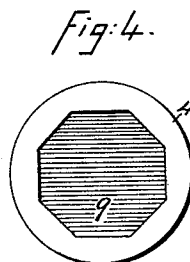
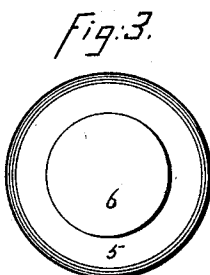
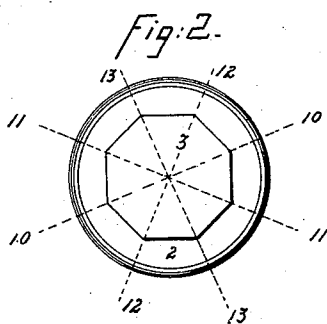
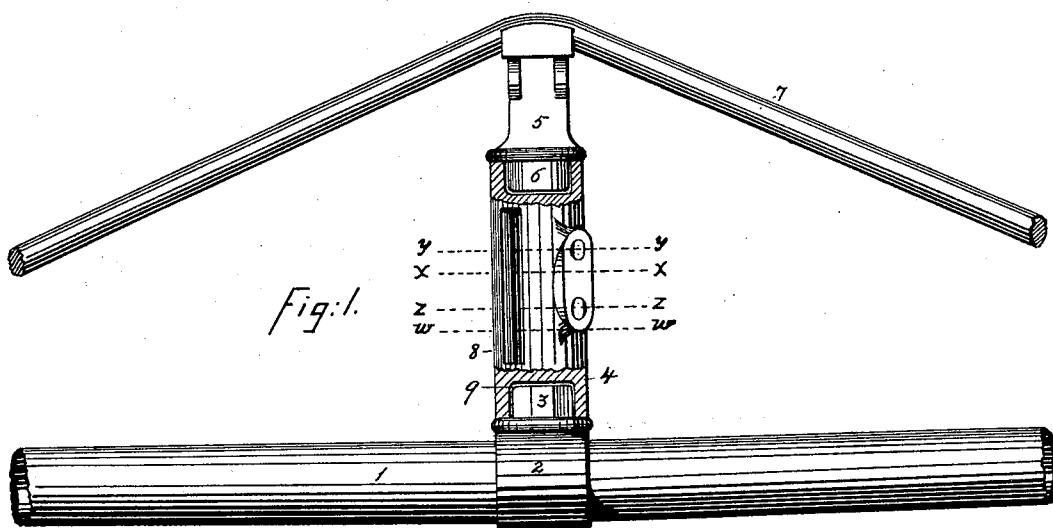


(No Model.)

C. HOYLE.
STRUT FOR TRUSSED BRAKE BEAMS.

No. 583,055.

Patented May 25, 1897.



WITNESSES:

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STRUT FOR TRUSSED BRAKE-BEAMS.

SPECIFICATION forming part of Letters Patent No. 583,055, dated May 25, 1897.

Application filed January 28, 1897. Serial No. 621,121. (No model.)

To all whom it may concern:

Be it known that I, CHARLES HOYLE, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Struts for Trussed Brake-Beams; and I declare the following to be a full, clear, and exact description of the invention, 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, and to the reference-numerals marked thereon, which form a part of this specification.

Similar parts throughout the different figures are correspondingly marked.

In the accompanying drawings, Figure 1 is a plan view of so much of a trussed brake-beam as is necessary in order to show my present invention, which relates only to the strut or king-post. Fig. 2 is an enlarged end view of the member of the strut located at the compression-member end of said strut. Fig. 3 is an enlarged end view of the member of the strut located at the tension-rod end of said strut; and Fig. 4 is an enlarged end view of the middle or fulcrum-supporting member of the strut as it appears when seen from either end, both ends being the same in construction.

My present invention relates to that class of brake-beams commonly termed "trussed" brake-beams in which a strut or king-post forms an essential part; and it consists in a novel and improved construction of such strut or king-post, as hereinafter more fully set forth and claimed, by which a more generally applicable, and therefore more economical, construction is secured. Where such beams are constructed with a rigid strut formed of one member, it is necessary to provide a right and a left hand beam, the same being determined by the direction given to the lever-bar slot in the strut. It is also necessary to provide beams with this slot arranged at various angles with respect to a line running transversely through the center of the strut, and it is also necessary to provide beams with the fulcrum-pin hole for the lever-bar located at various distances from the center of the compression member. All this necessitates making and keeping on hand a number of pat-

terns and keeping on hand a variety of beams, the parts of which are not interchangeable.

It is the object of my present invention to so construct this strut that while preserving simplicity of construction the one strut will satisfy the varied requirements mentioned by a simple change in the association and relationship of its parts, of which there are three, so constructed and adapted as to admit of making the required changes. I am well aware that these results have heretofore been secured by more or less complicated constructions, involving in some instances threads or grooves upon the strut. In most of these present constructions the change from a right to a left hand beam is secured by what is known as a "swiveling" king-post, in which the fulcrum-supporting portion or member of the strut is simply rotated from one position to the other while remaining in position in the beam. I therefore do not claim these features broadly, but only my improved construction for the attainment of the desired results.

In the construction of my strut I employ three detachable members or parts, one for the compression-member end of the strut, one for the tension-rod end of the strut, and a middle part for the support of the fulcrum of the lever-bar. The middle part or member, supporting the fulcrum and provided with the lever-bar slot, is held from rotation while in position in the beam by a projecting lug having four or more facets, said lug being attached to or formed in one with either one of the adjoining members and projecting into a correspondingly-shaped socket in the other adjoining member, this construction being provided at either one or both ends of the middle member. I prefer that this construction shall be only at one end, and I have therefore so shown it in the accompanying drawings. To change the position of the lever-bar slot, the middle member is removed and then placed back in a different position. To change the position of the fulcrum-pin hole, I make both ends of the middle member alike and place the fulcrum-pin hole or holes to one side of the center of said member. Then by simply turning said member end for end I secure a different position for the fulcrum-

pin hole or holes. The engaging lug at one end may be circular, if desired, as shown in the accompanying drawings.

The nature and operation of the improvement will be readily understood by the following explanation.

In the accompanying drawings, 1 indicates the compression member of the beam; 2, the member of the strut located at the compression-member end of said strut; 3, the lug with four or more facets, which in this case is attached to or formed in one with the member 2; 4, the middle or fulcrum-supporting member of the strut; 5, the member of the strut, located at the tension-rod end of said strut; 6, the projecting lug of the latter member, which in this case is shown round; 7, the tension member; 8, the lever-bar slot; 9, the socket corresponding in shape to the shape of the faceted lug, which projects into it at one or both ends of the strut. It is apparent that if it is desired to change a beam having this construction from a right to a left hand beam, where the lever-bar slot originally occupied the position indicated by the dotted line 10 10 in Fig. 2, it is only necessary to remove the middle member 4 of the strut and then replace it on the lug 3 in such position that the slot will correspond with the dotted line 11 11 of said figure, while if it is desired to simply change the angle of the slot the middle member is placed in such position that the slot will correspond with the dotted line 12 12 of the same figure, and if it originally occupied the position 12 and it is desired to change from a right to a left hand beam then the middle member 4 is placed on the lug in such position as will make the slot correspond with the dotted line 13 13. In the construction illustrated two fulcrum-pin holes are shown, located at $y y$ and $z z$, Fig. 1. By turning the middle member 4 end for end, so that the lug 6 will project into the socket 9, these fulcrum-pin holes will be changed to the positions indicated by the dotted lines $w w$ and $x x$, thus affording four different locations for the fulcrum-pin.

Having thus fully described my invention, I claim—

1. A strut or king-post for a trussed brake-beam, composed of two end members and a non-swiveling middle member, the latter

formed of one integral piece reversible end for end, as described, and adapted to engage with one or both of the said end members in a manner to prevent rotation about its longitudinal axis.

2. A strut or king-post for a trussed brake-beam, composed of two end members and a non-swiveling middle member, the latter formed of one integral piece and adapted to engage with one or both of the end members, in more than two positions, and in a manner to prevent rotation, about its longitudinal axis.

3. In a strut or king-post for a trussed brake-beam, the combination of the member, 2, having a collar for encircling the compression member upon one end, and a projecting faceted lug, 3, at the other end; the middle member, 4, having faceted sockets, 9, at both ends; with the end member, 5, having a projecting lug, 6, at one end, and a groove or cut for the reception of the tension-rod at the other end.

4. A strut or king-post for trussed brake-beams, composed of two end members one or both of which are provided with projecting faceted lugs, and one middle member having faceted sockets at both ends adapted to engage with the said lugs upon the end members, substantially as and for the purposes shown and described.

5. A strut or king-post for trussed brake-beams composed of two end members and a middle member, the latter provided with a fulcrum-pin hole located between its middle and either end, and reversible end for end as described, and adapted to engage with both of said end members.

6. A strut or king-post for a trussed brake-beam composed of two end members, one or both of which are provided with faceted lugs, and a middle member, the latter having faceted sockets adapted to positively engage with one or both of the end members in more than two predetermined and fixed positions about its longitudinal axis.

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

CHARLES HOYLE.

Witnesses:

J. M. THOMPSON,
J. C. STEWART.