

(No Model.)

C. K. PICKLES.
BRAKE BEAM.

No. 569,666.

Patented Oct. 20, 1896.

Fig. 1.

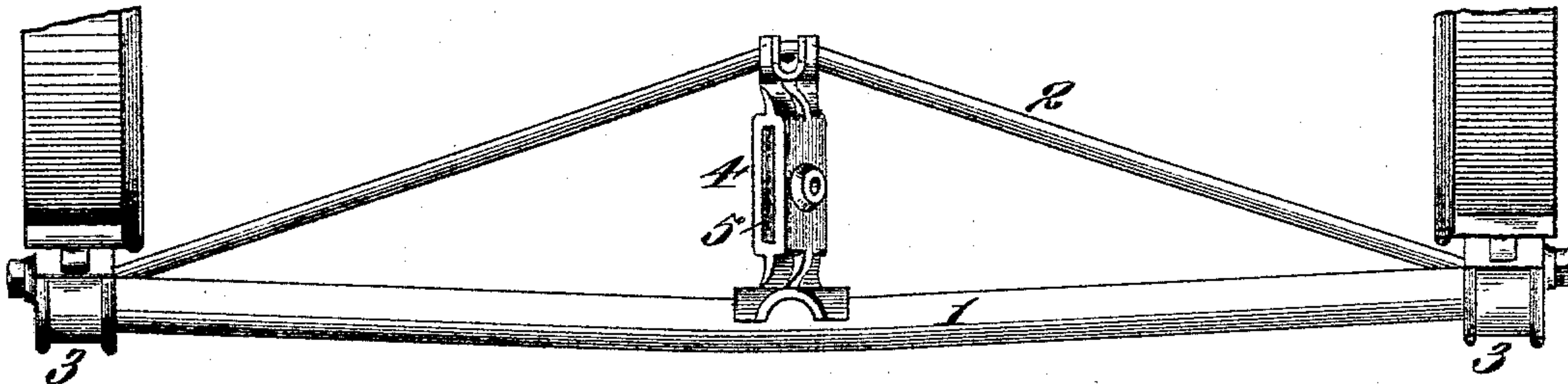


Fig. 2.

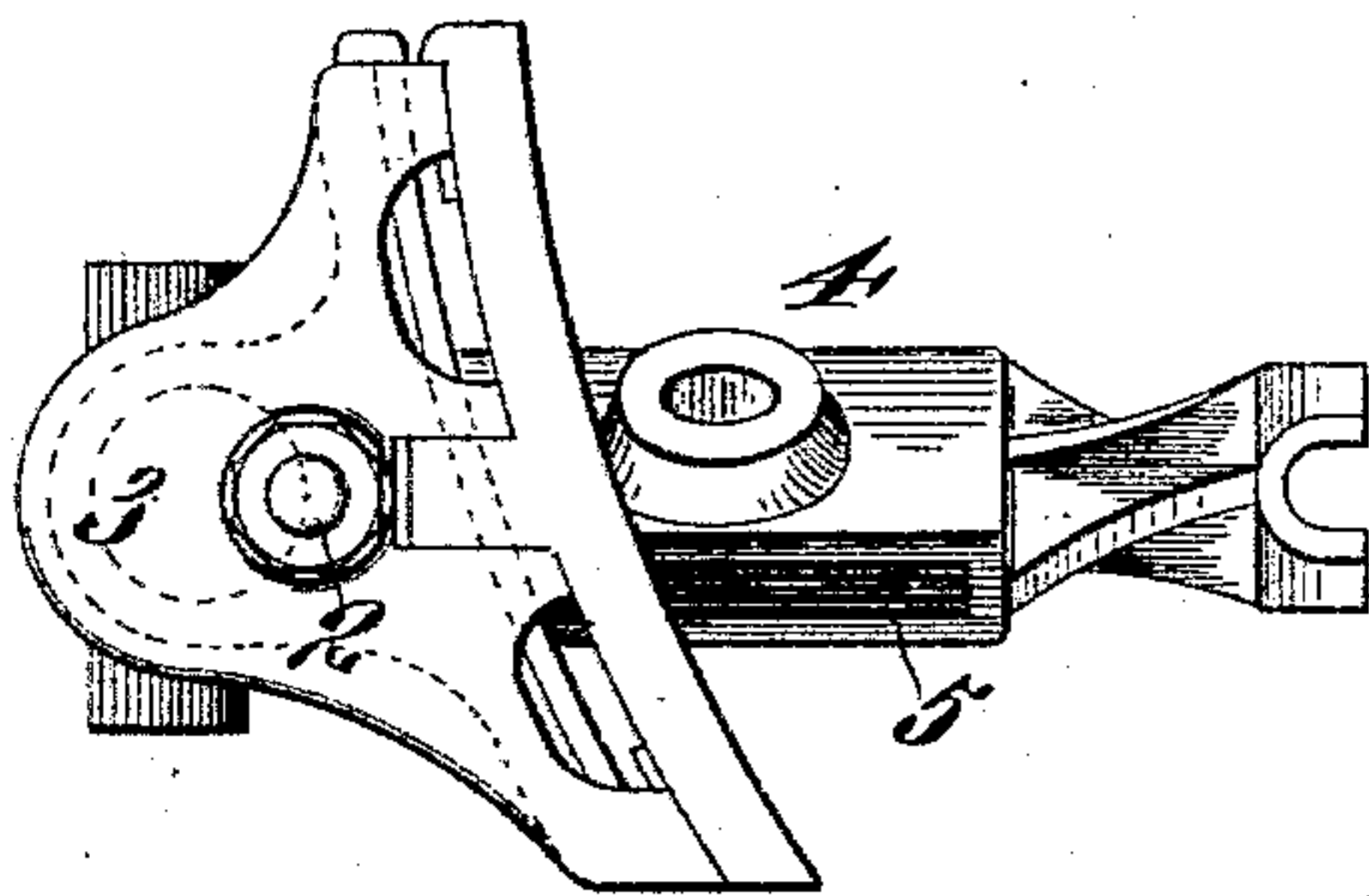


Fig. 3.

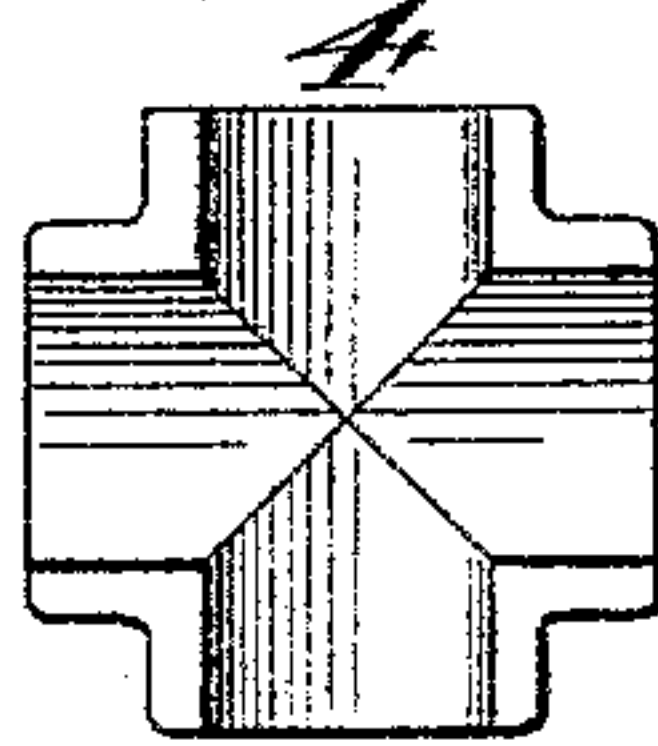


Fig. 4.

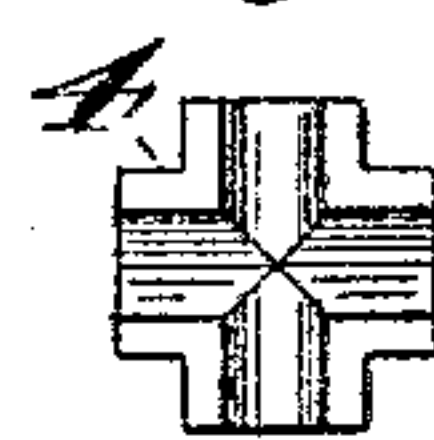


Fig. 5.
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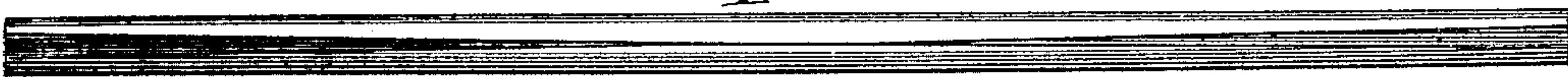


Fig. 6.

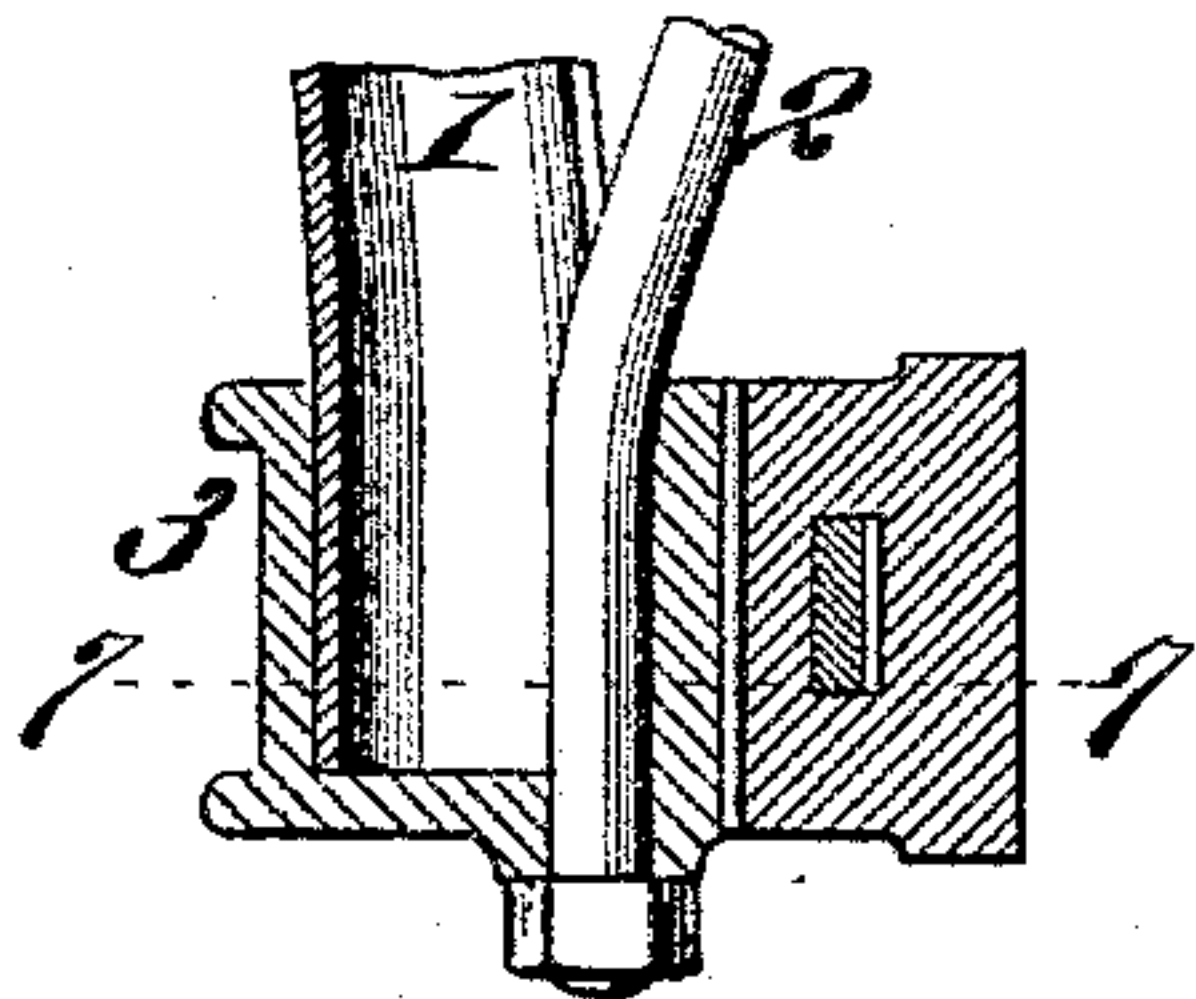


Fig. 7.

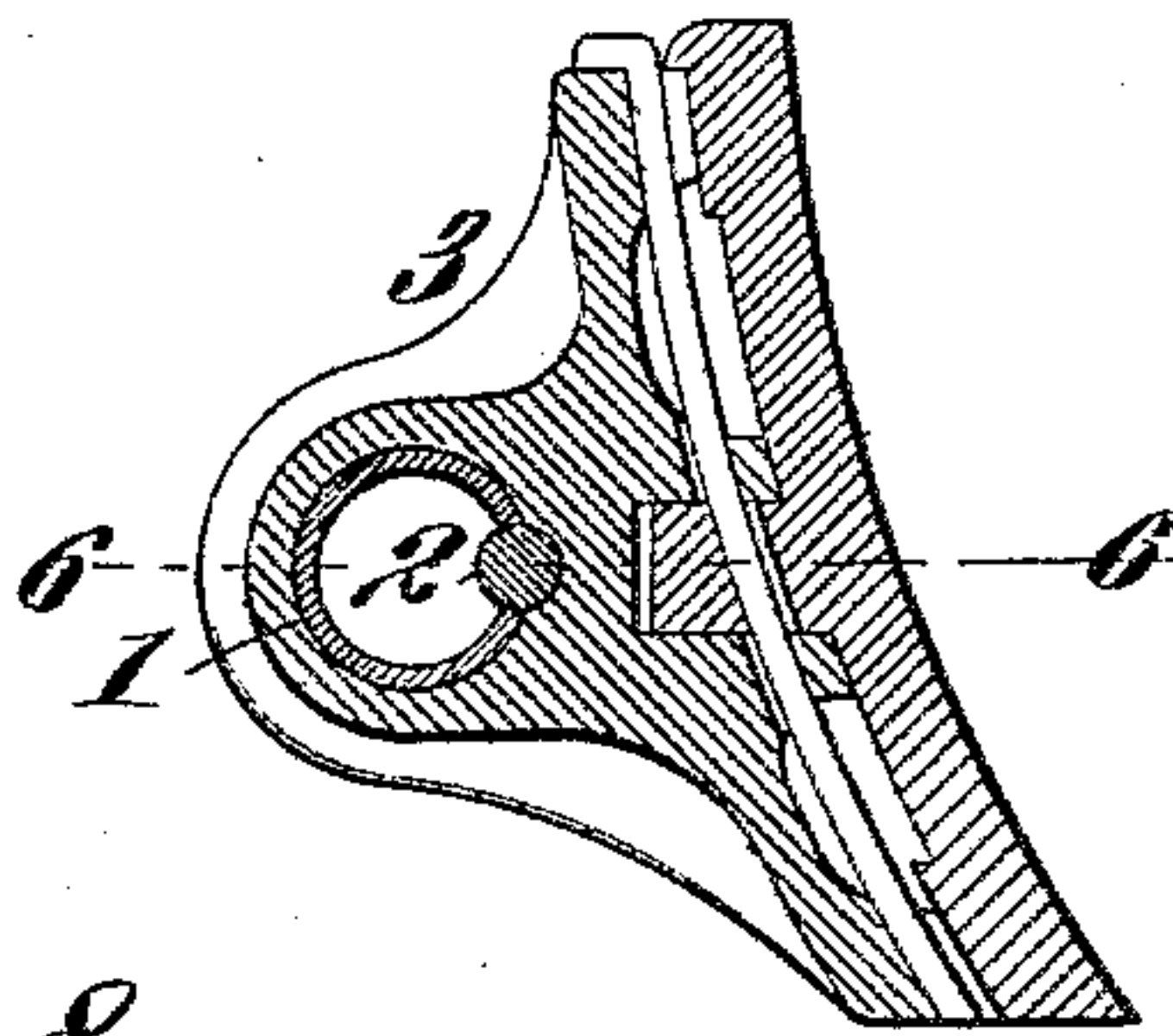
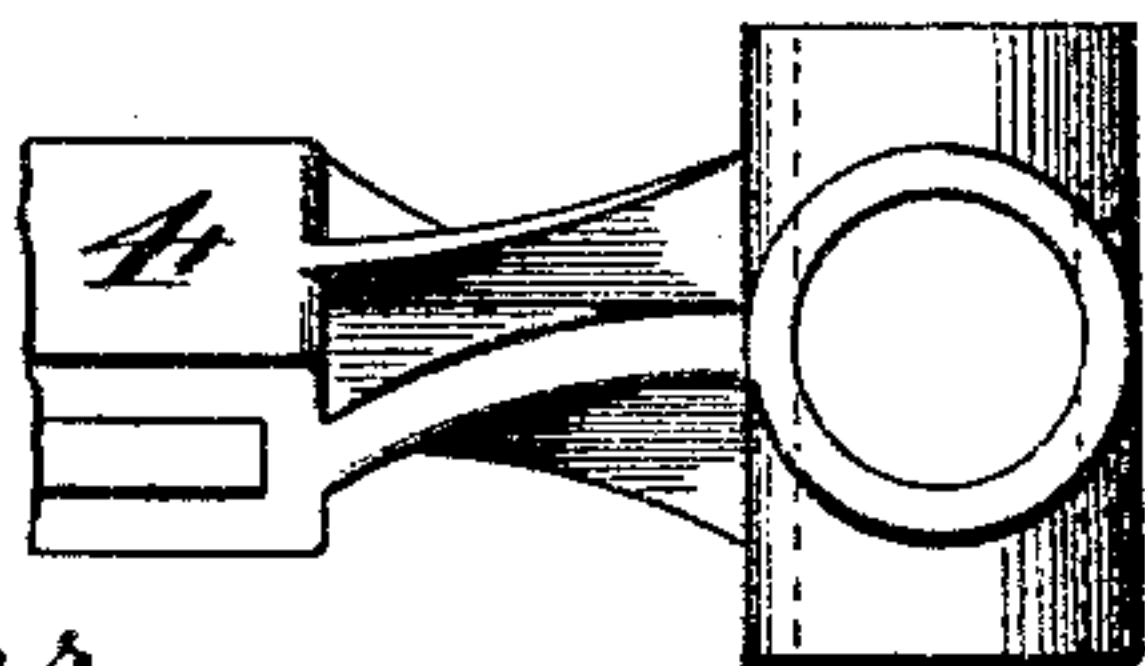


Fig. 8.



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UNITED STATES PATENT OFFICE.

CHARLES K. PICKLES, OF ST. LOUIS, MISSOURI, ASSIGNOR TO J. J. MCCARTHY,
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BRAKE-BEAM.

SPECIFICATION forming part of Letters Patent No. 569,666, dated October 20, 1896.

Application filed September 8, 1896. Serial No. 605,158. (No model.)

To all whom it may concern:

Be it known that I, CHARLES K. PICKLES, a citizen of the United States, and a resident of the city of St. Louis, in the State of Missouri, have invented a new and useful Improvement in Brake-Beams, of which the following is a specification.

My invention relates to truss brake-beams, and has for its principal objects to adapt the beam for use at either end of the car, as desired, and to assemble the several members of the beam so that they will retain their respective positions relatively to one another.

To these ends my invention consists in a strut adapted to be mounted in positions at right angles to each other.

It also consists in a strut formed in a single piece and having cross-grooves in its ends adapted to fit over the tension member and compression member, all as will hereinafter more fully appear.

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

In the accompanying drawings, which form part of this specification, Figure 1 is a plan view of my device. Fig. 2 is an enlarged end view thereof, omitting the tension member. Figs. 3 and 4 are views of the respective ends of the strut. Fig. 5 is a view of the beam proper or compression member, showing the longitudinal slots therein. Fig. 6 is a horizontal sectional detail at one end of the brake-beam on the line 6 6 of Fig. 7. Fig. 7 is a vertical sectional view of the brake-beam near one end thereof, as indicated by the line 7 7 of Fig. 6. Fig. 8 is a detail showing a modification of the strut at the end which fits the compression member.

Like symbols refer to like parts wherever they occur.

The beam proper or compression member 1 of the present brake-beam is a metallic tube and is formed preferably of a sheet of steel rolled into tubular form with its edges meeting at the middle of the beam, but diverging toward its respective ends, as shown in Fig. 5. The slots thus formed in the beam are made of the same width as the tension member 2, and this tension member is bent near its respective ends, so as to have its end por-

tions lie in said slots and extend out through holes provided therefor in the respective brake-heads 3. Each of these brake-heads 3 has a socket into which the end of the compression member fits, and a semicylindrical groove is formed in the wall of said socket in alinement with the hole through which the tension member passes. By this construction the tension member necessarily lies partly in the groove inside of the brake-head socket and partly in the space between the edges of the compression member, and as the tension member fills the space between such edges the brake-head, the compression member, and the tension member are rigidly and immovably fastened together. The projecting ends of the tension member are screw-threaded and furnished with nuts whereby any desired power may be applied to the tension member and therefore to the truss-frame.

The strut or king-post 4 is preferably of a single piece or casting, having at each end cross-grooves arranged at right angles. The cross-grooves in one end are adapted to fit over the tension member, and those at the other end are adapted to fit over the compression member. When the several members of the truss-frame are assembled, the stress produced by the tension member holds the strut firmly in place.

A slot 5, adapted to accommodate the equalizing-lever of the brake, is made through the strut in a plane about forty-five degrees from the planes of the respective cross-grooves, so that the equalizing-lever is shifted from an inclination of forty-five degrees on one side to the like inclination on the other side, according as one set of cross-grooves or the other is used, to fit over the tension member and the compression member. The truss-frame is thus capable of use at either end of the car, according to the inclination of the equalizing-lever on one side or the other.

In the modification shown in Fig. 2 the cross-grooves for the compression member assume the form of tubular sockets of the size and shape of the compression member, so that the compression member is inserted endwise into such tubular socket or collar instead of having the strut merely abut against said member.

What I claim as new, and desire to secure by Letters Patent, is—

1. A brake-beam comprising a strut made of a single piece and having cross-grooves at each end, those at one end being adapted to fit over the compression member and those at the other end being adapted to fit over the tension member, substantially as and for the purpose set forth.
2. A brake-beam comprising a strut having

cross-grooves in its ends adapted to fit over the tension member and the compression member, respectively, substantially as and for the purpose set forth.

Signed at St. Louis, Missouri, September 5, 1896.

CHARLES K. PICKLES.

In presence of—

JAMES A. CARR,

T. PERCY CARR.