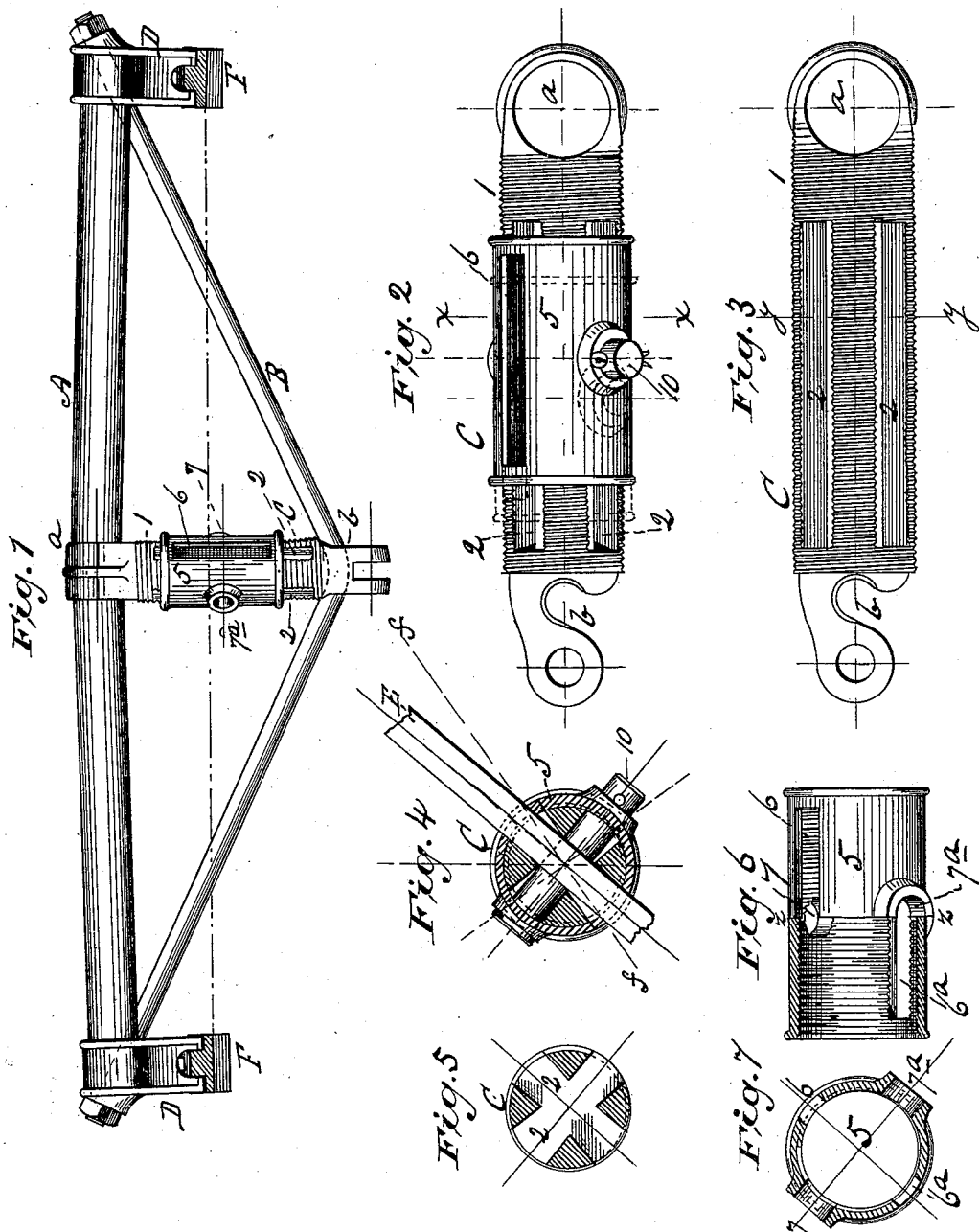


(No Model.)

H. B. ROBISCHUNG.
BRAKE BEAM.

No. 508,531.

Patented Nov. 14, 1893.



Witnesses:

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Inventor

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UNITED STATES PATENT OFFICE.

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BRAKE-BEAM.

SPECIFICATION forming part of Letters Patent No. 508,531, dated November 14, 1893.

Application filed June 8, 1893. Serial No. 477,007. (No model.)

To all whom it may concern:

Be it known that I, HENRY B. ROBISCHUNG, a citizen of the United States, residing at Kalamazoo, in the county of Kalamazoo and State of Michigan, have invented certain new and useful Improvements in Brake-Beams; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, wherein—

Figure 1, is a plan view of a trussed brake-beam embodying my invention. Fig. 2, is an enlarged, detached, view of the strut or post embodying the invention. Fig. 3, is an enlarged detached view of the strut proper, the adjustable sleeve or fulcrum pin support having been removed. Fig. 4, is a transverse sectional view of the strut on the line $x-x$, Fig. 2, a portion of a brake lever being shown in elevation; Fig. 5, a transverse sectional view of the strut on the line $y-y$, Fig. 3—or the same view as Fig. 4, with the adjustable sleeve and lever omitted. Fig. 6, is a detached view of the sleeve or fulcrum pin support parts cut away to show the threaded interior. Fig. 7, is a transverse section of the adjustable sleeve or fulcrum pin support on the line $z-z$, Fig. 6.

Like symbols refer to like parts wherever they occur.

My invention relates to the construction of trussed brake-beams, but more especially to that class wherein the brake lever is fulcrumed on the strut or post of the structure between the compression and tension members. In such structures the distance of the lever fulcrum—or pin hole of the strut—from the plane of the brake shoes will vary materially according to the standards of different railroads. In some cases, the fulcrum of the lever will have to be in rear of the plane of the face of the brake-shoe, and sometimes in front of said plane, (see dotted line Fig. 1) to accommodate the varying lengths of lower connecting rods, or to adapt the beam for use on different trucks having connecting rods of varying length.

To meet the requirements, in the case of trussed brake-beams, as now constructed, a strut pattern for each standard is required,

and the beam has to be set up at the place of manufacture with special regard to a given standard. To overcome these objections to the present construction of brake-beam, I have devised a strut having a longitudinally adjustable lever fulcrum, so that but a single strut pattern will be required and the beam may, after it is set up, be adjusted to any standard—and any strut having said characteristics, embodies the first feature of my invention. It is also well understood, that as commonly constructed, a right and left hand pattern is commonly required for each standard, accordingly as a right or left hand brake lever is used with the beam, and to meet this requirement, I prefer to construct my strut or post, so that the lever fulcrum—or fulcrum block—shall be rotatable as well as longitudinally adjustable on the strut proper; and said construction embodies a second feature of my invention. There are other minor features of invention, all as will hereinafter more fully appear.

I will now proceed to describe my invention more fully, so that others skilled in the art may apply the same.

In the drawings, A indicates the compression member, B, the tension member, and C, the strut or post of a trussed brake-beam, provided with brake-heads D, brake lever E, and brake shoes F—the latter being shown in transverse section, and in the same plane, as indicated by the dotted line in Fig. 1. The compression and tension members may be of any approved form, but the strut C is to be one wherein the support or fulcrum of the lever is longitudinally adjustable on the strut proper, and is preferably composed of a strut section proper or continuous strut piece as at 1, having a collar a , for the compression member A, a seat b for the passage of the tension member B, and slotted longitudinally as at 2, 2, for the passage of the brake-lever E. The elongated slots 2, 2, may be, and preferably are, of greater width than the thickness of lever E, so as to permit the lever to be arranged at different angles, as indicated by the dotted line $f-f$, Fig. 4, and the strut is of cylindrical form and externally threaded for the

reception of an internally threaded sleeve 5, also longitudinally slotted, as at 6, 6^a, for the passage of the lever, and provided with pin-holes 7, 7^a, for the passage of the fulcrum-pin 8, of the brake lever E.

In setting up the beam, the adjustable sleeve 5, or the adjustable fulcrum pin support, is first placed on the strut section 1, and rotated until the pin holes 7, 7^a, are in the desired position. The strut is then secured to the compression member A, and a double inclined tension member B, placed in the notch or seat *b* of the strut and the nuts on the end of the tension member tightened up in the usual manner. The brake lever E is then passed through the slots of the sleeve 5 and strut section 1, and the fulcrum pin 10 is passed through the pin holes 7, 7^a, and the pin-hole in lever E, which completes the beam. Thereafter, the fulcrum of the lever E can be moved longitudinally to or from the compression member A by withdrawing the fulcrum pin and lever and rotating the sleeve 5, in the proper direction, after which the lever and fulcrum-pin, on being replaced will prevent the further rotation of the sleeve and maintain the lever fulcrum in the position to which it has been adjusted. Owing also to the particular construction chosen for illustration of this invention, to wit: the threaded slot strut and internally threaded sleeve support for the fulcrum pin, of the brake lever, the strut can

be readily changed from a right hand to a left hand strut at will.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a trussed brake-beam, the combination with the strut or post, of a longitudinally adjustable fulcrum pin support; substantially as and for the purposes specified.

2. In a trussed brake-beam, the combination with a continuous strut or post, of a rotatable adjustable fulcrum pin support arranged thereon; substantially as and for the purposes specified.

3. In a trussed brake-beam, the combination with the strut or post, of a rotatable longitudinally adjustable fulcrum-pin support; substantially as and for the purposes specified.

4. The combination in a strut or post for trussed brake-beams, of a longitudinally slotted externally threaded post, and a slotted internally threaded sleeve having pin holes for the reception of a fulcrum pin; substantially as and for the purposes specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 5th day of June, 1893.

HENRY B. ROBISCHUNG.

Witnesses:

E. B. LEIGH,

E. T. WALKER.