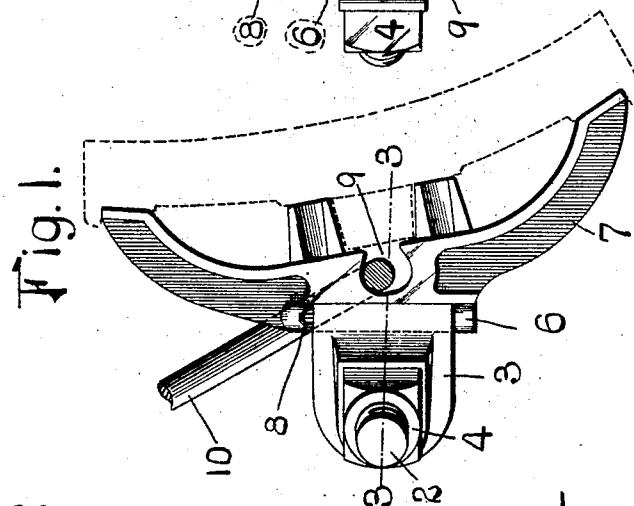
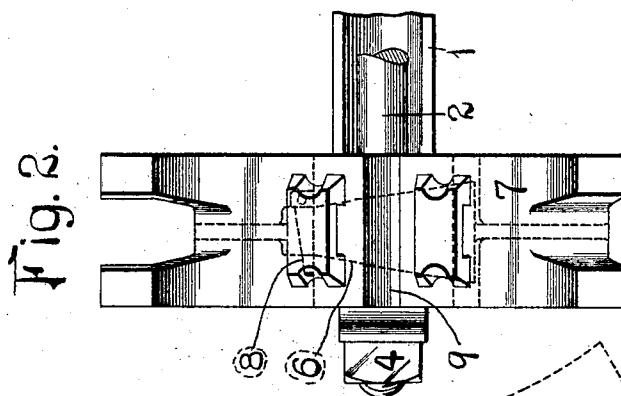
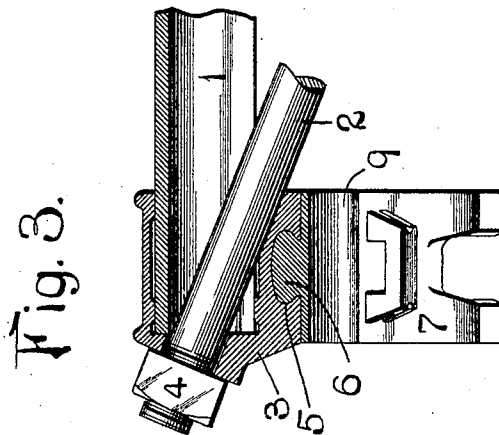


No. 813,758.

PATENTED FEB. 27, 1906.

C. H. WILLIAMS, JR.
BRAKE BEAM.

APPLICATION FILED JULY 21, 1905.



Witnesses

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BRAKE-BEAM.

No. 813,758.

Specification of Letters Patent.

Patented Feb. 27, 1906.

Application filed July 21, 1905. Serial No. 270,684.

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 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, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevational view. Fig. 2 is a front elevational view, and Fig. 3 is a sectional view on the line 3 3 of Fig. 1.

This invention relates to a new and useful improvement in brake-beams, the object being to enable the head to be readily and quickly removed in making repairs without necessitating the unhooking of the beam or the disturbance of the integrity of the truss.

With this object in view the invention consists in the construction, arrangement, and combination of the several parts, all as will be hereinafter described and afterward pointed out in the claims.

In service the brake-shoes, which are carried by the brake-head, being secured in position by a wedge-key passing through the perforated lugs on the front face of the head in a well-known manner, are made removable in order that they may be replaced when worn. Frequently in careless inspection these shoes are permitted to wear down to such an extent that the fastening-lugs are ground off by the wheels until finally the shoes drop out of the head because of the destruction of the securing means. It is not designed, however, in practice that the securing-lugs for the shoes should be worn, as it is the intention to renew the shoes at frequent intervals, so as to protect the heads. However, when the shoes are ground off and the heads come in direct contact with the wheels it is necessary to renew the heads, as well as the shoes; and the principal object of my present invention is to provide a removable brake-head carrying a removable shoe, so that when the brake-head is worn by contact with the wheel so that it no longer affords a proper support for the brake-shoe the head may be removed and a new head substituted.

A well-known type of trussed brake-beam is shown in the accompanying drawings, in

which the thrust-block is provided with a socket to receive a key on the back of the head. In this manner when it is desired to renew the head it is obvious that the head can be removed from the thrust-block without in the least destroying the integrity of the truss.

In the drawings, 1 indicates the compression member of appropriate character, and 2 the tension-rod.

3 indicates a thrust-block in which the end of the compression member is seated and through which the tension-rod passes, the latter having a nut 4 on its end for tightening the same and placing a camber in the compression member. The front face of this thrust-block is provided with a tapered dovetail recess 5, (the widest portion being at the bottom,) in which fits a locking-wedge 6 on the back of the brake-head 7. The upper portion of wedge 6 is provided with an opening in which is received a flat cotter-pin 8, which prevents the wedge from falling from its socket. In Patent No. 791,739, dated June 6, 1905, granted on an application filed by me, I have shown a construction wherein the taper of the wedge is reversed. I have found by experience, however, where the brake-hanger supports the beam and its carried brake-lever mechanism through the brake-head that the tendency of the wedge-key in my former patent is to work loose. The brake-hanger passes through an opening 9 in the face of the brake-head and is held in position by the lug on the brake-shoe, said brake-hanger being illustrated in Fig. 1 by the numeral 10. The brake-beam normally hangs free and is in service, so far as the application of the brakes is concerned, for a comparatively short period of time. In swinging free the beam and brake-levers are carried by the head, which is connected to the hanger 10, and consequently in my former construction the taper was such as to permit the parts to work loose and rattle. In my present construction by reversing the taper the parts tend to keep tight and by so doing dispense with the rattling in service, and no strain whatever is placed on the key 8.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a trussed brake-beam, the combina-

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tion with a thrust-block having a vertically-disposed tapered socket, the upper portion of said socket being the narrower, a removable brake-head having a tapered projection there-
5 on for interlocking with said socket, the lower portion of said projection being the wider, a renewable brake-shoe carried by said brake-head, and means on said brake-head for the connection of a brake-hanger; substantially
10 as described.

2. In a trussed brake-beam, the combination of a thrust-block and a removable brake-head, one of said parts having a vertically-disposed tapered socket, the upper portion of
15 which socket is the narrower, and the other of said parts having a tapered projection

thereon for interlocking with said socket, the lower portion of said projection being the wider, a renewable brake-shoe carried by said brake-head, and means on said brake-head 20 for the connection of a brake-hanger, whereby, when the beam is hanging in position, the weight thereof will tend to more firmly seat the tapered wedge in its socket; substantially as described. 25

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 18th day of July, 1905.

CHARLES H. WILLIAMS, JR.

Witnesses:

E. T. WALKER,
A. F. WAIT.