J. M. HANSEN.

BRAKE BEAM.

APPLICATION FILED OCT. 27, 1911.

1,067,810.

Patented July 22, 1913.

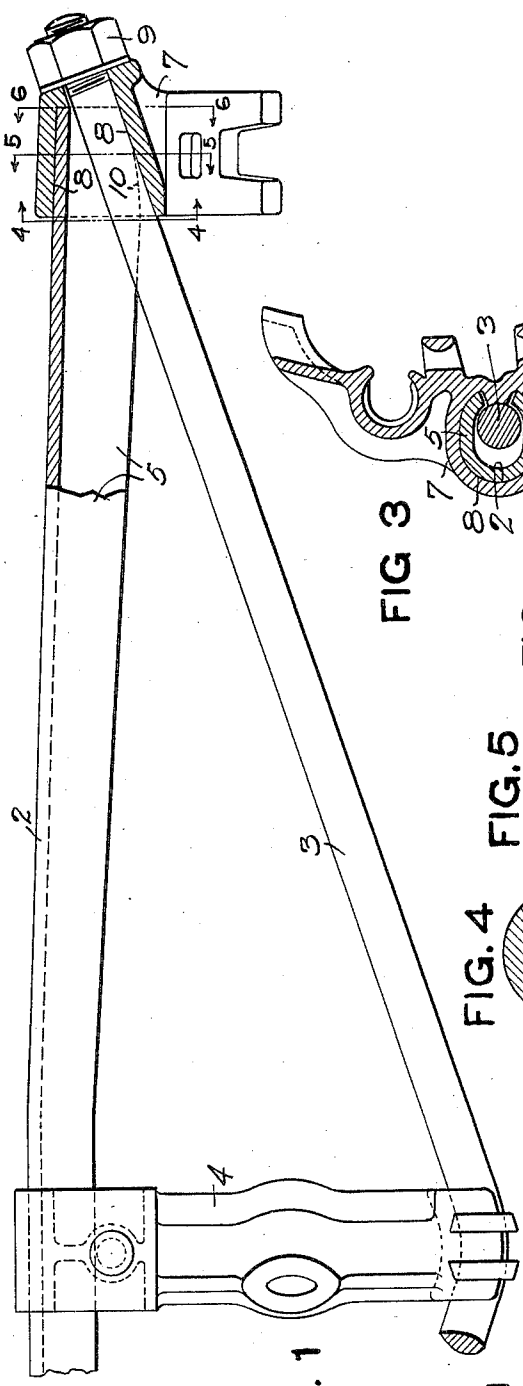


FIG. 1

FIG. 3

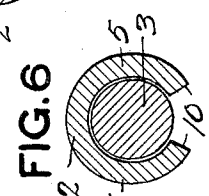


FIG. 6

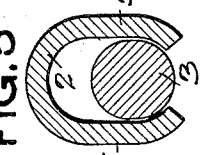


FIG. 5

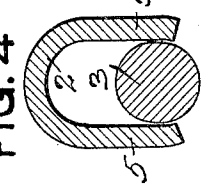


FIG. 4

FIG. 2

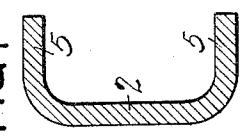


FIG 7

WITNESSES.

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BRAKE-BEAM.

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Application filed October 27, 1911. Serial No. 657,132.

To all whom it may concern:

Be it known that I, JOHN M. HANSEN, a citizen of the United States, and resident of Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Brake-Beams; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to brake-beams, and more particularly to the type known as a trussed brake-beam.

The object of my invention is to provide a light and rigid brake-beam which will withstand severe usage to which such brake-beams are subjected and maintain the shoes in proper position with reference to the wheels.

To these ends my invention comprises the novel features hereinafter set forth and claimed.

In the accompanying drawing, Figure 1 is a plan view of a portion of a brake-beam embodying my invention and partially in section. Fig. 2 is a rear view of same; Fig. 3 is an enlarged section on the line 3—3 Fig. 2; Figs. 4, 5, 6 and 7 are enlarged sections on the lines 4—4, 5—5, 6—6 and 7—7, respectively, of Figs. 1 and 2, the brake head being removed.

My improved brake-beam comprises the compression-member 2, the tension-member 3 and the king-post 4. The compression-member 2 is formed of metal of suitable thickness and may be formed from a rolled or bent channel, the original cross-section of same being indicated in Fig. 7 taken at or near the mid-portion of the compression-member. This channel-member is then subjected to compression so as to force the flanges 5 toward each other, and at the same time gradually curving the flanges as the outer ends of the beam are reached, as clearly shown by the sections 4, 5 and 6. This compression of the member is commenced to a small degree just beyond the mid-portion of the beam and gradually increases toward the outer end of the beam until at the end, as indicated in Fig. 6, the flanges are curved until the compression-member almost surrounds the tension-member 3. This compressing of the flanges of the member 2 will act to decrease the thickness of the beam or taper it from the mid-portion to the end as shown in the rear view Fig. 2 and at the same time the compression member is increased in width toward the outer end. The brake-head 7 has the circular flaring opening 8 which receives the end of the compression-member 2 and the tension-member 3, and this brake-head is held in place by the nut 9 which is threaded onto the end of the tension-member 3 projecting beyond said brake-head.

The outer ends of the compression member 2 are slightly cut away as at 10 to enter the flaring seat in the brake-head, and it is this extreme end-portion which is bent around in a substantially circular form to embrace the outer end of the tension-member 3. With a compression-member 2 formed in this manner and united with the tension-member and brake-head, I provide a very strong and rigid construction in which the strength is increased at the outer end of the beam where the greatest strain comes and in consequence the brake-shoe is held in proper alinement with the wheel and the outer end of the brake-beam is not liable to sag or bend.

What I claim is:

A brake-beam comprising a compression-member, a tension-member, a king-post connecting same, said compression-member formed of a channel-section, the flanges of said channel gradually approaching each other from or about, the mid-portion of said beam to the ends thereof, and gradually bent to form a round section at or adjacent the ends.

In testimony whereof, I the said JOHN M. HANSEN have hereunto set my hand.

JOHN M. HANSEN.

Witnesses:

ROBERT C. TOTTEN,

JOHN F. WILL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."