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RAILWAY BRAKE BEAM SUPPORT CHAIR

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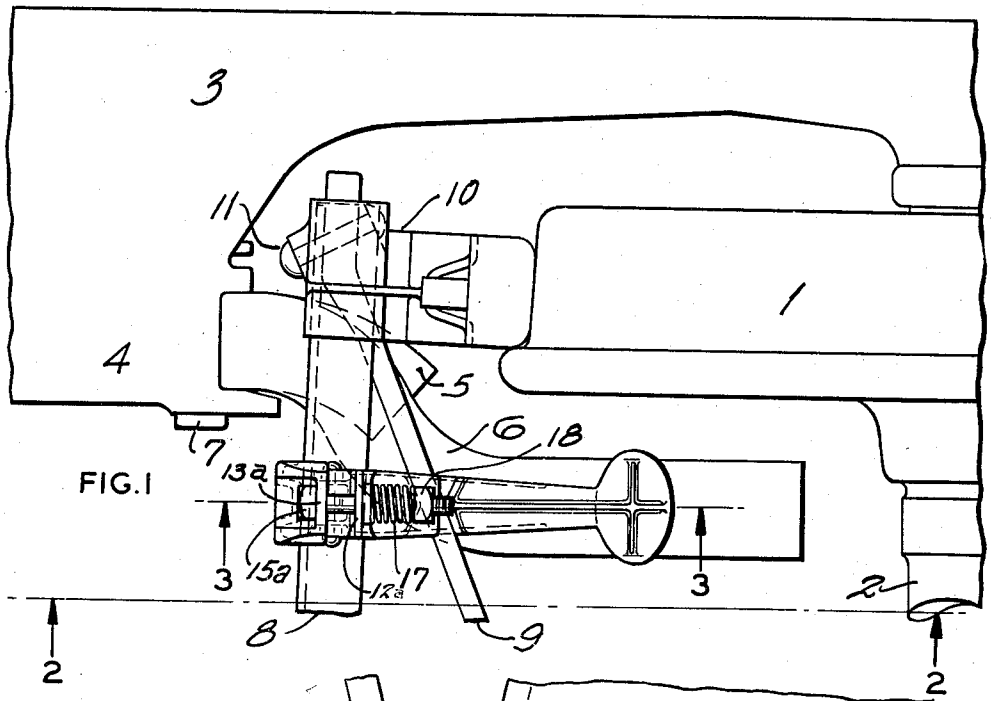


FIG. 1

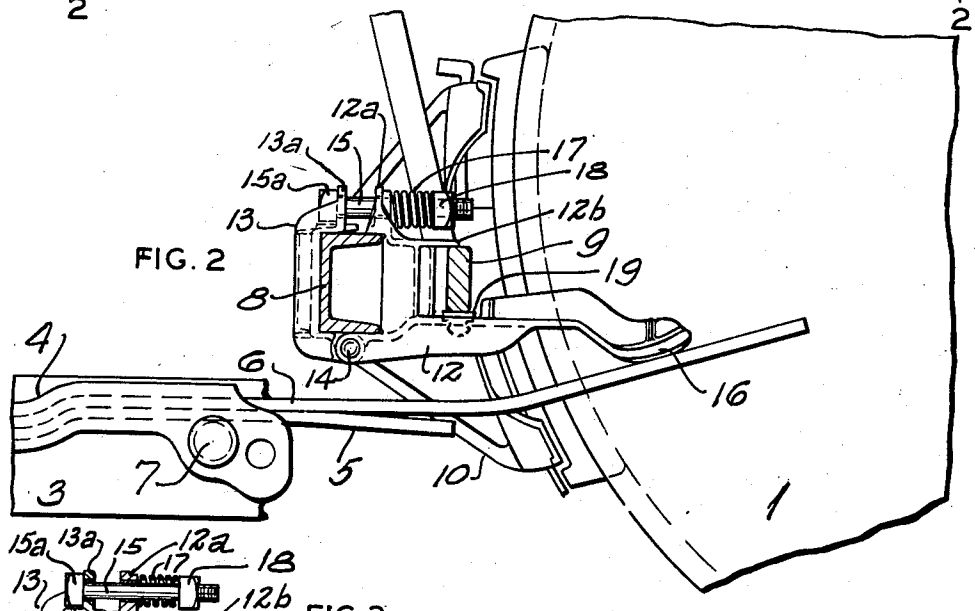


FIG. 2

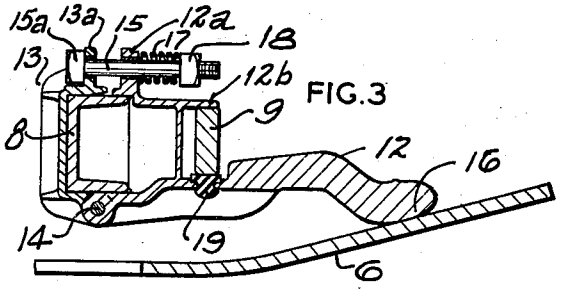


FIG. 3

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RAILWAY BRAKE BEAM SUPPORT CHAIR

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2 Claims. (Cl. 188—210)

The invention relates to railway brake beams and consists in an improved chair for application to a truss type brake beam to engage an elongated member underlying the beam and guide the beam in its movement to and from the associated wheel and, if necessary, to support the beam in the event of failure or undue wear of the normal beam support.

The device is of the type which is frictionally clamped to the main compression and tension members of the beam and such devices are likely to loosen up, either by wear due to vibration or improper application to the beam. Even a slight loosening of a bolt nut or other holding part becomes progressively worse after continued service, developing additional wear on either or both the chair or the beam. If the beam is removed from the truck and scrapped and the worn chair salvaged for installation on a new beam, the uncertain fit of the worn parts of the chair to the new beam is even more likely to result in loosening of the chair.

The main object of the invention is to adapt a chair of this type for ready and satisfactory tight application to a beam so as to avoid the loosening, wear, and other disadvantages resulting from use of the present chairs.

In the accompanying drawings illustrating a selected embodiment of the invention,

Figure 1 is a top view of one end portion of a brake beam to which the improved support chair is applied, the adjacent portion of a wheel and truck side frame mounting a support and guide also being shown.

Figure 2 is a vertical longitudinal section taken on the line 2—2 of Figure 1.

Figure 3 is a detail vertical longitudinal section taken on the line 3—3 of Figure 1.

The truck is indicated by a wheel 1, an axle 2, and a side frame 3, which is mounted upon the axle through the usual bearing and journal box, not shown. The frame includes a bracket 4 extending inwardly of the truck and terminating in a downwardly facing channel portion receiving a two piece support consisting of bars 5 and 6, secured in place by a pin or bolt 7 and extending outwardly beyond the bracket to provide a stiff support adjacent to the bracket and a relatively yielding support spaced from the bracket.

The brake beam includes a channel compression member 8, a rectangular bar tension member 9, the end portions of members 8 and 9 converging and being secured together by a brake head 10 and a rivet 11 passing through the head and members 8 and 9.

The support chair consists of two parts 12, 13, pivotally connected by a rivet 14 and clamped to channel member 8 by a bolt 15. Part 12 underlies tension member 9. The right hand end of part 12 terminates in a downwardly extending convex shoe 16 slidable on the outer portion of bar 6. Part 13 has an upstanding flange 13*a* for seating the head 15*a* of the bolt. Part 12 has an upstanding flange 12*a* for seating one end of a coil spring 17, which is compressed by a nut 18 applied to its other end.

Preferably part 12 is apertured to receive a button 19 of rubber-like material forming a pad engaging the lower portion of strap 9 which is gripped between a horizontal flange 12*b* on the chair and the main horizontal body portion of the chair.

With this arrangement, a tight gripping of the beam parts is insured when the chair is first applied and is maintained throughout the life of the chair, irrespective of vibrations and the penetration of water and dirt to the joints between the chair and the brake beam and tension members and any resulting wear. The chair may be removed from one beam and applied to another successively irrespective of variations in manufacturing tolerances of the chair parts or of the beam parts.

The details of the structure may be varied without departing from the spirit of the invention and the exclusive use of those modifications coming within the scope of the claims is contemplated.

What is claimed is:

1. A railway brake beam support chair for a truss type brake beam having compression and tension members converging toward each other, comprising a pair of upstanding parts pivotally connected at their lower ends and each having vertically spaced elements projecting toward the other part, said elements cooperating to engage opposite sides of a brake beam compression member, an arm extending from the lower portion of one of said parts at the side of the latter opposite its compression member engaging elements, there being a projection on the upper portion of the latter mentioned part spaced above said arm and cooperating with the latter to form a channellike recess opening toward the outer end of the arm to receive a brake beam tension member, clamp means extending between the upper portions of said parts to grip a brake beam compression member between said parts to hold the support to the beam, said means including an automatic spring take-up device which maintains the grip of the parts on the beam compression member if the chair shifts along the beam, there being a yielding seat on said arm for a brake beam tension member received in said recess.

2. In a railway brake beam including a compression member and a tension member having portions spaced apart in the general plane of the beam, a support chair mounted on both of said members and comprising clamp parts having laterally opening recesses facing each other and receiving the compression member between them, a bolt provided with a head element and a nut element which oppose, respectively, faces on the two clamp parts facing away from said recesses, one of said clamp parts having vertically spaced projections extending transversely of the beam away from said compression member and outwardly above and below the adjacent portion of the tension member and forming a pair of jaws opening

away from the compression member, the lower of said projections terminating in a downwardly facing bearing adapted to engage a supporting track, there being a coil spring compressed between one of said bolt elements and the opposing clamp part and yieldingly thrusting the clamp parts against the compression member and holding said arm to the beam tension member and compensating for vibrations, manufacturing inequalities, wear and movement of the chair along the beam, said lower projection terminating in a bearing being provided with a pad of yielding material engaging the bottom of the beam tension member and cooperating with the coil spring to secure the support chair in position on the beam.

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