

(No Model.)

A. A. LINDLEY.
BRAKE SHOE.

No. 573,227.

Patented Dec. 15, 1896.

Fig. 1.

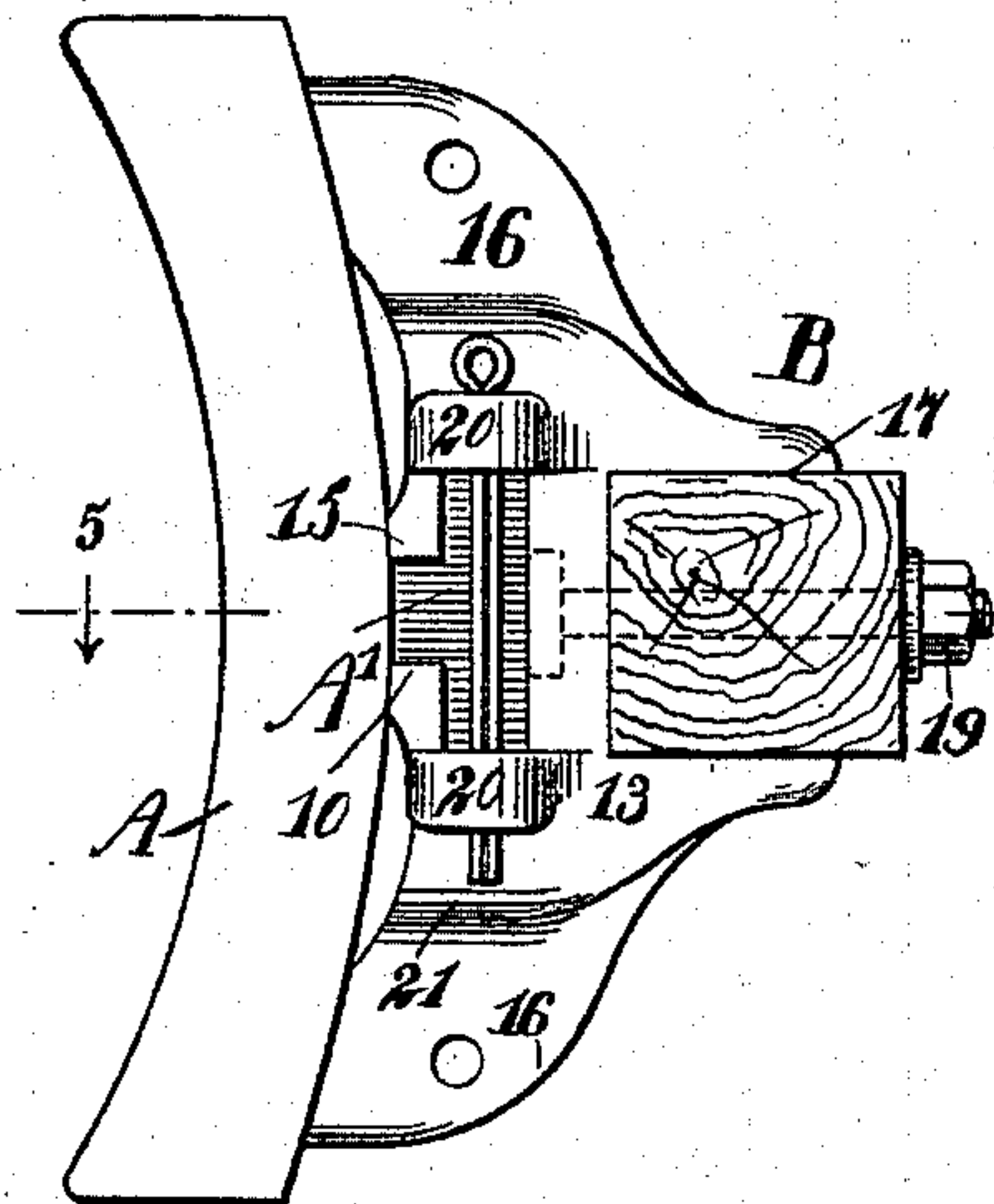


Fig. 2.

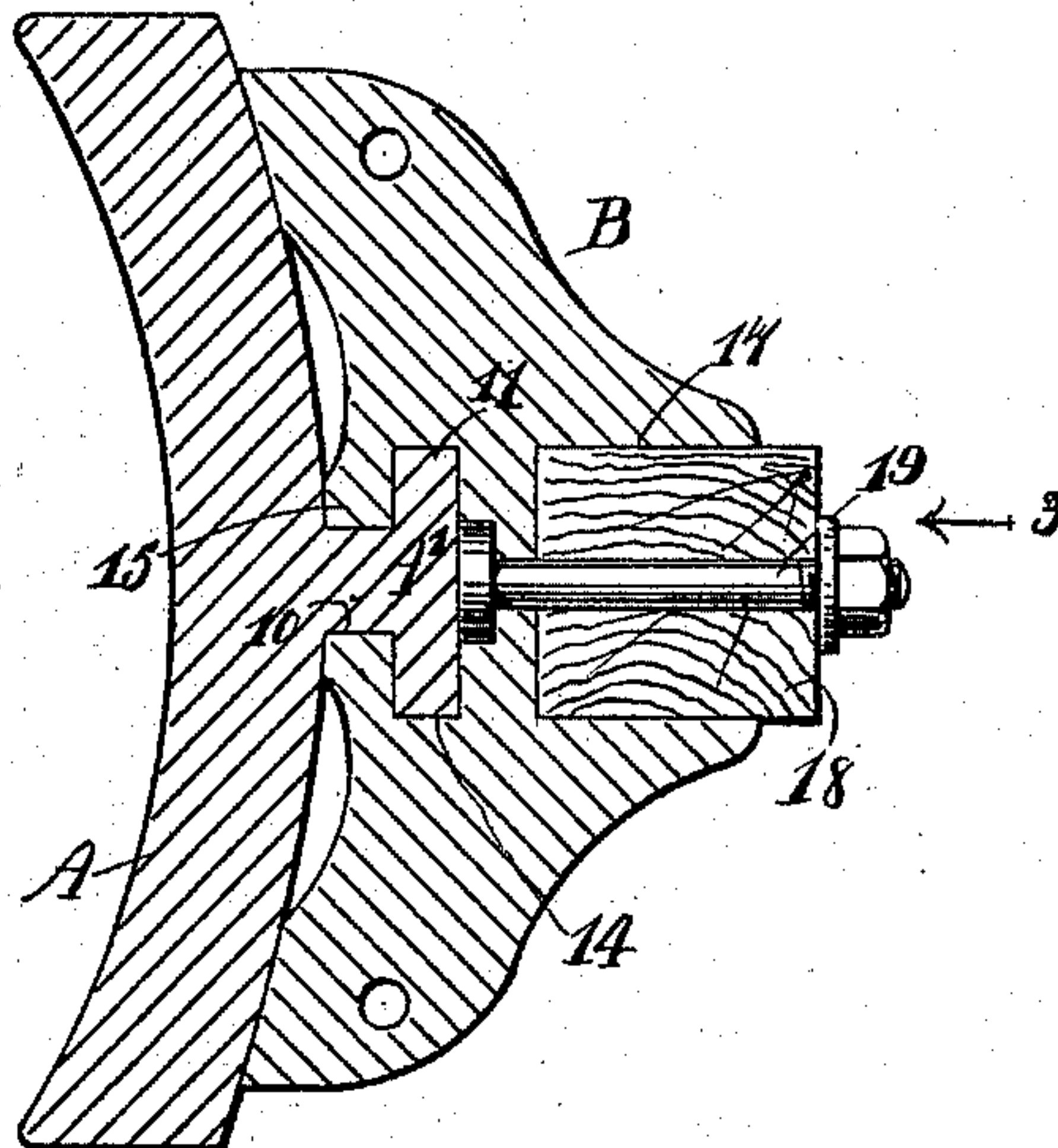


Fig. 3.

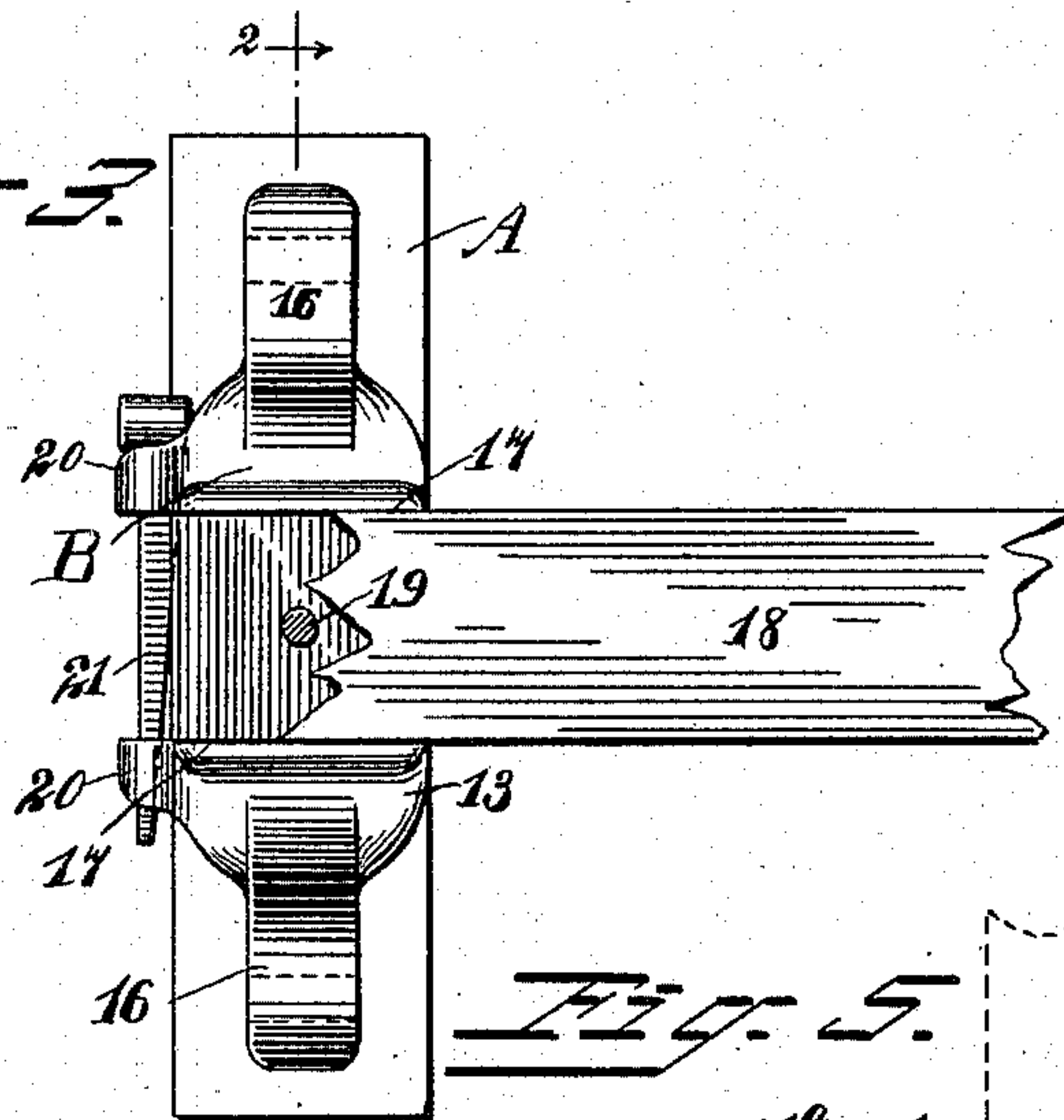


Fig. 4.

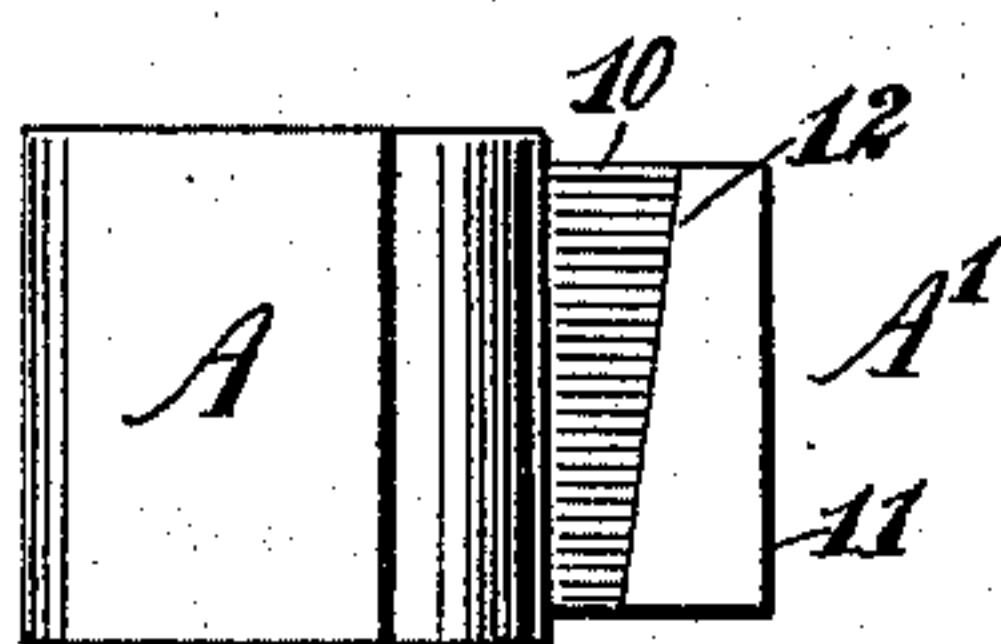
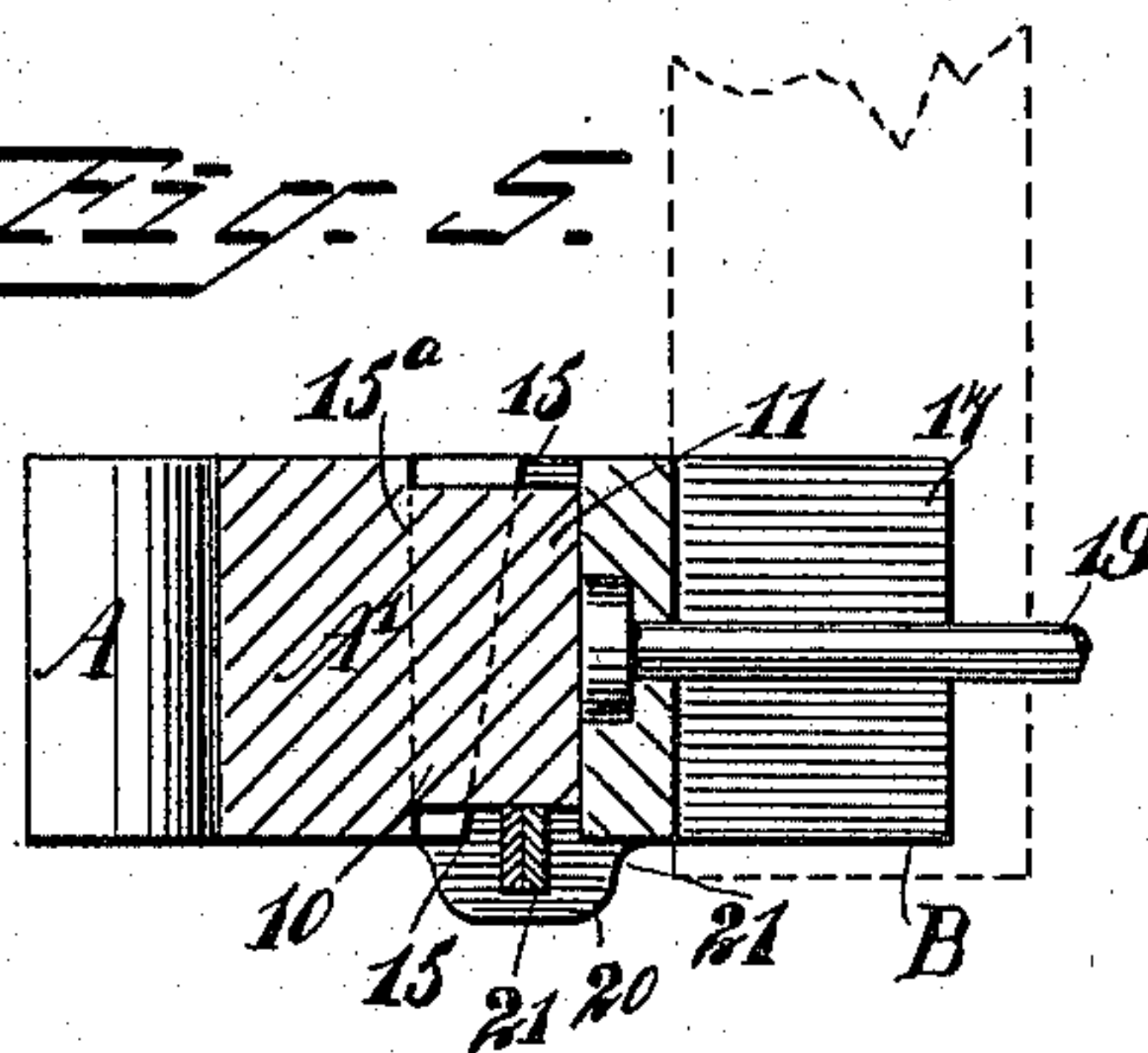


Fig. 5.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ALVA A. LINDLEY, OF OSKALOOSA, IOWA.

BRAKE-SHOE.

SPECIFICATION forming part of Letters Patent No. 573,227, dated December 15, 1896.

Application filed April 4, 1896. Serial No. 586,247. (No model.)

To all whom it may concern:

Be it known that I, ALVA A. LINDLEY, of Oskaloosa, in the county of Mahaska and State of Iowa, have invented a new and useful Improvement in Brake-Shoes, of which the following is a full, clear, and exact description.

The object of the invention is to provide a brake-shoe which will be held perfectly rigid to the brake-head, thereby preventing a tilting of the shoe and consequently unevenness in the wear of its bearing-face.

A further object of the invention is to attach the brake-shoe to the brake-head in such manner that the shoe will be reversible, enabling a shoe to be applied to either side of a car or vehicle, and whereby, further, should the shoe by any possibility leave its head it will fall to the ground outside of the rails of a track, thus guarding against a possible derailment by reason of the wheels passing over the detached shoe.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the brake-shoe and brake-head, the brake-beam being in section. Fig. 2 is a vertical central section through the brake-shoe, brake head, and beam, the said section being taken practically on the line 2 2 of Fig. 3. Fig. 3 is a rear view of the brake-shoe and brake-head, a portion of the brake-beam being broken away to illustrate the connection between the said beam and the brake-head. Fig. 4 is an end view of the brake-shoe detached; and Fig. 5 is a horizontal section through the brake-shoe and brake-head, the brake-beam being shown in dotted lines and the section being taken practically on the line 5 5 of Fig. 1.

In carrying out the invention the brake-shoe A may be of any desired shape or may be of any approved material. Usually, however, the shoe has a concaved inner or rear surface and a convexed outer or forward surface. At the central portion of the outer con-

convexed face of the shoe a T extension A' is located, being preferably integral with the shoe, and the said extension comprises a shank 10 and a head 11, the head being provided with a tapering under face 12, as is best shown in Fig. 4.

The brake-head B consists of a central or body portion 13 and wings 16, which extend from the top and bottom portions of the central or body member of the head, the wings being adapted for close engagement with the upper and the lower portions of the convexed or rear face of the brake-shoe A, as illustrated in Figs. 1 and 2.

In the rear face of the central member of the brake-head a T-slot 14 is made, which is shaped to receive the T extension A' of the brake-shoe. Consequently the wide or head portion of the aforesaid slot is tapering, the inclination given thereto being indicated by the dotted line 15 in Fig. 5, while the second dotted line 15^a serves to indicate, practically, the inner central face of the body portion of the brake-head. The enlarged end of the head-section of the said T-slot 14 is at the outer face of the brake-head, as is also shown in Fig. 5.

At the forward central portion of the brake-head a recess 17 is made, adapted to receive the brake-beam 18, which is attached to the brake-head through the medium of a bolt 19 or its equivalent. At the top and at the bottom of the tapering portion of the T-slot 14 an ear 20 is made, and a pin 21 or a like device is passed through the said ears, serving to prevent the T extension A' on the brake-shoe working outward from the brake-head after the two parts are placed in position.

It is evident that the brake-head has a positive bearing against the shoe at the center, at the top, and at the bottom, and, further, that the brake-shoe is rigidly attached to the brake-head, the attachment being made in a removable manner; and, owing to the fact that the contracted portion of the T extension A' of the shoe and the contracted portion of the T-slot 14 in the brake-head, receiving such extension, is at the inner side of both of these parts, in the event the locking-pin 21 should become disengaged from the brake-head and the brake-shoe should work loose from the

head it will drop outward beyond the path of the wheels of the vehicle and will thereby offer no obstruction to the progress of said vehicle.

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

1. A brake-shoe having an extension provided with a head having a tapering surface, a support for the shoe, provided with a recess
10 shaped to receive the extension from the shoe, and a locking device carried by the head and located opposite the wider portion of the shoe extension, as and for the purpose specified.

2. The combination, with a brake-shoe having a central T extension, the head portion
15 whereof is beveled upon its under face, of a brake-head having bearing against the shoe near its top and near its bottom, being provided with a central substantially T-shaped
20 slot, having its wider member tapering to correspond to the taper of the head portion of

the shoe extension, the wider end of the T-slot being at the outside portion of the head, and a locking device adapted to cross the wider and outer end of the said T-slot, as and for
25 the purpose specified.

3. The combination, with a brake-shoe having a tapering extension from the central portion of its forward face, of a head adapted for
30 attachment to a brake-beam and provided with a tapering slot shaped to receive the extension from the shoe, the wider end of the slot being at the outer face of the head, and a locking-pin carried by the head and crossing the wider end of the slot therein, the said
35 pin serving to prevent the extension of the shoe from leaving the aforesaid head, as and for the purpose specified.

ALVA A. LINDLEY.

Witnesses:

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CLARA A. HAMILTON.