J. J. HOFFMAN.

BRAKE BEAM.

APPLICATION FILED JUNE 29, 1910.

976,461.

Patented Nov. 22, 1910.

FIG. 1

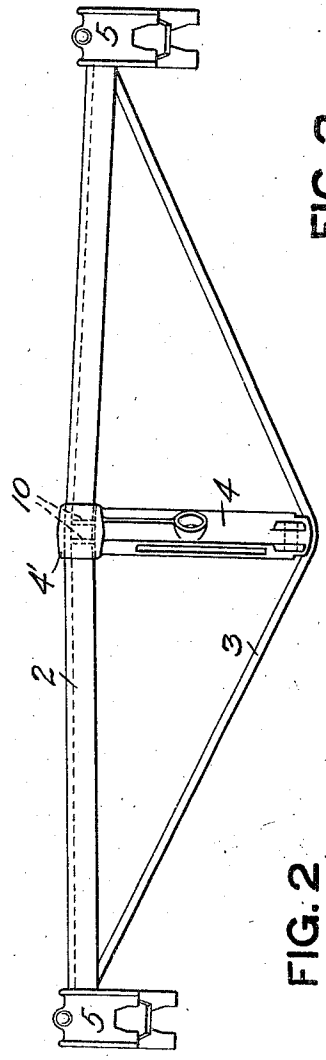


FIG. 3

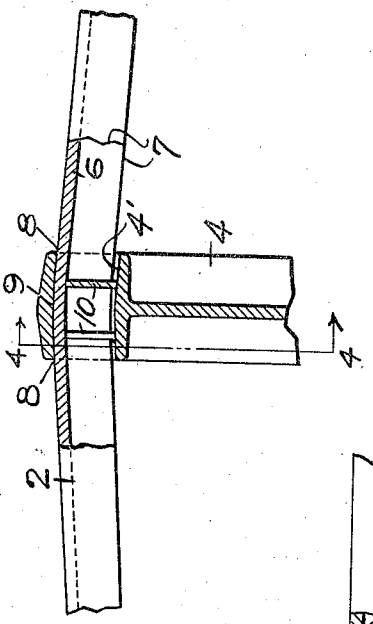


FIG. 4

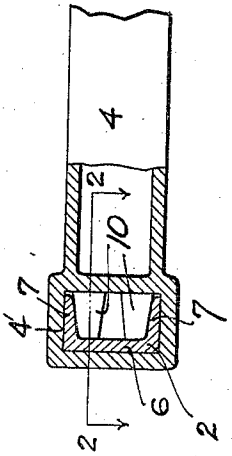
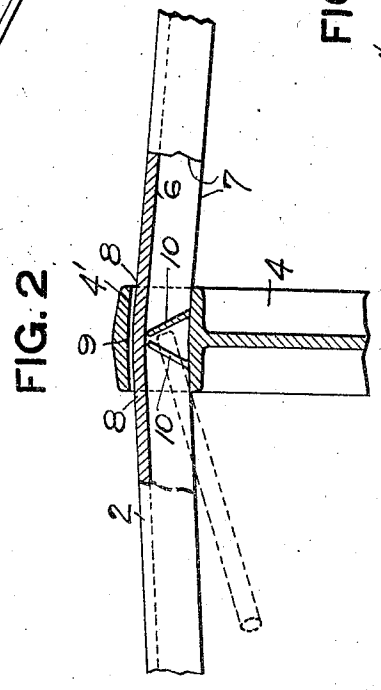


FIG. 2



WITNESSES.

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BRAKE-BEAM.

976,461. Specification of Letters Patent. Patented Nov. 22, 1910.

Application filed June 29, 1910. Serial No. 569,454.

To all whom it may concern:

Be it known that I, JOHN J. HOFFMAN, residing in New Kensington, in the county of Westmoreland and State of Pennsylvania, have invented a new and useful Improvement in Brake-Beams, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to brake beams of the trussed type and its object is the provision of a simple, strong and durable connection between the strut bar or king-post and the compression member. The purpose of binding the strut to the compression member is, as is well understood by those skilled in the art, to prevent longitudinal creeping of the strut along the compression member, with consequent weakening and destruction of the truss integrity of the beam.

I will now describe my invention so that others skilled in the art to which it appertains may understand and construct the same, referring to the accompanying drawings in which I have shown my invention as applied to a brake beam having a compression member of the flange type. It will be apparent, however, that my invention is applicable to beams employing compression members of various cross-sectional shapes.

Figure 1 is a top plan view of a brake beam embodying my invention; Fig. 2 is a fragmentary view showing the top of the strut and associated portion of the compression member in section, and showing the fingers employed in binding the compression member to the strut, in lower inclined positions; Fig. 3 is a similar view, showing the strut firmly bound to the compression member, and Fig. 4 is a view taken on the line 4—4 of Fig. 3.

In the drawings the reference numeral 2 indicates the compression member, 3 the tension member, 4 the king-post or strut bar, and 5 the brake shoe heads mounted upon the respective ends of the beam.

My invention has particular reference to the connection between the compression member 2 and the strut 4, and in this connection, and in the preferable embodiment of my invention as shown in the drawings I provide the top of the strut with the transverse opening or socket 4′, through which the compression member 2 is passed in the assembling of the different parts of the beam.

As shown in Fig. 4, the socket 4′ is of such dimensions as to snugly receive without binding the compression member 2. Preferably the socket is of such depth as to permit of the free insertion of a cambered beam without binding of the web 6 and edge of the flanges 7 against the wall of the socket. In coöperation with the diverging faces 8 of the compression member, incident to the camber being placed therein the upper inner face of the socket may be correspondingly shaped as indicated by the numeral 9, so that when the beam is bound against the upper face of the socket, a sort of an interlock will be provided between the respective faces.

Means for binding the compression member against the top of the socket comprise the fingers 10 which are formed preferably integral with the strut 4. These fingers 10 in normal position, so as to permit of the insertion of the compression member 2, are bent downwardly or inclined toward each other in the manner shown in Fig. 2, to provide a clearance for the passage of the web 6 and flanges 7. By driving the fingers to the upright position shown in Fig. 2, it will be apparent that the compression member will be firmly bound thereby against creeping to the upper face 9 of the socket. As shown in Fig. 2 these fingers 10 may be driven to the upright position shown in Fig. 3 by the insertion of a suitable tool into the socket 5 at points between the flanges 7 of the compression member; the fingers 10 being preferably staggered so as to permit of the free access from the opposite side of the strut, of the tool, to and for a purchase on the fingers 10 for an upward setting thereof. By providing the fingers with the oppositely disposed inclined side faces for binding coöperation with the inner faces of the flanges 7, the frictional resistance between the fingers and compression member may be greatly increased.

The advantages of my invention will be appreciated by those skilled in the art. My improved connection between the compression member and the strut, as will be seen, is simple in construction, and is such as to firmly and lastingly bind these respective members together so as to prevent relative creeping. The fingers 10 may be readily

formed on the strut 4 by casting or forging, and preferably in the position shown in Fig. 2, ready for the attachment of the compression member.

It will be apparent that many changes may be made in the construction shown which would not be a departure from my invention, and I do not therefore desire to limit myself thereto.

What I claim and desire to secure by Letters Patent is:

1. In a brake beam, the combination with a compression member and a tension member connected at their respective ends, of a strut interposed between the members and having an aperture for the passage of the compression member, the strut being provided with a finger adapted to be forced against and bind the compression member within the strut aperture.

2. In a brake beam, the combination with a compression member and a tension member connected at their respective ends, of a strut interposed between the members and having an aperture through which the compression member passes, the strut being provided with an integral finger adapted to be forced against and bind the compression member within the strut aperture.

3. In a brake beam, the combination with a compression member and a tension member connected at their respective ends, a strut interposed between the members, and having an aperture for the passage of the compression member, the strut being provided with a finger adapted to be driven against and terminally impinge upon the compression member for binding of the compression member to the strut.

4. In a brake beam the combination with a compression member and a tension member united at their respective ends, of a strut interposed between the members, and provided with an aperture for the passage of the compression member, and having a plurality of fingers arranged in staggered relation, and adapted to be forced against the compression member for binding thereof to the strut.

5. In a brake beam, the combination with a compression member and a tension member united at their respective ends, of a strut interposed between the members and having an aperture for the passage of the compression member, and provided with a plurality of fingers adapted to be forced against and terminally impinge upon the compression member.

6. In a brake beam, the combination with a compression member and a tension member united at their respective ends, of a strut interposed between the members and provided with an aperture for the passage of the compression member, and having a plurality of fingers arranged in staggered relation, and adapted to be forced against and impinge upon the compression member.

7. In a brake beam, the combination with a compression member and a tension member united at their respective ends, of a strut interposed between the members and provided with an aperture for the passage of the compression member, and having an integral finger projecting upwardly from the wall of the aperture and adapted to be forced into engagement with the compression member.

8. In a brake beam, the combination with a compression member and a tension member united at their respective ends, of a strut interposed between the members and having an aperture for the reception of the compression member, and provided with a plurality of fingers projecting from the wall of the socket and disposed in staggered relation and adapted to be forced into engagement with the compression member.

9. In a brake beam, the combination with a compression member and a tension member united at their respective ends, of a strut interposed between the members, and having an aperture for the passage of the compression member, the upper wall of the aperture having an inner angularly disposed face, against which the compression member is adapted to abut, and the strut also being provided with a finger adapted to be forced into engagement with the compression member for binding thereof against the angularly disposed face.

In testimony whereof, I have hereunto set my hand.

JOHN J. HOFFMAN.

Witnesses:
M. ARTHUR FULLER,
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