

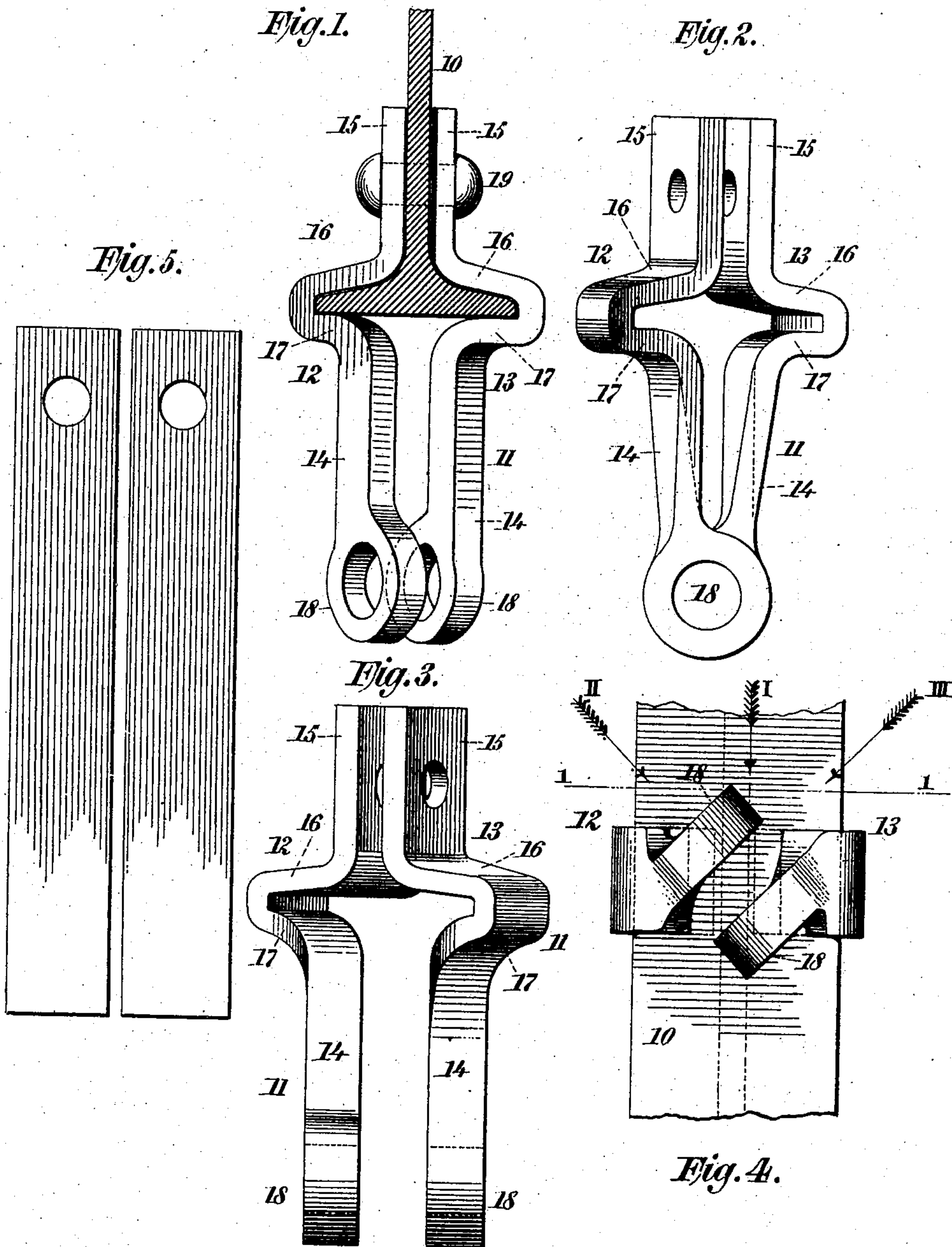
No. 762,285.

PATENTED JUNE 14, 1904.

S. A. CRONE.  
BRAKE BEAM.

APPLICATION FILED APR. 27, 1903.

NO MODEL.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## BRAKE-BEAM.

SPECIFICATION forming part of Letters Patent No. 762,285, dated June 14, 1904.

Application filed April 27, 1903. Serial No. 154,394. (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, 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; and it consists in the novel features of construction and combinations of parts hereinafter described, and particularly pointed out in the claims.

Brake-beams of the class to which my invention pertains comprise a rolled body-beam of suitable length, brake-heads of standard construction on the ends thereof, and a fulcrum for the brake-lever; and my invention has for its object to produce a novel fulcrum for use in such beams, said fulcrum being efficient and capable of being firmly and quickly applied to the beam. The fulcrum of my invention is formed from two pieces or blanks of forged metal conformed to the required shape and adapted to be firmly riveted or bolted to the 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, looking in the direction of the arrow I of Fig. 4, of a fulcrum constructed in accordance with and embodying my invention, the fulcrum being shown as secured to a usual body-beam, the latter being in section and partly broken away. Fig. 2 is a detached perspective view of same, taken in the direction of the arrow II of Fig. 4. Fig. 3 is a detached perspective view of same looking in the direction of the arrow III of Fig. 4. Fig. 4 is an outer end view of the fulcrum and beam, the latter being partly broken away; and Fig. 5 is a detached plan view of the blanks or pieces from which the fulcrum members are formed.

In the drawings, 10 designates a portion of the usual body-beam, and 11 the novel fulcrum of my invention, which is applied centrally upon one edge of the beam, the latter preferably being of commercial shape.

The fulcrum 11 is formed of the two separate

parts or members (numbered 12 13, respectively) which when brought into proper relation to each other at the opposite sides of the beam 10 form reversely angularly disposed sides 14 14, each having at its inner end the flanges 15 16 17 and at its outer end the integral eye 18, the eyes 18 being in line with each other and adapted to receive the pin or bolt upon which the usual brake-lever (not shown) will be mounted. The flanges 15 16 17 at the inner end of the sides 14 respectively engage the web and flange of the beam 10, and the flanges 15 of said sides are provided with suitable apertures to receive the rivet or bolt 19 by which the fulcrum may be secured to the beam 10.

The members 12 13 of the fulcrum may each be formed from a blank or strip of forged metal or merchant bar, as represented in Fig. 5, and it is one of the purposes of the invention to provide a suitable fulcrum capable of being manufactured from strips or pieces of forged metal or merchant bar. The upper ends of the blanks (shown in Fig. 5) are fashioned into the flanges 15, 16, and 17, and the remaining portions of said blanks are reversely twisted into the parallel angular relation in which they are shown, while the lower ends of the said blanks are fashioned into the integral eyes 18. Those portions of the blanks to be formed into the sides 14 and eyes 18 will be subjected to usual upsetting methods, whereby they become reduced in width and increased in thickness, the said sides 14 thus becoming of less width than the width of the flanges 15 16, this method being preferable to shearing off the edges of the blanks. The eyes 18 may be formed by upsetting the outer ends of the blanks and then punching the holes therein to form said eyes, or the said eyes may be formed by curling over the outer ends of said blanks and welding the extreme end edges of the blanks to the body thereof, thereby forming the integral eyes 18, both methods being familiar to metal-workers and requiring no special explanation.

It will be observed that when the members 12 13 are in position upon the beam 10 their sides 14 are sufficiently separated from each



other to receive between them the usual brake-lever, and, as illustrated in Figs. 3 and 4, the edge surfaces of the sides 14 face each other to receive the brake-lever between them, while the flat face of the said members are brought into contact with the beam 10, the edge surfaces of the sides 14 14 becoming thus disposed, due to the twisting in reverse directions of those portions of the blanks to be fashioned into the sides 14 and eyes 18, this twisting of the blanks also securing the angular relation of the sides 14 to the longitudinal line of the beam 10.

The fulcrum constructed in accordance with the present invention is particularly strong and durable and simple and inexpensive of manufacture, and being of forged or wrought metal is not liable to become fractured or broken. In addition the fulcrum members are so disposed as to very conveniently receive the brake-lever between them, and the integral eyes 18 afford broad bearing-surfaces and strong supports for the pin or bolt upon which the brake-lever is mounted.

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

1. The brake-beam fulcrum comprising the members 12, 13 formed of bars of forged metal at one end flanged to engage the body-beam and beyond said beam forming the angularly-disposed sides 14 and twisted to bring their edge surfaces facing each other to receive between them the brake-lever, the outer ends of said sides having the eyes; substantially as set forth.

2. The brake-beam fulcrum comprising the

members 12, 13 formed of bars of forged metal at one end having the flanges 15, 16 and 17 and beyond the body-beam forming the angularly-disposed sides 14 twisted to bring their edge surfaces facing each other to receive between them the brake-lever, the outer ends of said sides having the eyes; substantially as set forth.

3. The brake-beam fulcrum comprising the members 12, 13 formed of bars of forged metal flanged at their inner ends to engage the body-beam and beyond said beam having their width reduced and their thickness increased by forging and forming the angularly-disposed sides 14, which are twisted to bring their edge surfaces facing each other to receive between them the brake-lever, the outer ends of said sides having the eyes; substantially as set forth.

4. The brake-beam fulcrum comprising the members 12, 13 formed of bars of forged metal flanged at one end to engage the body-beam and beyond said beam forming the angularly-disposed sides between which the brake-lever is to be mounted, said sides having the enlarged outer ends containing the eyes to receive the brake-lever pin; substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 25th day of April, A. D. 1903.

SETH A. CRONE.

Witnesses:

ARTHUR MARION,  
CHAS. C. GILL.