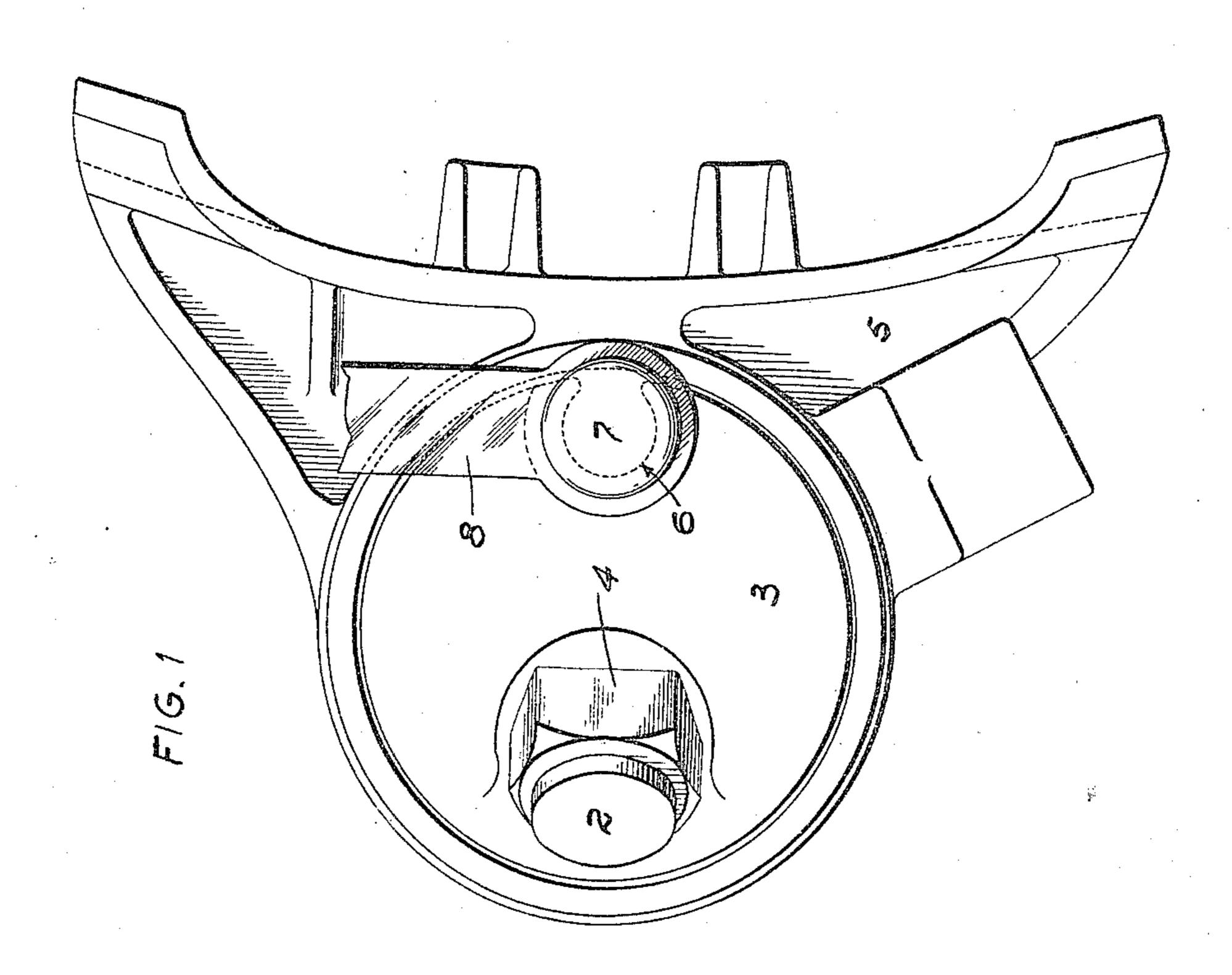
## C. H. WILLIAMS, JR. BRAKE BEAM,

951,866.

Patented Mar. 15, 1910.



WITNESSES Sym. Janus. M. Janus.

INVENTOR CHARLES H. WILLIAMS JR.

BY FR. Conwally

## UNITED STATES PATENT OFFICE.

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

## BRAKE-BEAM.

951,866.

Specification of Letters Patent. Patented Mar. 15, 1910.

Application filed July 16, 1909. Serial No. 507,957.

To all whom it may concern:

Be it known that I, CHARLES H. WIL-LIAMS, Jr., a citizen of the United States, residing at Chicago, Illinois, have invented 5 a certain new and useful Improvement in Brake-Beams, 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 an end elevation of a brake beam of my improved construction and 15 showing the hanger connections. Fig. 2 is a plan view of one end of the brake beam with the head thereon. Fig. 3 is a plan view of one end of the beam, and showing a modified arrangement of the beam hangers.

My invention relates generally to brake beams, and more particularly to the manner of hanging the beam, the principal object of my invention being to attach hangers in the form of links directly to the 25 sleeves located on the ends of the beam, and which sleeves receive the adjustable brake heads, which arrangement does away with the tendency of the hangers to rotate the heads upon the sleeves as where said hang-30 ers are attached directly to the heads. By attaching the hangers directly to the sleeves, all uneven wear between the sleeves and the heads is done away with, and a very strong and rigid construction is provided.

To the above purposes, my invention consists in certain novel features of construction and arrangement of parts hereinafter more fully described and claimed.

Referring by numerals to the accompany-40 ing drawings, 1 designates the compression member of the beam, and 2 the tension member, the ends of which members are joined in any suitable manner. Located upon said ends are sleeves 3 which are fixed in posi-45 tion by means of nuts 4 located on the threaded ends of the tension member. Brake heads 5 are adjustably arranged upon the sleeves 3, there being suitable means provided for locking said heads upon the 50 sleeves. Formed through each sleeve 3, at any desirable point, but preferably in horizontal alinement with the compression and tension members, is an aperture 6 which

receives a pin or bolt 7, the latter passing

through the lower ends of the hangers 8, 55 and said bolt or pin being held in position by means of a nut or cotter, or both. A pair of the hangers 8 are provided for each sleeve, or if desired the lower end of a single hanger may be bifurcated and at- 60 tached to the sleeve. By such construction the brake beam is suspended by the sleeves, and as a result there is no tendency of the brake heads to rotate upon the sleeve, as is the case where the beam is suspended by 65 the brake heads.

In the modified construction shown in Fig. 3, a lug or pin 9 is formed integral with the outer portion of each sleeve, and said lug or pin engages the lower end of a 70 hanger 10, which connection is made secure by means of a cotter 11 seated in the lug or

pin. My improved construction is comparatively simple, is adapted for either solid or 75 trussed beams, and as such construction permits the hangers to normally occupy vertical positions, all uneven wear between the sleeves and the heads due to hangers occupying inclined positions is entirely done 80 away with.

It will be readily understood that minor changes in the construction and form of my improved device can be made and substituted for those herein shown and de- 85 scribed without departing from the spirit of my invention.

Having thus described my invention, what I claim is:

1. The combination with a brake-beam, of 90 brake-head receiving sleeves on the ends of the beam, to the outer ends of which sleeves the lower ends of the brake hangers are connected.

2. The combination with a brake-beam, of 95 brake-head receiving sleeves located on the ends thereof and provided with brake hanger pin-receiving apertures.

3. The combination with a brake-beam, of brake-head receiving sleeves located on the 100 ends thereof and provided with brake hanger pin-receiving apertures, which apertures are in the same horizontal plane with the body of the beam on which the sleeves are mounted.

4. The combination with a brake-beam, of cylindrical sleeves on the ends thereof adapted to receive adjustable brake heads,

105

said sleeves being adapted to be directly connected to the lower ends of the brake hangers.

5. The combination with a brake beam, of 5 sleeves located on the ends thereof and adapted to receive adjustable brake heads, and brake hangers, the lower ends of which are connected directly to the sleeves.

6. The combination with a brake beam, of 10 sleeves located on the ends thereof and adapted to receive adjustable brake heads, transversely disposed pins seated in said sleeves, and brake hangers loosely connected

to said pins.

7. The combination with a brake beam, of sleeves located on the ends thereof and adapted to receive adjustable brake heads, there being apertures formed through said sleeves, pins seated in said apertures, and 20 brake hangers pivotally connected to said pins.

8. The combination with a brake beam, of sleeves located on the ends thereof and adapted to receive brake heads, and pins 25 loosely seated in said sleeves and adapted to engage the lower ends of brake hangers.

9. In a brake beam, a sleeve adapted to be positioned on the end of the beam and to receive an adjustable brake head, there be-30 ing an aperture formed through said sleeve, which aperture is adapted to receive a pin

carried by the lower end of the brake hanger.

10. The combination with a brake beam and its hangers, of sleeves located on the 35 ends of the beam and adapted to receive adjustable brake heads, and there being a flexible connection between the lower ends of the hangers and said sleeves.

11. The combination with a brake beam 40 and its hangers, of sleeves located on the ends of the beam and adapted to receive adjustable brake heads, and pins carried by the sleeves and engaging the lower ends of

the hangers.

12. The combination with a brake beam and its hangers, of sleeves on the ends of the beam adapted to receive adjustable brake heads, there being apertures formed through said sleeves and pins loosely seated in said 50 apertures and engaging the lower ends of the hangers.

13. A thrust block or sleeves for brake beams having means at its outer end for the

attachment of a brake hanger.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this 2nd day of July 1909.

CHARLES H. WILLIAMS, JR.

Witnesses:

EDWARD T. WALKER, JOSEPH W. WEINLAND.