

No. 647,779.

Patented Apr. 17, 1900.

H. R. WHOMES.

BRAKE BAR.

(Application filed Jan. 13, 1900.)

(No Model.)

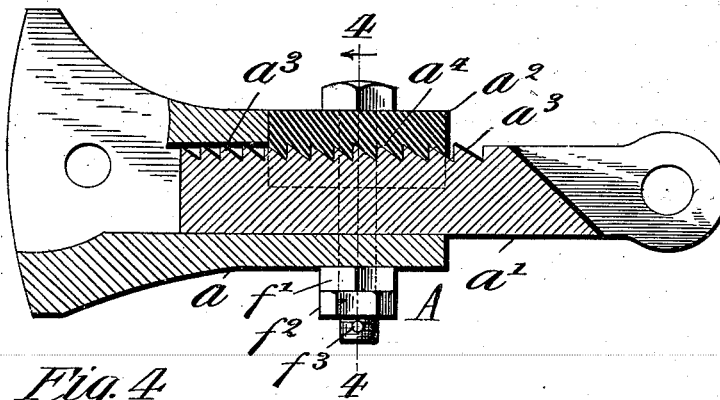
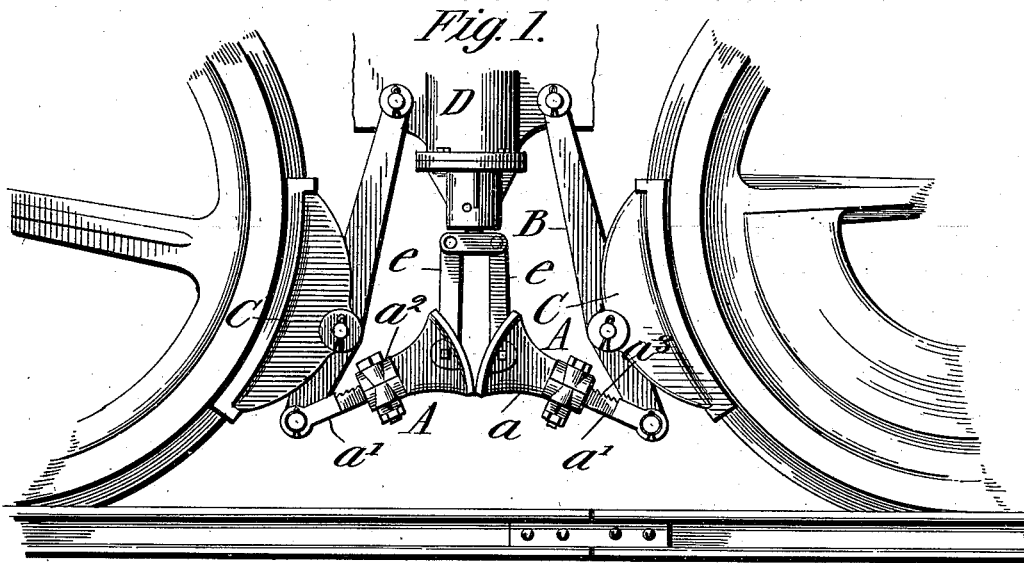


Fig. 4

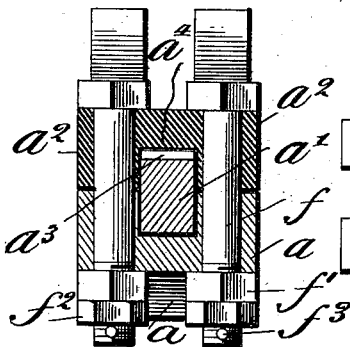
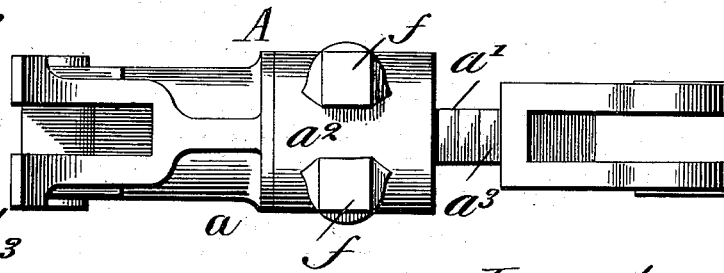


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

HENRY RICHARD WHOMES, OF WINONA, MINNESOTA.

BRAKE-BAR.

SPECIFICATION forming part of Letters Patent No. 647,779, dated April 17, 1900.

Application filed January 13, 1900. Serial No. 1,353. (No model.)

To all whom it may concern:

Be it known that I, HENRY RICHARD WHOMES, a citizen of the United States, residing at Winona, in the county of Winona and State of Minnesota, have invented certain new and useful Improvements in Brake-Bars; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in brakes more especially designed for use in connection with the driving-wheels of locomotive-engines, and has for its object the production of an improved brake-bar by which adjustment of the brake-shoe is greatly facilitated and such adjustment effectively maintained.

The nature of the invention will be readily comprehended by reference to the following detailed description and to the accompanying drawings, in which I have for the purpose of illustrating one application of the invention shown the bar in connection with brake mechanism for locomotive-drivers.

Figure 1 of the drawings shows in elevation brake mechanism embodying my invention. Fig. 2 is a longitudinal vertical section of my improved brake-bar. Fig. 3 is a top view of the bar. Fig. 4 is a cross-sectional view on line 4 4 of Fig. 2.

Referring to the drawings by letter, A denotes my improved brake-bar, which in its application to locomotive-driver brake mechanism is interposed between the brake-lever B, which carries the shoe C, and the actuating-piston in the cylinder D. The rod is formed in sections, one of which, α , is recessed to receive a reduced end of the other section α' , which end is angular in cross-section. The section α may be of cam form at its outer end to shoulder against a companion bar, and said end may also be bifurcated to afford connection with the piston-link e . At its opposite end the section α is cut away, preferably to the center, to form a seat for a removable cap-piece α^2 , which is provided in its under side with a recess forming a continuation of

the recess in the section α . The outer, preferably bifurcated, end of the section α' may pivotally connect with the lower end of the lever B. The inner reduced end of this section α' is provided at its upper side with teeth α^3 , preferably of ratchet form, which are engaged by correspondingly-formed teeth α^4 in the recess of the cap-piece, whereby endwise movement of the section α' is prevented. At each side of the recess the section α and cap-piece α^2 are apertured to receive threaded bolts f , and nuts f' are employed in connection with the bolts to hold the cap-piece to its seat and firmly clamp the section α' in its recess. To prevent loosening of the nuts f' , jam-nuts f^2 are provided, and as a further precaution spring-cotters f^3 may be passed through holes in the exposed ends of the bolts.

To vary the length of the bar for adjusting the shoes, the bolts are loosened to enable the lifting of the cap-piece sufficiently to cause its teeth to disengage from the teeth of the section α' , when said section is free to be moved inwardly or outwardly, as the case may be, after which the cap-piece is firmly secured in place and the rod is rendered perfectly rigid. Inasmuch as the bar is when in action subjected to a compressing strain in the direction of its length, the teeth are so formed and disposed that the vertical shoulders of the respective teeth receive the pressure, and this arrangement also enables the elongation of the rod to be easily and quickly accomplished, as in the outward movement of the section α' the teeth ride freely over each other.

With the cap-piece firmly secured in clamping position there is no danger of the parts becoming loosened, so that the liability to disorder is the minimum, and even though there be a slight play the parts will be maintained in their adjusted position, as the cap-piece must be raised to a height in excess of the depth of the teeth before the release of the section α' can be effected. The teeth are preferably closely disposed, so as to afford a wide range of adjustment.

While I have shown my invention as applied to the brake mechanism of locomotive driving-wheels, I do not wish it understood that I thereby limit its application. On the contrary, the improved brake-bar may be

employed in connection with other types of wheel-brake mechanism.

I claim as my invention—

1. An adjustable brake-bar comprising a
5 recessed section and a section one end of
which is toothed and is slidable in the recess,
a cap-piece having teeth to engage the teeth
of the slidable section, and devices for se-
curing the cap-piece on the recessed section
10 to clamp the slidable section.

2. An adjustable brake-bar comprising a
recessed section having a seat, a cap-piece

adapted to fit said seat and having on its un-
der side ratchet-shaped teeth, bolts and nuts
for securing the cap-piece to place, and a sec- 15
tion having a reduced end removably insert-
ed in the recess and ratchet-shaped teeth to
engage the teeth of the cap-piece.

In testimony whereof I affix my signature
in presence of two witnesses.

HENRY RICHARD WHOMES.

Witnesses:

IDA R. PEHEER,

W. J. SMITH.