No. 720,676. PATENTED FEB. 17, 1903.

S. A. CRONE.

BRAKE BEAM.

APPLICATION FILED NOV. 1, 1902.

NO MODEL.

Fig. 1.

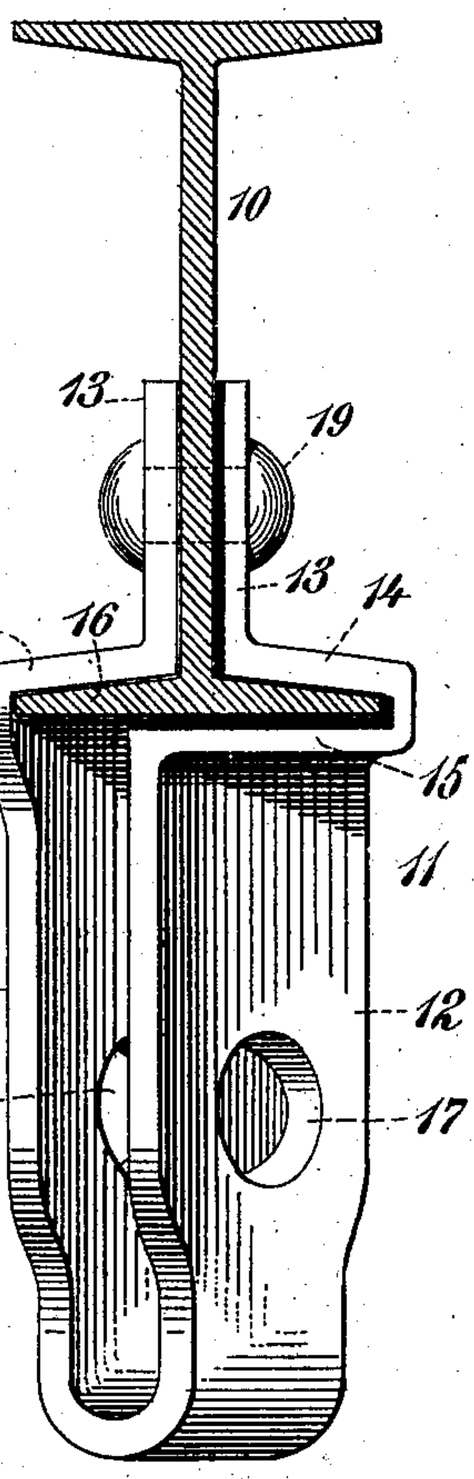


Fig. 2.

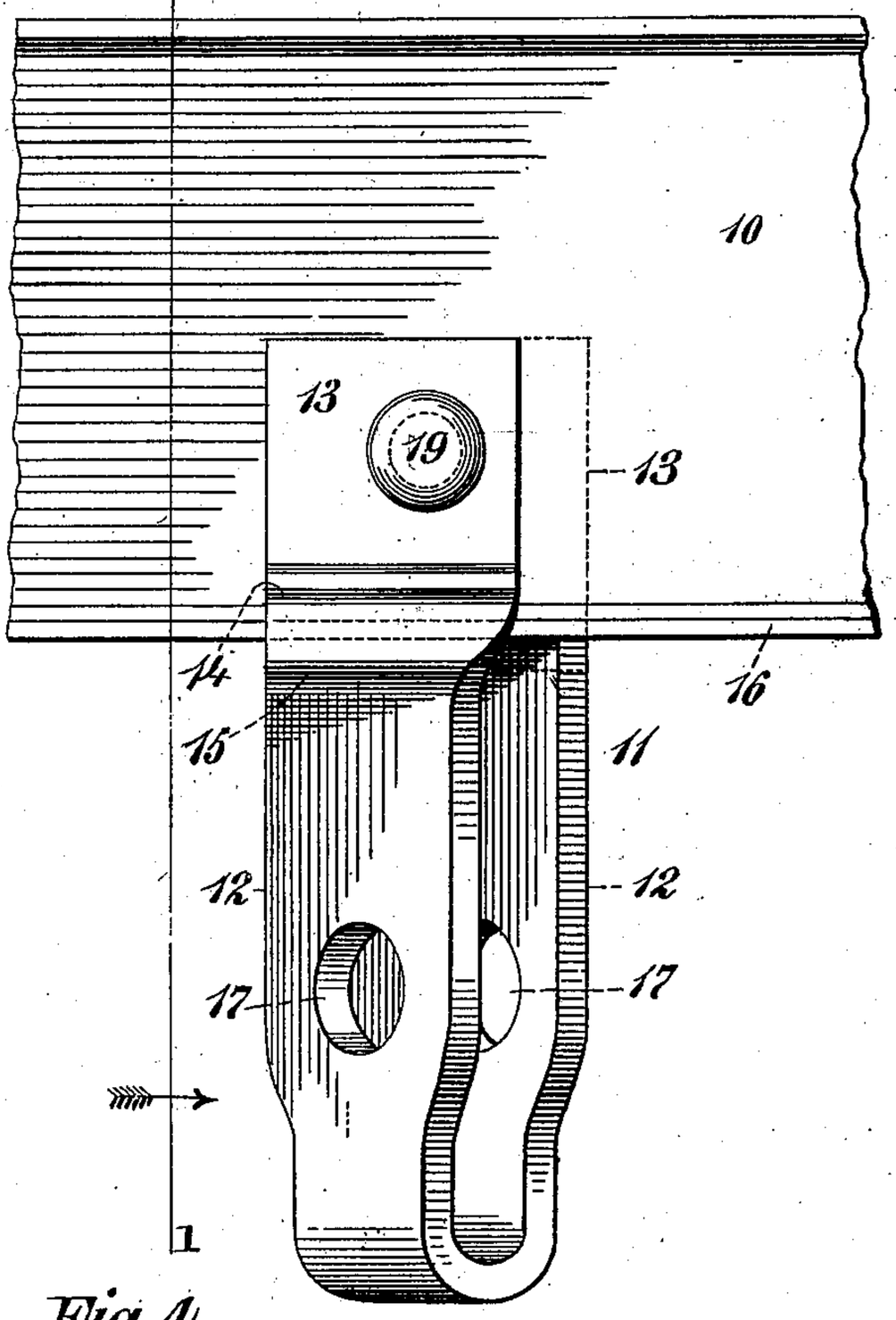


Fig. 4.

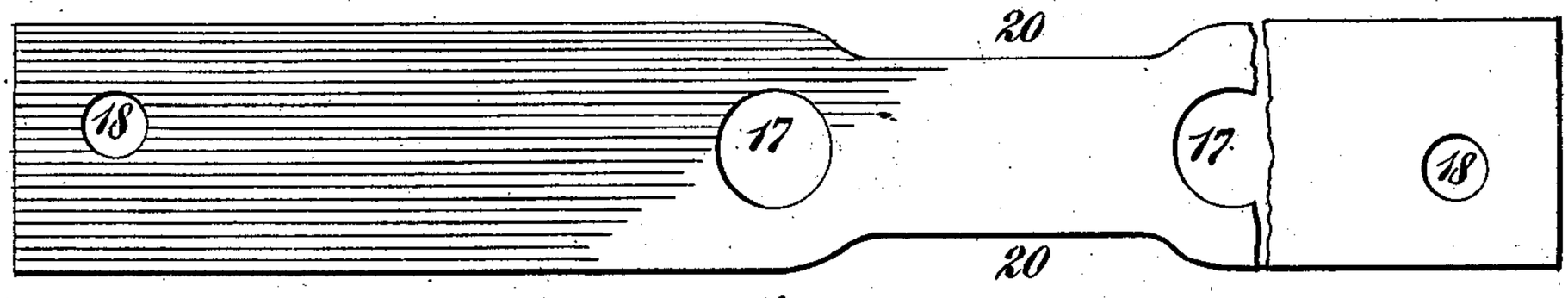
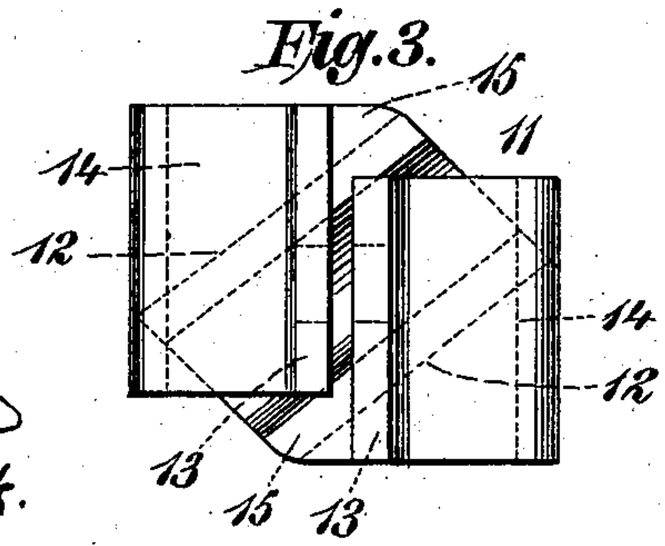


Fig. 3.



WITNESSES:

Gustave Dieterich.

Anna V. Broderick.

INVENTOR

Seth A. Crone

BY

Chas. C. Gill

"ATTORNEY

UNITED STATES PATENT OFFICE.

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

BRAKE-BEAM.

SPECIFICATION forming part of Letters Patent No. 720,676, dated February 17, 1903.

Application filed November 1, 1902. Serial No. 129,631. (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 for railway-cars; 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 in one integral piece of forged metal bent 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 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 on the dotted line 1 1 of Fig. 2. Fig. 2 is a side elevation, partly broken away, of a brake-beam equipped with a fulcrum embracing my invention. Fig. 3 is a detached top view of the fulcrum; and Fig. 4 is an elevation, partly broken away, of the blank from which the fulcrum is 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 on one edge of the beam, the latter preferably being of commercial I shape. The fulcrum 11 is formed from a strip or blank of forged metal, (shown in Fig. 4,) which is folded at its center to form the parallel fulcrum sides 12 12 and at its ends is bent to form the flanges 13 14 15, which engage the sides of the web of the beam 10 and also the opposite sides and outer edges of the flange 16 of said beam 10. The sides 12 12 of the fulcrum 11 are provided with corresponding apertures 17 to receive the bolt, upon which the usual brake-lever (not shown) will be mounted, and the flanges 13 13 of the said fulcrum are provided with suitable apertures 18 to receive the bolt or rivet 19, by which the fulcrum may be secured to the beam 10. The central portions 20 of the strip from which the fulcrum is formed will be cut away along their edges, as shown, so as to enable the spreading outward of the sides 12 12 from each other at their upper ends and also to enable a greater range of movement in the brake-lever without striking the closed outer end of the fulcrum.

In the formation of the fulcrum from the blank or strip of forged metal shown in Fig. 4 the metal will be heated and the two ends of the strip first fashioned to create the flanges 13 14 15, and then the strip or blank will be folded at its center to bring the end portions thereof together to adapt them to fit upon the opposite sides of the beam 10. The flanges 15 at the upper ends of the sides 12 are substantially of triangular outline, so as to pass upon the flange 16 of the beam 10 and permit of the sides 12 being given their requisite parallel angularity for the reception between them of the brake-lever.

The fulcrum of my invention is in one integral piece of metal and is entirely open at one end and may be passed upon the end of the beam 10 before the usual brake-heads are in position on said beam, or it may be snapped upon the central portion of the beam 10 by spreading the sides 12 apart and passing the corresponding flanges 13, 14, and 15 of same upon said beam, it being my purpose to provide a one-part fulcrum which may be applied upon the beam 10 when the brake-heads are thereon without removing said heads. The fulcrum of my invention is inexpensive of construction and not liable to become broken either before or after its application to the beam 10.

The flanges 13 and 14 at the end of the fulcrum will have a natural tendency to bind against the beam 10, and this is a feature of advantage. In the bending up of the blank or strip to form the fulcrum 11 the flanges 13 will normally be brought into reasonably

close relation to each other, so that when said flanges are upon the web of the beam 10 they will bind against said web. It is evident that the flanges 15 need not actually press against the beam-flange 16, since the pull is always outward against the fulcrum.

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

1. The brake-beam fulcrum in one integral piece of forged metal folded about its center and forming the angularly-disposed sides 12, and at its ends having the flanges 13, 14 and 15, said sides being connected at their outer end only; substantially as set forth.

2. The brake-beam fulcrum in one integral piece of metal forming the parallel angularly-disposed sides 12, and at the end of each thereof having the flanges 13, 14 and 15, said sides being connected at their outer end only and being adapted to be sprung open to pass upon the flange of the beam 10; substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 31st day of October, A. D. 1902.

SETH A. CRONE.

Witnesses:
ARTHUR MARION,
CHAS. C. GILL.