

April 21, 1925.

1,534,608

C. F. PERKINS

BRAKE BEAM

Filed July 21, 1923

FIG. 1.

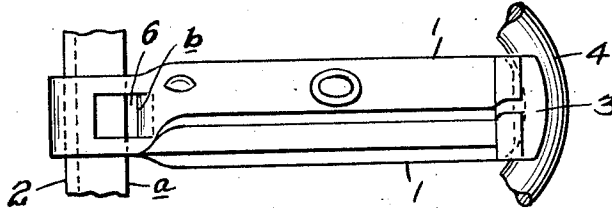


FIG. 2.

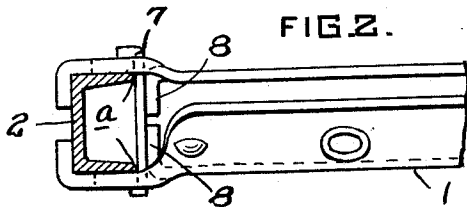


FIG. 3.

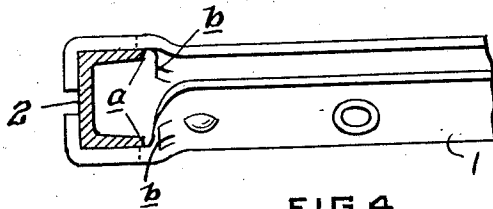


FIG. 4.

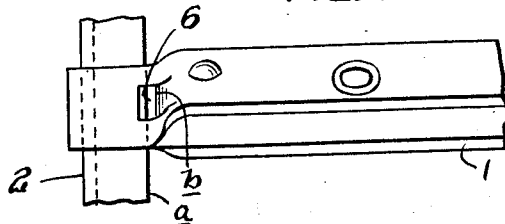


FIG. 5.

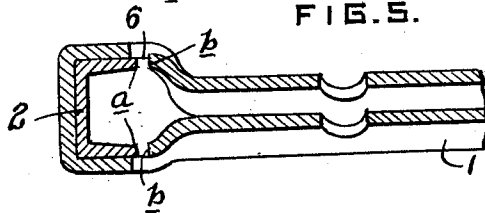
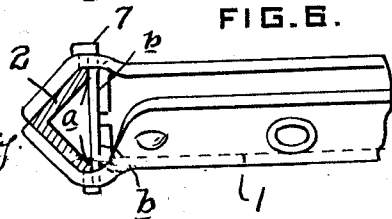


FIG. 6.



WITNESSES
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BRAKE BEAM.

Application filed July 21, 1923. Serial No. 653,032.

To all whom it may concern:

Be it known that I, CHARLES F. PERKINS, residing at Johnstown, in the county of Cambria and State of Pennsylvania, a citizen of the United States, have invented or discovered certain new and useful Improvements in Brake Beams, of which improvements the following is a specification.

The invention described herein relates to certain improvements in brake beams of the truss type, the improvement being especially adapted for the use in the construction of a beam having its compression member formed of a structural shape, such as a channel or angle, and the angle formed by bending a metal strip to an approximately U-shape.

The invention has for its object the provision of means whereby compression members may be securely gripped by the portion of the strut engaging the compression member. The invention is hereinafter more fully described and claimed.

In the accompanying drawings forming a part of this specification, Fig. 1 shows an elevation of a portion of a truss brake beam embodying the improvement claimed herein; Fig. 2 is an elevation at right angles to the view shown in Fig. 1; Figs. 3 and 4 are views of portions of the compression member and strut of a truss brake beam, illustrating a modification of the construction shown in Figs. 1 and 2; Fig. 5 is a sectional view of the construction shown in Fig. 4; and Fig. 6 is a view similar to Fig. 3 showing the improvement in connection with an angle or U-shaped compression member.

In the practice of the invention the strut consists of two parallel members preferably formed by bending a strip of metal, to a U-shape, which is secured at one end to the compression member 2 and is provided at its opposite end with a saddle 3 having a seat for the reception of the tension member. In describing the improvement claimed herein the side of the beam formed by the compression member will be considered its front end.

The compression member may be made in the form of a channel, as shown in Figs. 1 to 5, or in the form of an angle as shown in Fig. 6. The compression member and strut may be secured together by bending the free end of the legs of the strut to bear against the sides and web of the compression mem-

ber. In lieu of connecting the strut to the compression member by folding the ends around the latter, the front or closed end of the strut may be shaped to receive the compression member and bear against the sides and web of such member, as shown in Fig. 5. When the compression member is formed by an angle as shown in Fig. 6, it is preferred that the latter should be arranged in the closed end of the strut.

In order to cause the strut to tightly grip the compression member, holes 6 are formed in the strut to permit of the insertion of a wedge 7 in the rear of the edges of the sides of the compression member. The holes are so located that the wedge will bear against the edges *a* of the member and the wedge is so constructed that at the points where it will bear on the edges of the compression member, it will have a thickness slightly greater than the distance between the edges *a* and the rear edges *b* of the holes 6. In order that the edges *a* and *b* may be in alignment longitudinally of the strut and have directly opposite bearings on the wedge, portions of the sides of the strut in the rear of the holes 6 are forced inwardly sufficient to bring the edges *a* and *b* into alignment longitudinally of the strut, as shown in Fig. 3. It is preferred that the holes 6 should extend forwardly of the edge *a* of the compression member so that when the wedges are driven into position, they will draw the strut tightly against the compression member.

In order to provide guiding surfaces for the wedge when driven into locking position, tongues 8 are formed by cutting the sides of the strut and these tongues are bent inwardly as shown in Figs. 2 and 6. The cuts whereby the tongues are formed, extend rearwardly along the sides of the strut towards the end engaging the tension member, the initial points of the cuts being so located that when the tongues are bent inwardly, their under surfaces will form bearings for one side of the wedge, the opposite side of the wedge bearing on the edges *a* of the compression member. It is preferred that the tongues should be made of such length that their free ends will be closely adjacent when the tongues are bent inwardly, as shown in Figs. 2 and 6, thereby forming substantially continuous guiding surfaces for the wedge which is provided at

one end with a suitable head while the opposite end is adapted to be bent over against the side of the strut.

I claim herein as my invention:

5 1. A brake beam having in combination a compression member formed of structural material, a strut having spaced sides, said sides at the front end of the strut engaging the compression member and having holes
10 therethrough extending rearwardly from the compression member the rear edges of the holes being in alinement with the sides of the compression member and a wedge passing through said holes and across the
15 compression member and adapted to bear on the edges of the compression member and opposing or rear sides of the holes.

2. A brake beam having in combination a structurally shaped compression member,
20 a strut having spaced sides engaging at one end the compression member, and having tongues cut therefrom to initially project in the direction of the compression member and

bent inwardly to positions in alinement with the edge of the compression member and a
25 wedge extending through the holes formed by bending the tongues inwardly and bearing against the edges of the compression member and the tongues.

3. A brake beam having in combination 30 a structural shaped compression member, a strut having spaced sides bearing respectively on the outer faces of the sides of the compression member and having oppositely disposed holes in the rear of the compression
35 member and having portions forced inwardly into alinement and in the rear of the edges of the compression member, and a wedge extending through the holes in the sides of the strut and bearing against the
40 edges of the compression member and the inwardly projecting portions of the strut.

In testimony whereof, I have hereunto set my hand.

CHAS. F. PERKINS.