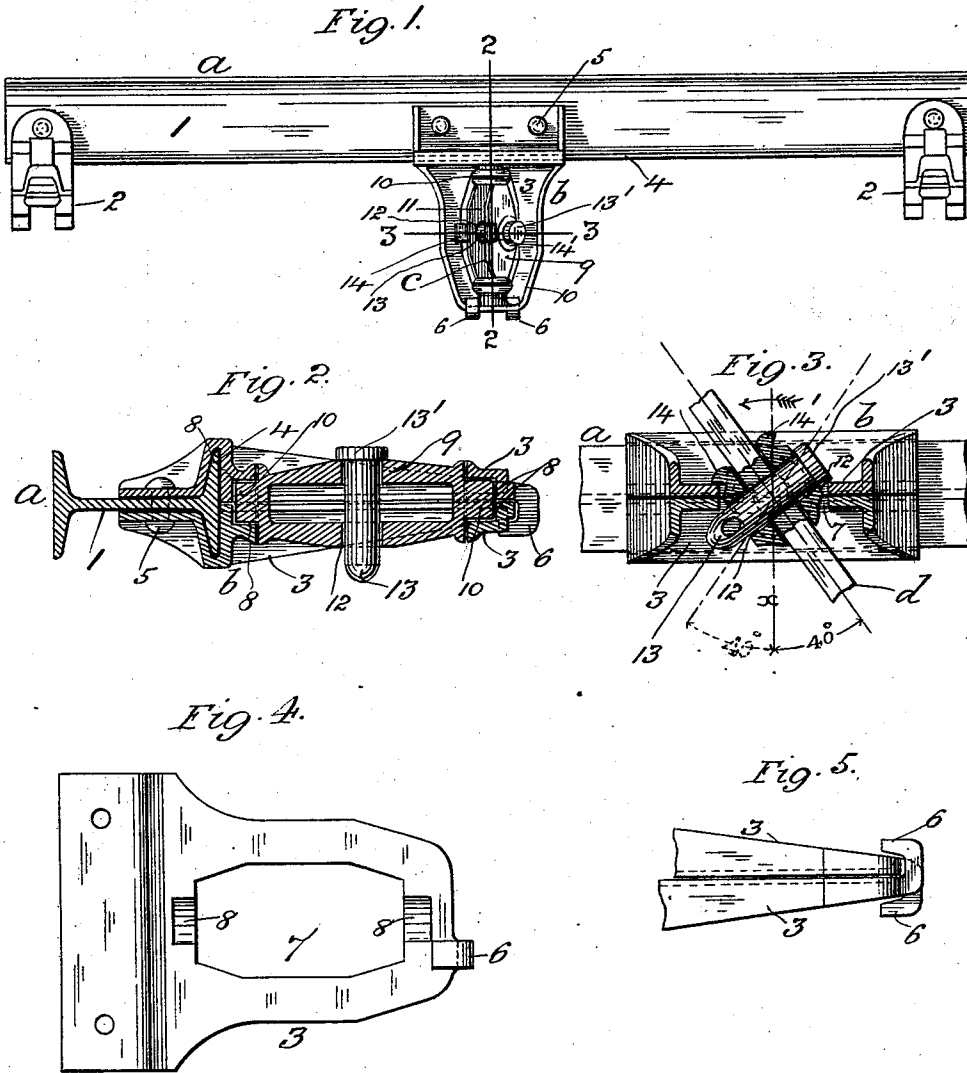


C. L. SCHWARTZ.
BRAKE BEAM FULCRUM.
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CARL L. SCHWARTZ, OF ST. LOUIS, MISSOURI.

BRAKE-BEAM FULCRUM.

1,001,173.

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To all whom it may concern:

Be it known that I, CARL L. SCHWARTZ, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented a new and useful Improvement in Brake-Beam Fulcrums, of which the following is a specification.

My invention relates particularly to the fulcrum of that part of the air brake-gear of a railroad car known as the "brake-beam" in connection with the brake lever, and to which the brake-heads are attached, and has for its object to provide a brake-beam fulcrum which is adjustable to the required angle at either side of the vertical line so that the same brake-beam and fulcrum can be used on either side of the car truck, and thereby obviate the necessity of carrying a right hand and a left hand beam respectively, as at present.

It consists in features of novelty as hereinafter described and claimed, reference being had to the accompanying drawing forming part of this specification, whereon,

Figure 1, is a top plan view of a brake-beam having my improved fulcrum attached thereto; Fig. 2, a vertical longitudinal section to enlarged scale through the fulcrum (assuming the movable part thereof to be in the position corresponding to the vertical position of the brake-lever coupling pin), on line 2, 2, in Fig. 1; Fig. 3, a vertical transverse section to enlarged scale through the fulcrum on line 3, 3, in Fig. 1; Fig. 4, a top plan view to enlarged scale of the lower half of the fixed part of the fulcrum detached, and seen fixed to the brake-beam in Fig. 1, and Fig. 5, a side elevation to enlarged scale of the outer end portion of the fixed part of the fulcrum, showing means for interlocking the halves thereof in their assembled position.

Like letters and numerals of reference denote like parts in all the figures.

a represents a brake-beam which in the present case is preferably, I-shaped in cross section with its web 1 horizontally arranged, and having the brake-heads 2 secured thereto in the usual well-known manner. From the brake-beam *a* in the same plane, and on the same side thereof as the brake-heads 2, projects my improved brake-beam fulcrum which comprises a fixed part *b* secured to the brake-beam *a*, and a movable part *c* pivotally mounted longitudinally in the fixed part *b* and adapted for connection with the

brake lever *d* (seen broken away in Fig. 3) as hereinafter more particularly described. The fixed part *b* consists preferably, of a bracket made in halves (preferably facsimiles) 3, one above the other, having their meeting faces when assembled, horizontal, and preferably, in the plane of the web 1 of the brake-beam *a*, the inner end portion of each half 3 being adapted to straddle the corresponding flange 4, and extend part-way across the web 1 of the brake-beam *a* to which the halves 3 are fixed preferably, by rivets 5, the outer free end of each half 3 being formed with a hook 6 which in assembling the parts engages the other half 3 as shown particularly in Fig. 5, whereby, the halves 3 of the bracket or fixed part of the fulcrum, are securely held together. Through each half 3 of the fixed part *b*, at right angles to its meeting face, is an opening 7 of suitable size and shape, having at each end in the adjacent part of the said face, a semi-circular recess or bearing 8, the opening 7 and recesses 8 in the assembled position of the parts registering with those of the other half 3.

The movable part *c* of the fulcrum consists of a block 9 which extends longitudinally the entire distance between the ends of the openings 7 and is formed at its ends with trunnions or journals 10 by which the block 9 is pivotally mounted in the bearings 8 of the fixed part *b* of the fulcrum and adjustable within the openings 7 to either side of the vertical center line *x* of the said bearings. Transversely through the block 9 is a central longitudinal opening or slot 11 of suitable length and width for the free passage therethrough and play of the brake lever *d* (Fig. 3), and through the block 9 at right angles to the slot 11, is a central opening 12 for the passage therethrough and through the brake lever *d*, of the pin 13 by which the brake lever *d* is coupled to the block 9, the location of the side edge of the opening 7 through the upper half 3 of the fixed part *b* being so arranged that, when the block 9 is partially rotated in its bearings 8 in the direction of the arrow seen in Fig. 3, or to the left of the vertical center line *x* of the said bearings, until its slot 11 is at the required inclination of the brake lever *d*, and the latter then coupled to the block 9 by the pin 13, the head 13' of the pin 13 will engage the said edge of the opening 7 and thereby prevent the return of the block 9

with the brake lever *d* to the vertical position, the block 9 at the same time being stopped from further rotation in its initial direction to the left of the vertical position by a lug 14 which projects from the top of the block 9 at the left hand side of its slot 11, and engages the corresponding edge of the opening 7. Similarly, on withdrawing the pin 13 and partially rotating the block 9 in the opposite direction until its slot 11 is at the required inclination of the brake lever *d* to the right of the vertical center line *x* of the bearings 8, and then coupling the brake lever *d* to the block 9 by the pin 13, inserted in this case, from the left above the upper half 3 of the fixed part *b*, the head 13' of the pin 13 will engage the left hand edge of the opening 7, and at the same time the right hand edge of the opening 7 will be engaged by the lug 14' which projects from the top of the block 9 at the right hand side of its slot 11.

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

1. In a brake-beam fulcrum, the combination of a bracket fixed to the beam which bracket is made in halves, the outer ends of which are interlocked, and there being an opening through said bracket, a block extending longitudinally between the ends of the said opening and adapted for the free passage therethrough of the brake lever, bearings in the bracket in which the ends of the block are pivotally mounted, a pin adapted to couple the said lever to the block, and means for preventing rotatable movement of the said block in the assembled position of the parts.

2. In a brake-beam fulcrum, the combina-

tion of a bracket fixed to the beam and having an opening therethrough, a block extending longitudinally between the ends of the said opening and adapted for the free passage of the brake lever therethrough, bearings in the bracket in which the ends of the block are pivotally mounted, a pin adapted to couple the said lever to the block, and two opposite lugs on the block adapted respectively, and coöperatively with the said pin, to engage the said bracket at the corresponding sides alternately, of the said opening.

3. In a brake-beam fulcrum, a bracket made in halves fixed at one end to the said beam, means for interlocking the said halves with each other at their other ends and bearings formed in said bracket which bearings are adapted to receive the ends of the brake lever fulcrum block.

4. In a brake lever fulcrum, a bracket made in halves, the outer ends of which are interlocked, recesses formed in said mating halves to form bearings, and a slotted brake lever fulcrum block mounted on the bracket with its ends journaled in the bearings formed by the recesses.

5. In a brake lever fulcrum, a bracket made in halves, the outer ends of which are interlocked, recesses formed in said mating halves to form bearings, a slotted brake lever fulcrum, and trunnions on the ends thereof, which are journaled in the bearings formed by the recesses.

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Witnesses:

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