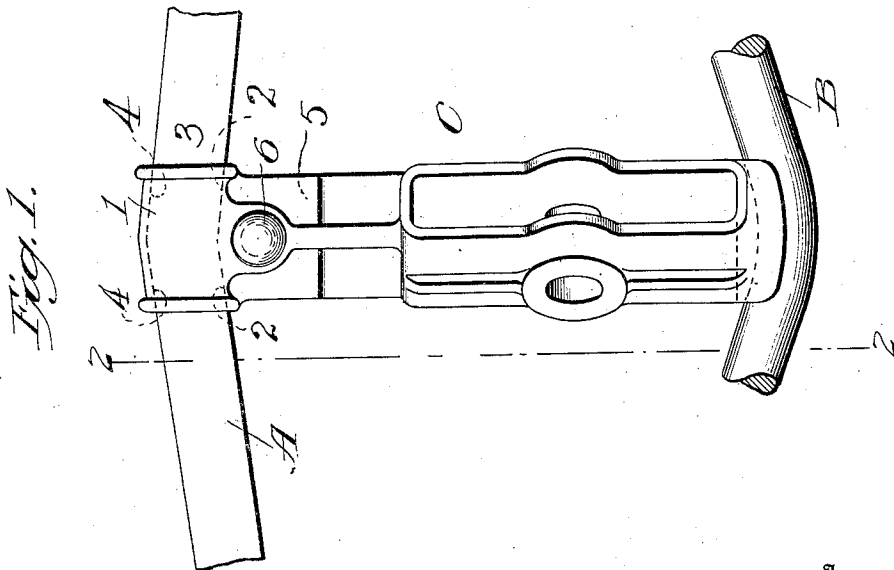
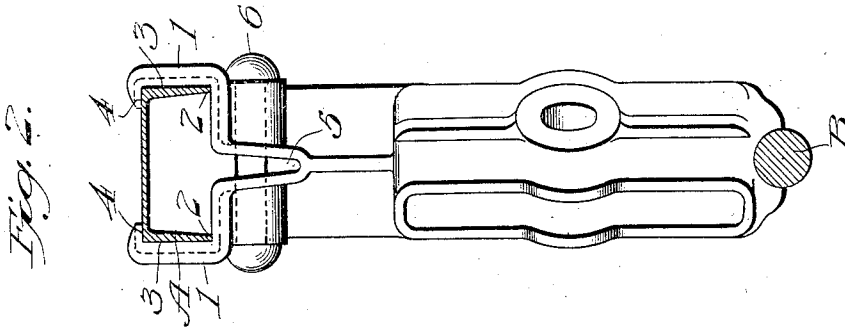


APPLICATION FILED APR. 18, 1911.

Patented May 20, 1913.

1,062,330.



Witnesses

Witnesses
T. M. Mocharre
J. M. Wynkoop,

Inventor

Philip T. Handiges

Knight Bros
Attorneys

Attorneys

UNITED STATES PATENT OFFICE.

PHILIP T. HANDIGES, OF EAST CLEVELAND, OHIO, ASSIGNOR TO THE DAMASCUS BRAKE BEAM COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

BRAKE-BEAM FULCRUM.

1,062,330.

Specification of Letters Patent.

Patented May 20, 1913.

Application filed April 18, 1911. Serial No. 621,953.

To all whom it may concern:

Be it known that I, PHILIP T. HANDIGES, a citizen of the United States, residing at 93 Elberon avenue, in the city of East Cleveland, county of Cuyahoga, and State of Ohio, have invented certain new and useful Improvements in Brake-Beam Fulcrums, of which the following is a specification.

This invention relates to railway brake beams of the trussed type embodying a compression member, a tension member, and a strut between said members; and particularly to a brake beam of this class in which the strut is made to embrace the compression member and bind upon it in a manner to insure imposing the load against the crest of the arch in the compression member and prevent displacement in the direction of the length of the brake beam.

It is desirable to avoid multiplication of parts in a structure used on railway cars. It is also desirable to employ the art of casting in the production of brake beam fulcrums, so far as this may be done without sacrificing the strength of the strut. But it has not heretofore been practicable to obtain the necessary binding of the strut upon the member of the brake beam against which it abuts when the strut has been made of cast metal in a single piece.

My invention provides a cast metal strut having a single piece bearing which is readily applied by sliding it endwise over the member of the brake beam with which it is to engage and which binds upon and firmly embraces said member when in position; these ends being attained by forming the end of the strut with a bearing embracing four sides of the member, with the walls of one side of the bearing divided and with a separating slot extending forward from the bearing into the body of the fulcrum so as to lend necessary flexibility to the jaws of the bearing: the cast fulcrum being malleable so that the jaws of the bearing may be set up against the member after the fulcrum is in place, and a rivet being provided for the purpose of drawing the jaws together: said rivet being preferably located to extend across the slot in immediate proximity to the jaws.

The invention will be fully understood upon reference to the accompanying drawing, in which,

Figure 1 is a top plan view and Fig. 2 a

section on the line 2—2, Fig. 1, showing the portions of a trussed brake beam with which my invention is concerned.

A represents the compression member, B the tension member and C the strut, of a well-known type of trussed brake beam.

The compression member A is shown constructed of channel-iron, but it may be of any other section. The tension member B is of round section, but it may be of any other form adapted to provide abutment for the fulcrum C and to transmit the braking stress from the same to the brake shoes.

The strut C is illustrated as a one-piece casting, but this characteristic is essential only so far as concerns that end which is designed to embrace and bind upon the member of the brake beam, ordinarily the compression member only, though, obviously the tension member as well, if desired.

The embracing end is provided with jaws 1 designed to embrace four sides of the compression member A, namely at the points 2, 3 and 4, so that the strut is not only adapted to impart stresses of compression if the member A be the compression member, but firmly bind upon the member A and hold the strut against displacement. Between the points 4, the bearing is divided so that the parts 1 constitute jaws which may be pressed into binding relation to the member A. To afford necessary flexibility to the jaws 1, the strut is provided with a slot 5 extending forward from the bearing a sufficient distance to permit the jaws 1 being pressed together without doing violence to the metal of the strut. To effectively press the jaws together and hold them in binding relation to the member A, a rivet 6 or the like is introduced through the strut in position to extend across the slot 5.

The strut is formed of a malleable casting with the bearing of such size as to fit easily over the member A, and it is applied by sliding it endwise over said member before the members A and B are assembled, after which it is firmly clamped in position by means of its rivet 6.

The bearing faces 2 and 4 are preferably designed with sufficient taper to cause the jaws to bind firmly when the bearing faces are pressed to their seats on the beam-member.

If it be desired to apply the strut after the two main members of the beam are as-

sembled, the jaws will be given sufficient initial spread to enable the strut to swing on its front end as a pivot, the projections forming the rear bearings 4 being sufficiently
5 spaced to admit the compression member between them, until the strut reaches its ultimate position when the jaws will be pressed together.

10 In adapting the strut to some sections of compression member, it may be desirable to locate the rivet elsewhere than in the relative position shown—even in some instances, in rear of the compression member.

I claim:—

15 A brake beam comprising a compression member, a tension member and a strut having its ends provided with bearings to receive said compression and tension members; the compression member bearing comprising a pair of jaws adapted to receive the
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compression member between them, whereby they bear upwardly and downwardly upon the compression member; said jaws being recessed to conform to the compression member, whereby each is adapted to bear forwardly and rearwardly against the compression member; and said jaws being separated by a slot extending inwardly from the compression member bearing to give resiliency to the jaws and having a rivet extending through the jaws across said slot adjacent to but not intersecting the compression member bearing. 25 30

The foregoing specification signed at Cleveland, Ohio, this 14th day of March, 1910. 35

PHILIP T. HANDIGES.

In presence of—

C. R. WAGNER,

R. J. COPE.