on the beam, the wall *a'* also having a bearing against the adjacent edge of the beam. These bearing engagements hold the shoe rigid and relieve the bolt H very largely from strain. In case of uneven wearing of the shoe it may be reversed end for end by removing the said bolt.

It will be readily seen that the shoe can be used until it is worn down nearly to the base of the lugs *a*, there being almost no waste metal. The attachment is also a very secure and durable one, there being no opportunity for the shoe to work loose under wear. It is also an economical one from the standpoint of the manufacturer, reducing largely the expense of pattern-work and cost of material.

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

1. The combination of a brake-beam, a shoe-attaching device rigidly secured to the end portion of said beam upon its upper side and projecting entirely above the beam, said device consisting of a bottom portion and parallel vertical side flanges, and a reversible brake-shoe having a pair of lugs or projections on its rear face, one of which seats and is secured between said side flanges, and the other of which engages the under side of the said beam, together with a bolt passing through said side flanges and the upper lug or projection and constituting the sole fastening between said shoe and attaching device, substantially as described.

2. The combination of a brake-beam, a shoe-attaching device C rigidly secured to the upper side of its end portion and projecting entirely above the beam, and having perforated side flanges, and a brake-shoe having a lug which fits between said flanges and has a perforation in alinement with the perforations in the flanges, the rear face of said shoe below said lug having a direct abutment against the adjacent edge of the beam, together with a bolt passing through the said alined perforations and constituting the sole fastening between said shoe and attaching device, substantially as described.

3. In brake mechanism, the combination of the brake-beam, the attachment device C rig-

idly secured to and projecting entirely above
the upper side thereof, and the reversible
brake-shoe having a lug secured in the device
C, a second lug engaging the under side of
5 the beam, and a bearing-wall intermediate
the two lugs abutting directly against the in-
ner edge of the said beam, together with a
bolt passing through the upper lug and the
side portions of the device C and constitut-

ing the sole fastening between the shoe and 10
the said device, substantially as described.

In testimony whereof I have affixed my sig-
nature in presence of two witnesses.

HENRY S. GOUGHNOUR.

Witnesses:

B. M. SMITH,
H. W. SMITH.