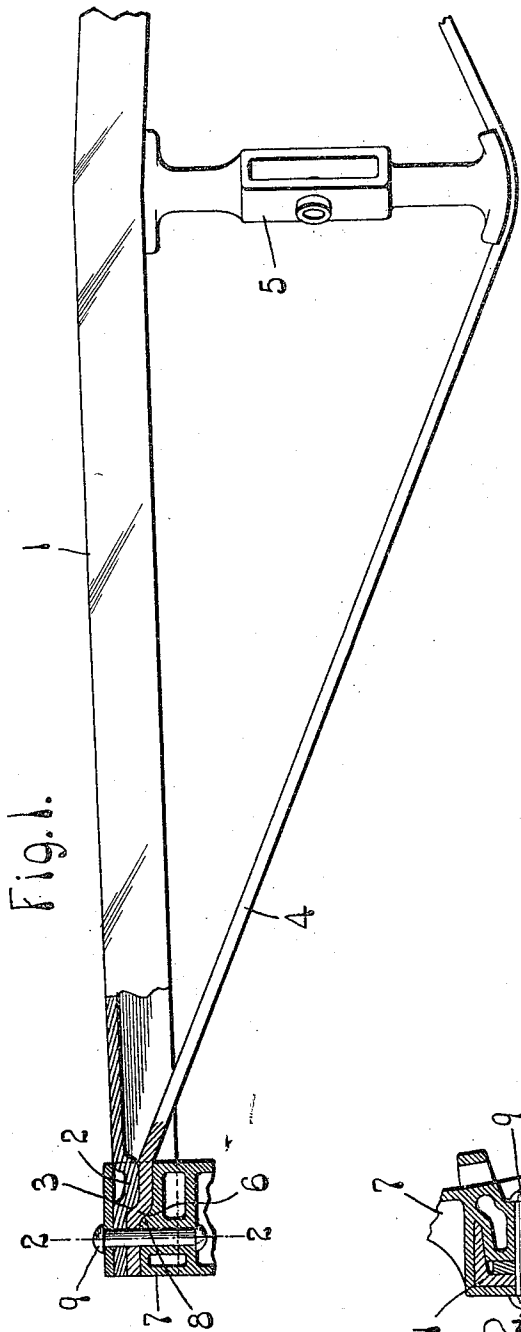


P. B. HARRISON.
BRAKE BEAM.
APPLICATION FILED JULY 6, 1909.

949,892.

Patented Feb. 22, 1910.



Witnesses
A. J. McCauley
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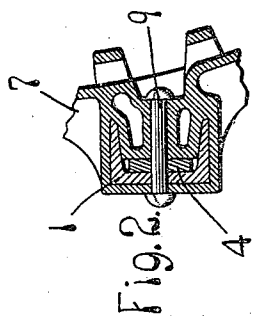


Fig. 2.

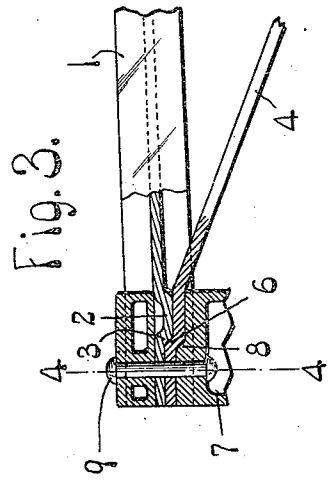


Fig. 3.

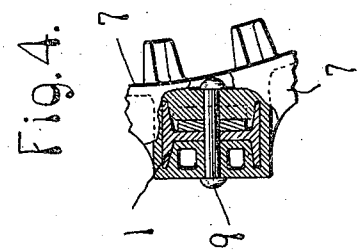


Fig. 4.

Inventor:
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by J. R. Amwall Atty.

UNITED STATES PATENT OFFICE.

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BRAKE-BEAM.

949,892.

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To all whom it may concern:

Be it known that I, PHILIP B. HARRISON, 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 plan view of one-half of a brake beam of my improved construction, the outer end thereof being shown in section. Fig. 2 is a section taken on the line 2—2, Fig. 1. Fig. 3 is an elevation, partly in section, of the outer portion of a modified form of my improved beam. Fig. 4 is a section taken on the line 4—4 of Fig. 3.

My invention relates generally to trussed metallic brake beams, and more particularly to that class of brake beams wherein an I-beam or channel forms the compression member and a plain metal bar or strap forms the tension member, and the object of my invention is to construct and unite the ends of the compression and tension members in such a manner that the thrust of the compression member is imparted directly to the tension member, without the employment of thrust blocks, end castings and the like.

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

Referring by numerals to the accompanying drawings, 1 designates the compression member, which may be formed of either a channel, as shown in Fig. 1, or an I-beam as shown in Fig. 3. The web forming the main body of the compression member is indented or upset adjacent each edge, as designated by 2, to form an abrupt transverse shoulder 3 on the under or inner side of said compression member.

4 designates the tension member which is preferably in the form of a strap or flat bar, and arranged between the central portions of the compression and tension members is a strut or brake lever post 5 of ordinary construction. The body of the tension member is transversely bent or upset adjacent each end, to form shoulders 6, which, when the

parts of the beam are assembled, bear directly against the shoulders 3 on the compression member.

7 designates cast metal brake heads, which are provided with suitably formed apertures or recesses for the reception of the ends of the beam, and formed within the recesses or apertures are transversely disposed shoulders 8 which bear against the bent portions of the tension members when the brake heads are properly fitted onto the ends of the beam. Bolts 9, or like fastening devices, are seated in coinciding apertures formed in the brake heads and in the ends of the compression and tension members, and serve to rigidly unite the ends of said members and to fix the brake heads thereon.

When the parts of the beam are properly assembled and the compression member properly cambered, a very strong, rigid, light weight beam is provided, the same being made up of a minimum number of inexpensive parts and as very little labor and time are involved in the assembling of the parts, a beam of comparative low cost is produced.

The abutting shoulders 3 and 6, and the shoulders 8, against which the bent portions of the tension member engage, provide means whereby the stress and strain in the compression and tension members are equalized throughout the entire beam structure, while the same is in use, and said shoulders also do away with all shearing strain upon the bolts 9, thereby enabling the parts of the beam to be fitted together with a minimum number of bolts of small diameter.

Having thus described my invention, what I claim is:

1. In a trussed brake beam, a compression member, a tension member, there being abutting shoulders formed on said members adjacent their ends, brake heads located on the ends of said members, and there being shoulders formed on said brake heads which engage against the shoulders on the tension member.

2. In a trussed brake beam, a compression member, a tension member, there being abutting shoulders formed on said members adjacent their ends, brake heads located on the ends of said members, there being shoulders formed on said brake heads which engage the shoulders on the tension member and

fastening devices for rigidly uniting the ends of the members and fixing the brake heads thereon.

3. In a trussed brake beam, a compression member provided with transverse shoulders adjacent its ends, a tension member provided with shoulders adjacent its ends which engage against the shoulders of the compression member, and brake heads provided with suitable recesses which receive the ends of the compression member and tension member.

4. In a trussed brake beam, a compression member provided with transverse shoulders adjacent its ends, a tension member provided with shoulders adjacent its ends, which engage the shoulders of the compression member, brake heads provided with suitable recesses which receive the ends of the compression member and tension member, and fastening devices passing through the brake heads and through the ends of the compression and tension members.

5. A brake beam having a flanged compression member and a flat plate tension member arranged between the flanges of said compression member, the web of said compression member and said flat plate tension member being formed with interlocking bends or indentations near the ends of the beam.

6. In a trussed brake beam, the combination with a compression member having a bend near its end forming an outwardly presented thrust shoulder, and a tension member having a coinciding bend which cooperates only with the outwardly presented thrust shoulder of the compression member.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this 28 day of June 1909.

PHILIP B. HARRISON.

Witnesses:

EDWARD T. WALKER,
JOSEPH W. WEINLAND.