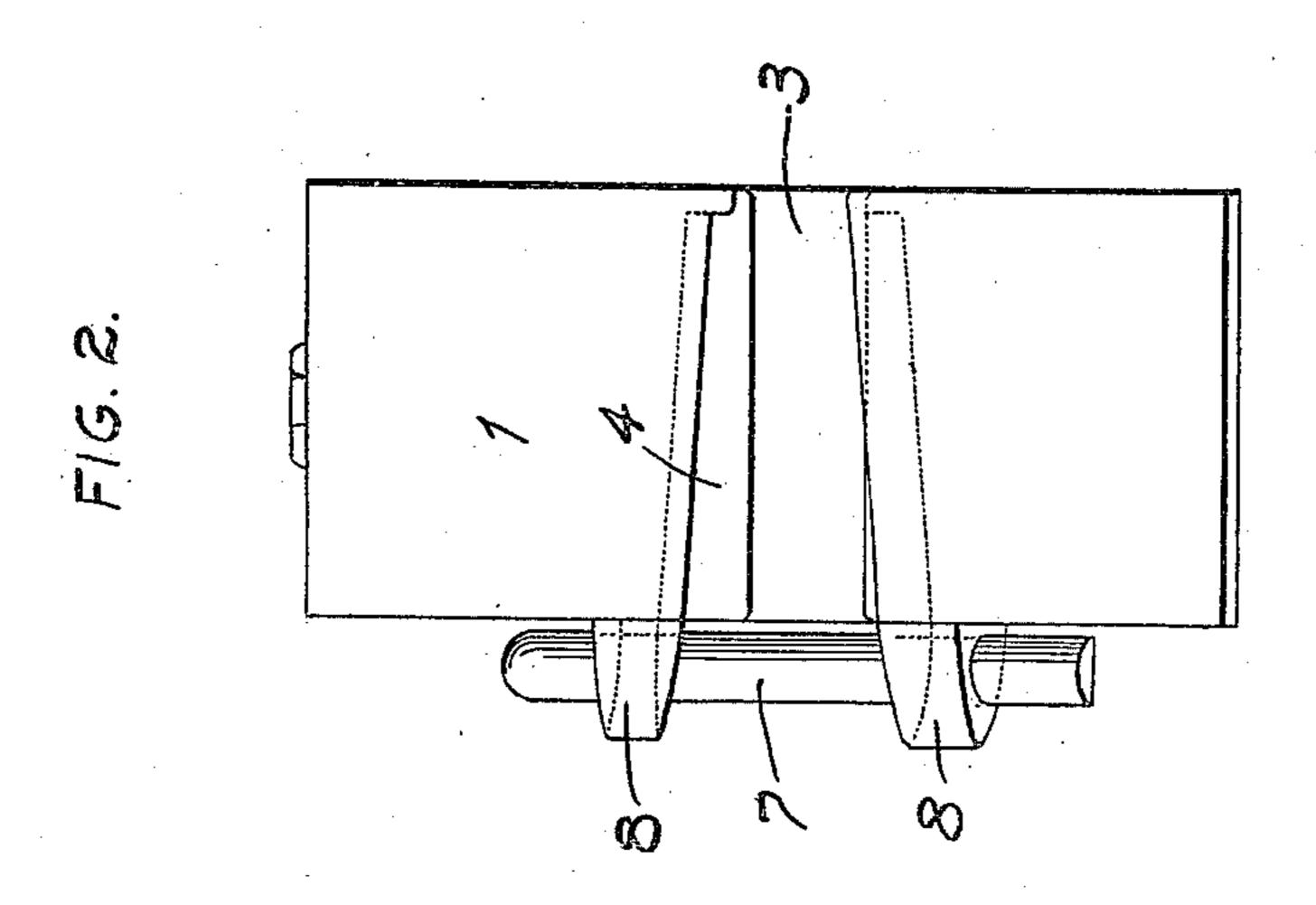
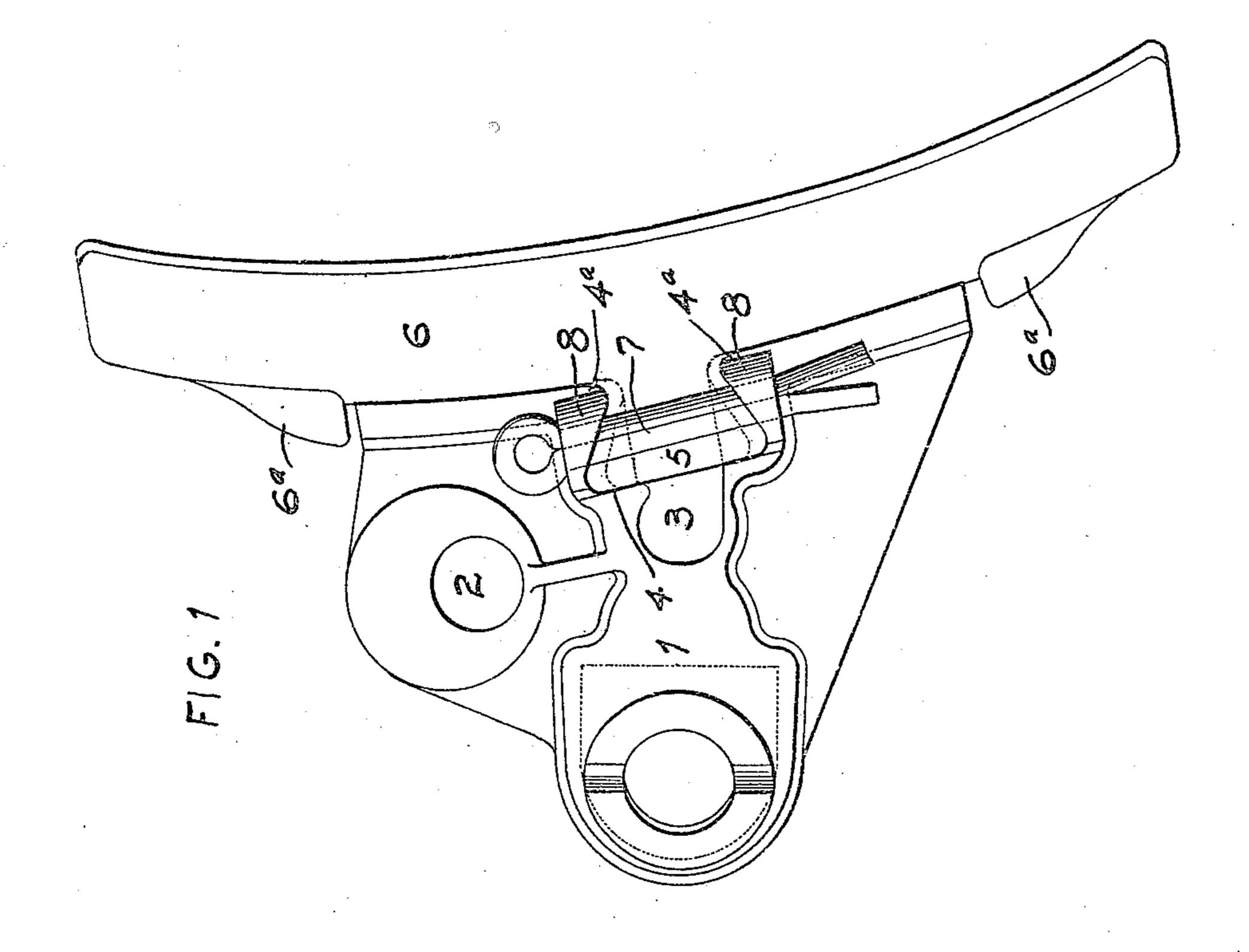
## C. H. WILLIAMS, JR. BRAKE HEAD AND SHOE. APPLICATION FILED JUNE 3, 1909.

952,553.

Patented Mar. 22, 1910.





WITNESSES
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INVENTOR CHARLES H. WILLIAMS JR.

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## UNITED STATES PATENT OFFICE.

CHARLES H. WILLIAMS, JR., OF CHICAGO, ILLINOIS, ASSIGNOR TO CHICAGO RAILWAY EQUIPMENT COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION.

## BRAKE HEAD AND SHOE.

952,553.

Specification of Letters Patent. Patented Mar. 22, 1910.

Application filed June 3, 1909. Serial No. 499,914.

To all whom it may concern:

Be it known that I, CHARLES H. WILLIAMS, Jr., a citizen of the United States, residing at Chicago, Illinois, have invented a cer-5 tain new and useful Improvement in Brake Heads and Shoes, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, 10 reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevational view of my improved brake head. Fig. 2 is a front

15 elevational view of the head.

This invention relates to a new and useful improvement in brake heads and shoes, the object being to overcome the faults of the Christie head with respect to the fit between 20 the head and the shoe.

to back out and fall, as heretofore, and, and backing support for the shoe. furthermore, in my present construction, the shoe cannot twist sidewise, as is possible in

25 the Christie type.

In the accompanying drawings, I have shown a brake head and shoe, in which the parts are secured together by a tapered dovetail interlock, which tends to bind the shoe 30 tightly to its seat and dispenses with the various lugs and fittings necessary in the Christie type of head. Furthermore, by my improved construction, it is possible to remove the brake shoe longitudinally of the 35 beam, or in a direction parallel to the axis of the beam which is of some importance in inserting new shoes in certain types of trucks. By dispensing with interlocking lugs between the head and shoe, as in the 40 Christie type, I avoid all danger of the lugs on the head becoming worn away in the event that the shoe is unevenly worn.

In the drawings, 1 indicates the brake head, which may be mounted upon any kind 45 of beam. This brake head is provided with the usual hanger openings 2 and 3. The shoe seat, constituting the front face of the head, is devoid of locking lugs and key re-

cesses, as in the Christie type of head, said shoe seat being preferably plain, as shown 50 in Fig. 2. There is, however, a longitudinally disposed, tapered recess 4 which may communicate with the hanger opening 3, said recess having overhanging, interlocking portions 4a to coöperate with the tapered, 55 dovetailed key 5 of the brake shoe 6. This wedge-shaped key 5 on the back of the brake shoe may slip longitudinally into the recess 4, the flat shoe seat permitting such movement, and when in position a cotter pin 7 is 60 passed through openings in lugs or ears 8 extending from the brake head, said cotter pin being located behind the wedge key 5 to prevent the displacement of the brake shoe. If desired, ribs 6a may be added to the back of 65 the shoe at its ends to reinforce the overhanging ends of the shoe; or, if desired, the shoe seat on the brake head can be extended In my present device, there is no shoe key | to provide a more extensive bearing surface

From the above, it will be seen that the objections, incident to the use of the Christie head heretofore pointed out, are obviated

by my improved construction.

I am aware that minor changes in the con- 75 struction, combination and arrangement of the several parts of my improvement can be made and substituted for those herein shown and described without in the least departing from the nature and principle of my inven- 80 tion.

Having thus described my invention, what I claim is:

The combination with a brake head having a dove-tail recess in its face, and a brake- 85 hanger recess communicating therewith, and a brake-shoe having an interlocking rib fitting in said dove-tail recess and forming one wall of said brake-hanger recess.

In testimony whereof I hereunto affix my 90 signature in the presence of two witnesses,

this 26th day of May, 1909.

CHARLES H. WILLIAMS, JR.

Witnesses:

E. T. WALKER, J. W. WEINLAND.

