

B. HASKELL.
BRAKE BEAM.

APPLICATION FILED JULY 7, 1909.

Patented Dec. 27, 1910.

979,668.

Fig. 1.

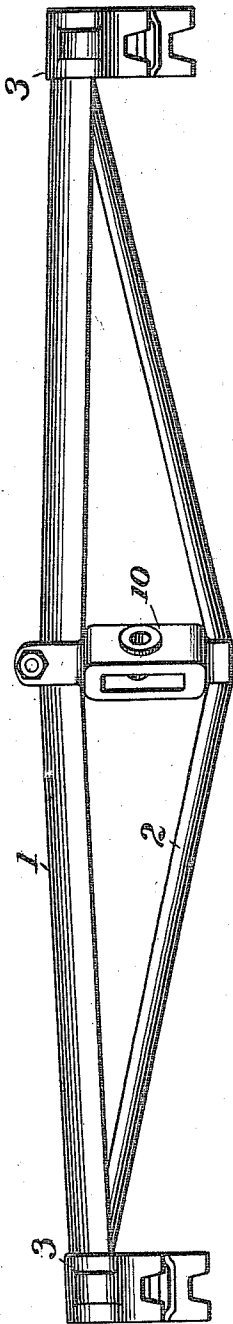


Fig. 2.

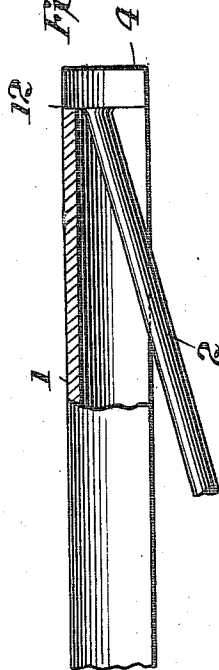


Fig. 3.

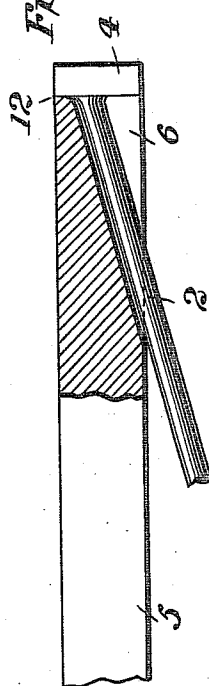


Fig. 4.

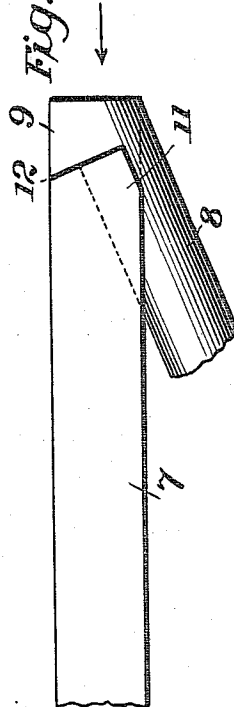


Fig. 5.

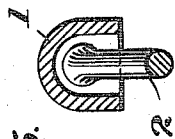


Fig. 6.

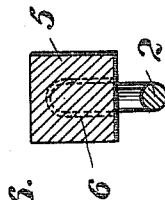


Fig. 7.



Witnesses
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UNITED STATES PATENT OFFICE.

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BRAKE-BEAM.

979,668.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, BRODERICK HASKELL, a citizen of the United States, residing at Franklin, in the county of Venango and State of Pennsylvania, have invented certain new and useful Improvements in Brake-Beams, (Case B,) of which the following is a specification.

The present invention relates to brake beams of the metallic truss type and has for its objects to provide a strong and rigid structure which at the same time is of very few parts, inexpensive, and easy of manufacture.

The matter of novelty will be better understood from the following detailed description taken in connection with the accompanying drawing and the distinctive features will thereafter be pointed out in the appended claims.

Referring to the drawing: Figure 1 is a front elevation of a brake beam constructed in accordance with my improvements. Figs. 2, 3 and 4 are detail longitudinal views, the first two being partly in section, showing as many different specific forms in which my invention may be embodied without departing from its broader essential features. Figs. 5, 6 and 7 are detail transverse views, the first two being in section further illustrating features in the constructions of Figs. 2, 3 and 4 respectively.

The improved brake beam is formed of compression and tension members, the former being centrally cambered as shown and the latter bent to form the complement of the usual truss construction, there being the ordinary central strut 10 secured between said members.

The brake heads 3 have no features of peculiarity except as they are fitted and firmly secured over the improved connection now to be described.

The compression member may be formed of a plate bent or rolled into U or channel section as shown at 1, in Figs. 1 and 2 or it may be a solid bar as shown at 5 and 7 in Figs. 3, 4, 6 and 7, the particular cross section of said member not being material in the broader aspects of the invention.

The tension member while preferably a rod as at 2 in Figs. 1 to 3 may be of various

modified forms, that shown at 8 in Fig. 4 illustrating one somewhat different form.

In case a solid bar is employed as the compression member the ends thereof are recessed as shown at 6 in Fig. 3 and at 11 in Fig. 4 to receive the ends of the tension member.

In the practice of my invention the ends of the tension member are provided with an excess of metal either by being made of extra length or otherwise and this excess of metal is upset to form heads 4 as shown in Figs. 2 and 3 or 9 as shown in Fig. 4. Such upsetting is done at a point, so that the compression member will fit snugly between said heads as shown. It will be seen by reference to Fig. 4 that in this form a kind of undercut or mortise joint is formed thus reliably holding the members in proper relation.

The parts being assembled in this manner a welding heat is applied to the joints at 12, by suitable means as an oxy-acetylene flame, an electric current or the like and the parts firmly welded together making substantially an integral truss structure. It will be understood that such welding may be made either with the aid of a suitable flux, or the operation may be that of the so-called "autogenous" welding as will be understood by those skilled in the art of welding.

It will thus be seen that I provide a very simple, strong and inexpensive brake beam with a minimum number of parts.

Having now fully described my invention, what I claim as new and desire to secure by Letters Patent is as follows:

1. A brake beam comprising a tension member provided with integral heads at its ends, a compression member snugly fitted between said heads, and abutting solely against and flush with the inner side of said heads, and brake heads fitting over the abutting edges of the integral heads and compression member.

2. A brake beam comprising a tension member provided with integral heads at the ends thereof, said heads forming undercut recesses and a compression member having engagement with said heads.

3. A brake beam comprising a tension member provided with heads at the ends

thereof, and a compression member fitted between and abutting solely against and flush with the inner side of said heads and united in molecular union therewith.

4. A brake beam comprising a tension member provided with integral heads at the ends thereof, said heads forming undercut recesses, and a compression member having mortised engagement in said recesses with

said heads, said engagement being in the nature of a molecular union between said parts. 10

In testimony whereof I affix my signature in presence of two witnesses.

BRODERICK HASKELL.

Witnesses:

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