

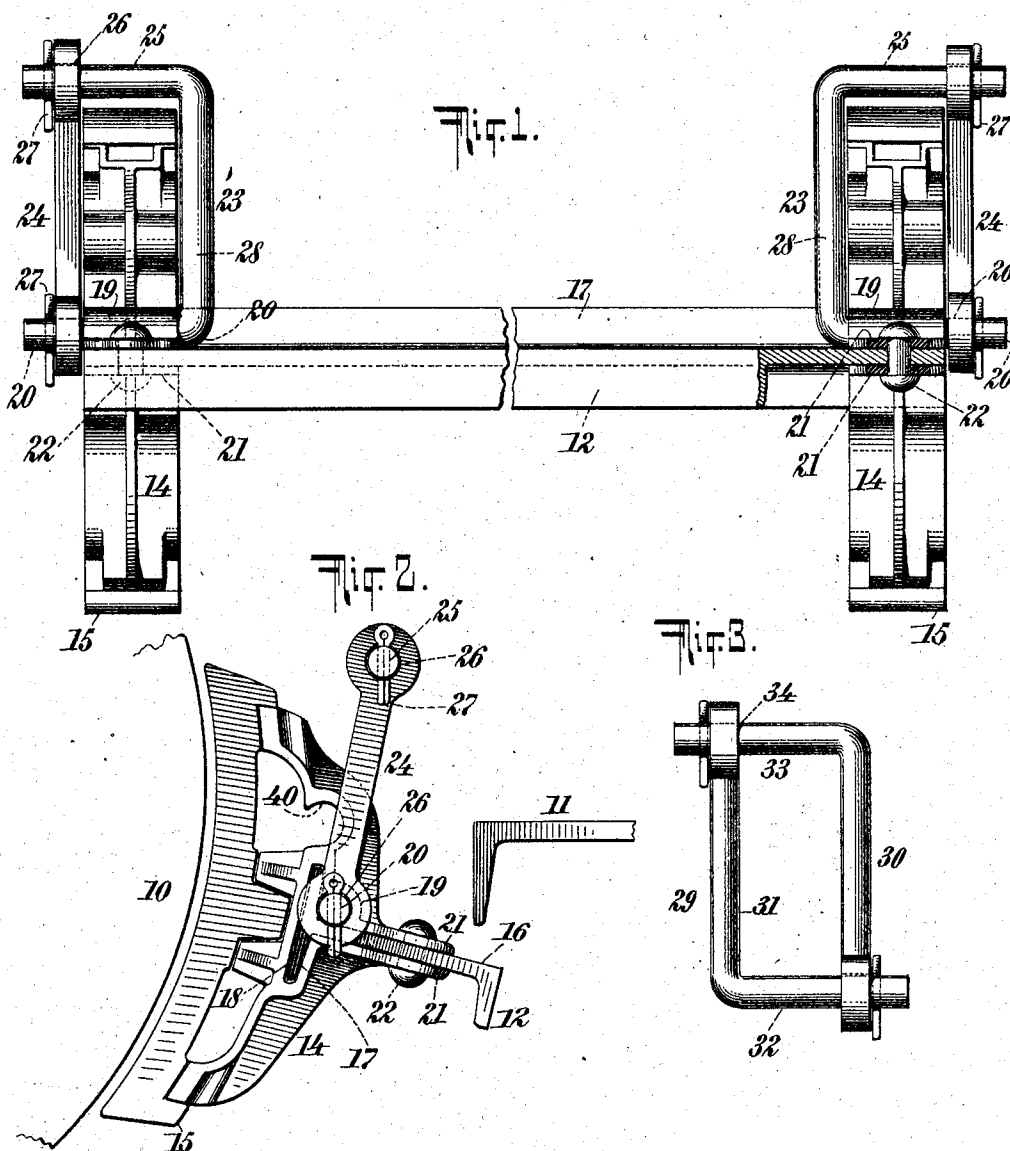
No. 773,003.

PATENTED OCT. 25, 1904.

S. A. CRONE.
BRAKE BEAM.

APPLICATION FILED JULY 27, 1904.

NO MODEL.



WITNESSES:

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SETH A. CRONE, OF NEW YORK, N. Y.

BRAKE-BEAM.

SPECIFICATION forming part of Letters Patent No. 773,003, dated October 25, 1904.

Application filed July 27, 1904. Serial No. 218,316. (No model.)

To all whom it may concern:

Be it known that I, SETH A. CRONE, a citizen of the United States, and a resident of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Brake-Beams, of which the following is a specification.

The invention relates to improvements in brake-beams for railway-cars; and it consists in the novel features and combinations of parts hereinafter described, and particularly pointed out in the claims.

My invention pertains more particularly to novel means for hanging the brake-beams and to a novel construction of brake-shoe head for use on flanged-metal body-beams.

One object of my invention is to produce an extremely durable and simple hanger and one capable of efficiently supporting the brake-beam, while at the same time allowing of the proper movement thereof.

A further object of the invention is to provide a suitable hanger and brake-shoe head for application to flanged-metal body-beams, whereby the lower wrist of the hanger may be located in the angle formed by the flange and web of said body-beam, the lower end of the hanger thus being as nearly as possible centrally of said body-beam.

The invention will be fully understood from the detailed description hereinafter presented, reference being had to the accompanying drawings, in which—

Figure 1 is an edge view, partly in section and partly broken away, of a brake-beam equipped with heads and hangers constructed in accordance with and embodying my invention. Fig. 2 is an end view of same and illustrates a part of a car-wheel and a part of the usual sand-plank or channel-bar of the truck, and Fig. 3 is a detached elevation of a modified construction of hanger embodying my invention.

In the drawings, 10 designates a car-truck wheel, 11 the usual sand-plank or channel-bar of the car-truck, and 12 the body-beam for the brakes, said beam 12 extending transversely of the truck and carrying on its ends

the heads 14 to receive in the customary manner the brake-shoes 15.

The body-beam 12 is formed from a section of rolled beam having a web 16 and flange 17 to receive the brake-shoe heads 14. The body-beam 12 may be of any of the several forms of beams known in this art, the most common form of body-beam being of I shape in cross-section.

The heads 14 are of known form and construction, with the exception of their central portions, at which said heads are formed with the socket 18 to fit upon the flange 17 of the body-beam, the loop 19 to receive the lower wrist of the hanger, and the flanges 21, which snugly fit against the web 16 of the body-beam and are thereto secured by rivets 22. The loop or sleeve portion 19 is of special importance in that it is located at the angle formed by the adjoining portions of the web 16 and flange 17 of the body-beam, where the recess finally receiving the wrist 20 of the hanger is formed by the said sleeve or loop portion 19 and the adjoining portions of said body-beam and whereby the said wrist may be brought close down against said beam. The flanges 21 extend outwardly upon the web 16 of the body-beam and when riveted to the latter hold the heads 14 firmly upon said beam. In respect of the heads 14 the novel features thereof consist of the loop or sleeve portion 19, located in the angle between the flange and the web of the body-beam and in the flanges 21, which extend outwardly upon said web and are thereto riveted.

The hangers in their preferred form each comprises a three-sided rod 23 and an I-bar 24, the lower member of the rod 23 being numbered and forming the wrist 20 and the upper member of said rod 23 being numbered and forming the upper wrist 25, which will be taken in the customary way by the usual brackets on the body of the car-truck. The I-bar 24 is simply a plain bar having eyes or openings 26 in its upper and lower ends adapted to receive the ends of the lower and upper members 20 25 of the rod 23, said members 20 25 beyond the vertical outer plane of the bar 24 being provided with suit-

able apertures to receive the locking-pins 27. The rod 23 is always at the inner side of the hanger and the bar 24 is always at the outer side of the hanger, as shown in Fig. 1, and the lower end of the bar 24 is flat and of sufficient dimensions to overlap the edges of the loop or sleeve 19 and adjacent portions of the body-beam 12, as shown in Fig. 2. In applying the hangers to the beam the rod 23 will first be placed in position by having its lower member 20 slipped into and at its outer end through the sleeve or loop portion 19 of the head, said member 20 always being inserted into said loop or sleeve portion from the inner end of the latter. Thereafter the bar 24 of the hanger is simply passed upon the outer ends of the members 20 25 of the rod 23 and there secured by means of the pins 27. The hanger constructed and applied as above explained is extremely simple and durable and comparatively inexpensive, and in addition it very efficiently holds the body-beam without permitting undue laxity of movement in the latter. One of the important features of the rod 23 is that it carries an integral wrist 20 at this lower end in position to enter the loop or sleeve 19 from the inner end of the latter and close down to the web of the body-beam, it being my purpose that the said wrist 20 shall be held close down against said web. The essential feature of the rod 23 is therefore that it has a vertical member 28 and the lower horizontal right-angular member 20 adapted to be passed into the loop or sleeve 19 from the inner end of the latter, and the more essential feature of the bar 24 is that at its lower end it is formed with the aperture 26 to pass upon the wrist 20 and is of sufficient size to lap against the outer edges of the loop or sleeve 19 and adjacent portions of the body-beam, and therefore while I prefer the construction of hanger shown in Fig. 1 I desire not to limit my invention to the special details of the upper end of said hanger, because these details may be changed within the scope of my invention and without varying the result attained by me. For illustration, in Fig. 3 is presented a modified form of hanger applicable as a substitute for the hanger shown at the right-hand side of Fig. 1, and in this modification the hanger is formed of two rods 29 30, the rod 29 furnishing a vertical member 31 and a lower wrist member 32, corresponding with the vertical member 28 and wrist 20 of the rod 23, and the rod 30 has at its lower end an eye to receive the end of the wrist 32 and is of sufficient size to lap against the outer edges of the loop or sleeve 19 and adjacent portions of the body-beam. The modification shown in Fig. 3 differs only in its upper part from the construction illustrated in Fig. 1, and this difference resides in making the rods 29 30 of right-angular shape and providing the upper end of the rod 30 with an integral wrist 33 to

enter an eye 34, formed at the upper end of the rod 29, the construction of Fig. 3 showing the upper wrist for the hanger as made integral with the outer rod 30 instead of integral with the inner rod 29, and this change necessitating the placing of the upper eye 34 in the rod 29 instead of in the rod 30.

The brake-beams are provided at both of their ends with hangers, and in the present instance the hanger at one end of the beam will be a duplicate of the hanger at the other end thereof, except that said hangers will be reversed with respect to each other, so that the rod 23 shall always be at the inner side of the hanger and the eye bars or rods 24 at the outer side thereof and at the outer ends of the body-beam.

A further advantage of my invention is that when the lower wrist of the hanger is close to the body-beam, as shown in the drawings, instead of, for instance, at the loop 40 in the head 14 the arc described by the brake-beam in its usual movements is such that there is very much less danger of said beam becoming wedged against or striking the usual sand-plank or channel-bar 11, and a further advantage of the present construction is that in the event of the brake-shoe and brake-shoe pin becoming lost from the head 14 or in the event of the upper portion of said head becoming broken the hangers will not become loosened from the brake-beam and allow the latter to fall, but will continue to support said beam under any and all conditions in which the loop or sleeve portion 19 of the head remains in place upon the beam.

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

1. The brake-beam comprising the body-beam of flanged metal, the brake-shoe heads 14 having the sockets 18 to receive the flange of said body-beam and loop or sleeve portions 19 in the angle of said beam, and hangers whose lower wrists are in said loop or sleeve portions 19; substantially as set forth.

2. The brake-beam comprising the body-beam of flanged metal having the web portion 16 and flange 17, and the heads 14 having the sockets 18 to receive said flange 17, the flanges 21 to engage and be riveted to said web 16 and the loop or sleeve portions 19 in the angle of said beam, combined with the hangers whose lower wrists are in said loop or sleeve portions; substantially as set forth.

3. The brake-beam comprising the body-beam, and the heads on said beam, said heads having loop or sleeve portions 19, combined with the hangers comprising inner rods having right-angular wrist members to be inserted through said sleeve portions and outer eyebar members to pass upon the projecting ends of said wrist members; substantially as set forth.

4. The brake-beam comprising the body-beam, and the heads on said beam, said heads

having loop or sleeve portions 19, combined with hangers for said beam, said hangers comprising inner members having at their lower ends right-angular wrist members to enter the loops or sleeves of the brake-shoe heads and outer eyebars members having at their lower ends eyes or openings to pass upon the projecting ends of said wrist members and being of sufficient dimensions to lap against the outer edges of said loops or sleeves and said beam; substantially as set forth.

5. The brake-beam comprising the body-beam, and the heads on said beam, said heads having the loop or sleeve portions 19, combined with the hangers for said beam, said

hangers comprising the inner rods 23 having the lower wrist members 20 and the upper wrist members 25 and outer eyebars 24 having eyes at their upper and lower ends to pass upon the projecting ends of said members 20, 25, said members 20 being adapted to said sleeve or loop portions of the brake-shoe heads; substantially as set forth.

Signed at Manhattan borough, New York city, in the county of New York and State of New York, this 26th day of July, A. D. 1904.

SETH A. CRONE.

Witnesses:

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ARTHUR MARION.