

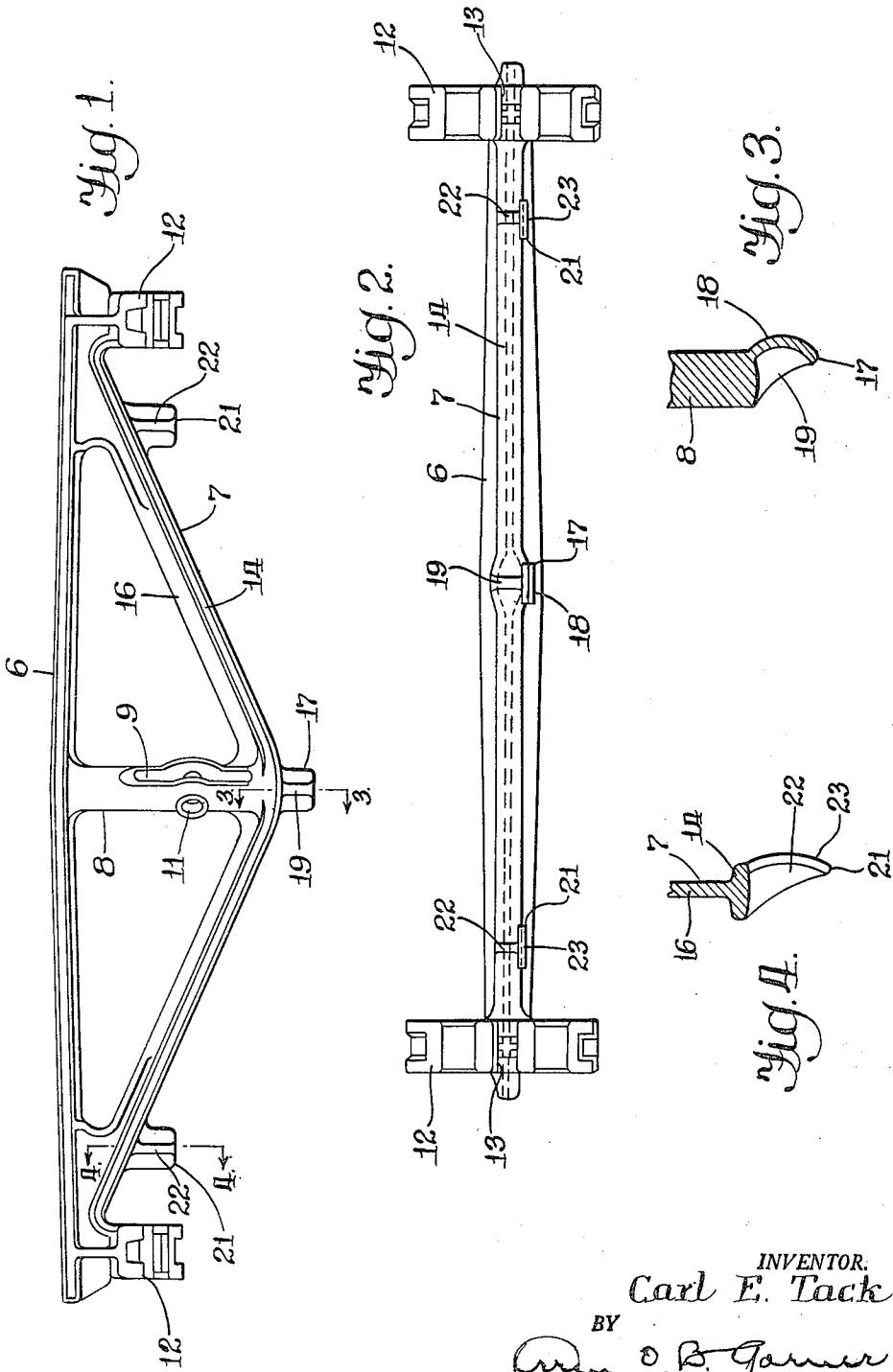
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BRAKE BEAM

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**BRAKE BEAM**

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1 Claim. (Cl. 188—213)

This invention relates to railway truss type brake beams, and is more particularly concerned with the provision of a cast steel brake beam embodying third and fourth point support shoes located intermediate the ends of the beam.

In some types of brake arrangements it has heretofore been found to be desirable to provide additional support for brake beams at various points between their brake hangers and this has been accomplished by detachably connecting third and/or fourth point support shoes to the beams by means of bolts, screws and other fastening means. The present invention contemplates the provision of a truss type brake beam having third and/or fourth point support shoes cast integral therewith, the shoes being formed and arranged to insure proper support and operation of the brake beam in service.

This invention further contemplates the provision of a cast truss type brake beam embodying tension and compression members and a central strut, the tension member being formed with a third point support shoe disposed adjacent the central strut and with a pair of fourth point support shoes adjacent its junctures with the compression member.

This invention embodies other novel features, details of construction and arrangement of parts which are hereinafter set forth in the specification and claims and illustrated in the accompanying drawing, wherein:

Figure 1 is a top plan view illustrating a cast steel truss type brake beam embodying features of the present invention.

Figure 2 is a front elevational view of same.

Figure 3 is a fragmentary transverse sectional view taken along the line 3—3 of Figure 1, illustrating the manner in which the third point support shoe is formed and arranged on the tension member of the brake beam.

Figure 4 is a fragmentary transverse sectional view taken along the line 4—4 of Figure 1, illustrating the manner in which the fourth point support shoes are formed and arranged on the tension member.

Referring now to the drawing for a better understanding of the present invention, the brake beam is shown as comprising a cast steel structure embodying a compression member 6 joined at its ends to the ends of a V-shape tension member 7, said members being connected together at their medial portions by means of a central strut 8 formed with a slot 9 to receive a brake lever which is engaged thereto at 11 by means of a pivot pin (not shown). Brake heads 12—12 may be attached to or cast integral with the brake beam and are formed with sockets 13—13 to receive associated brake hangers (not shown).

As illustrated in the drawing, the tension member 7 is preferably formed T-shape in cross section to provide a vertical web 14 and a horizontal web 16 projecting in-

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wardly therefrom toward the compression member 6. To provide additional support for the brake beam intermediate its ends, the present invention contemplates the provision of a third point support shoe 17, cast integral with the medial portion of the tension member 7 adjacent the strut 8, the shoe being preferably joined to the lower edge of the vertical web 14 and having face 18 formed and disposed for sliding engagement along a suitable guide member (not shown) in a manner well known in this art. A gusset 19 is joined to the upper face of the shoe and to the outer face of the vertical web 14.

A pair of fourth point support shoes 21—21 are cast integral with the end portions of the tension member and are preferably joined to the lower edge of the vertical web 14 and reinforced by gussets 22—22 extending between the upper faces of the shoes and the outer surface of the vertical web. The shoes 21—21 are formed with faces 23—23 formed and disposed for sliding engagement with a pair of guide members (not shown), the shoes 21—21 being positioned rearwardly from and, if desired, above the shoe 17.

In the brake beam construction thus shown and described, it will be noted that the third and fourth point support shoes may be cast integral with the tension member without adding materially to the cost of manufacture of the beam, and that the beam is adapted for use in brake rigging having third and/or fourth point guides to engage the shoes.

While this invention has been shown in but one form, it is obvious to those skilled in the art that it is not so limited but is susceptible of various changes and modifications without departure from the spirit and scope of the claimed invention.

I claim:

In a railway car truck brake beam casting; the combination of tension and compression members cast integral with each other at their ends and a strut cast integral with said members centrally thereof, said strut having a lever slot and having a pin hole intersecting said slot, said tension member being T-shaped in cross section and comprising a vertical web and a horizontal web projecting inwardly therefrom, and means cast integral with said tension member to slidably support said beam, said means comprising a support shoe having an arcuate wall of substantially uniform cross section presenting a concave upper surface and a convex lower surface, said arcuate wall being cast integral with the extreme lower forward edge of the tension member vertical web to prevent stress concentration in the tension member along the horizontal center plane of the beam casting, and a substantially vertical wall cast integral with the forward surface of the tension member vertical web and cast integral with the upper concave surface of the arcuate shoe wall approximately centrally thereof, said arcuate shoe wall being entirely disposed below said horizontal center plane.

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