No. 800,671. PATENTED OCT. 3, 1905.

J. F. O'CONNOR.

BRAKE BEAM FULCRUM.

APPLICATION FILED JAN. 9, 1905.

Fig. 1.

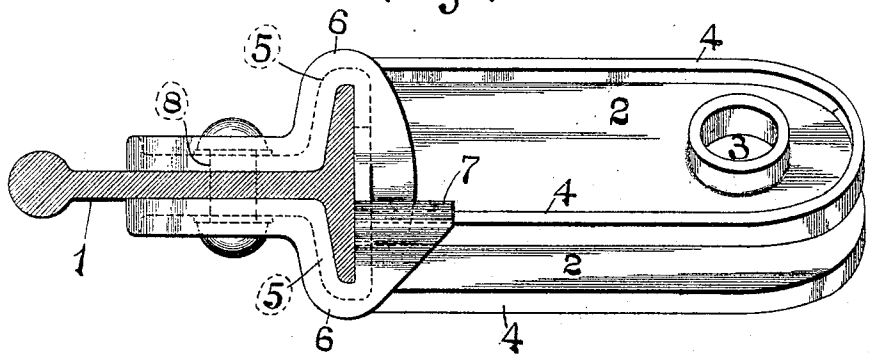


Fig. 2.

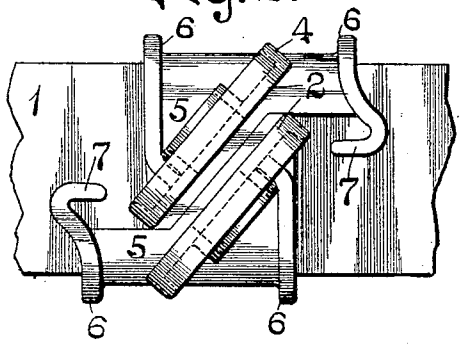


Fig. 3.

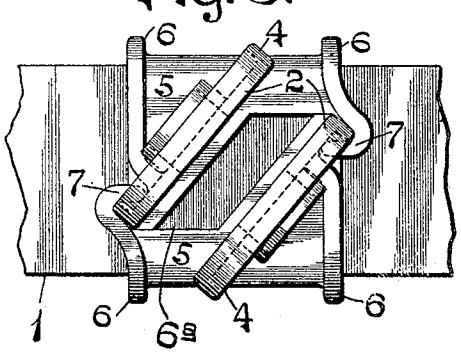
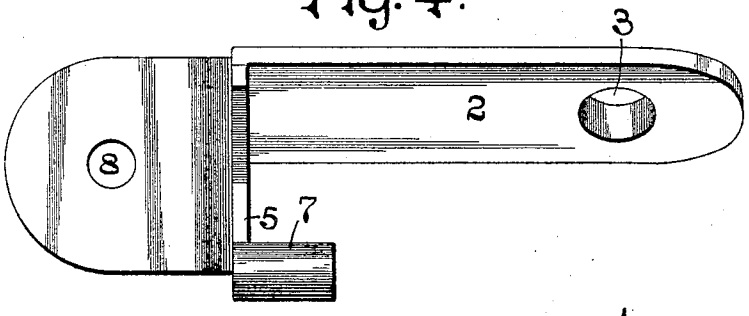


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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BRAKE-BEAM FULCRUM.

No. 800,671. Specification of Letters Patent. Patented Oct. 3, 1905.

Application filed January 9, 1905. Serial No. 240,253.

To all whom it may concern:

Be it known that I, JOHN F. O'CONNOR, a citizen of the United States, residing at 267 Ontario street, Chicago, Illinois, have invented a certain new and useful Improvement in Brake-Beam Fulcrums, of which the following is a full, clear, and exact description, 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, forming part of this specification, in which—

Figure 1 is a side elevational view of my improved brake-beam fulcrum in position on a beam. Fig. 2 is a front elevational view showing the parts in the position they occupy in mounting the fulcrum upon or removing the same from the beam. Fig. 3 is a front elevational view showing the fulcrum in its locked position on a beam, and Fig. 4 is a top plan view of one of the fulcrum sections or jaws.

This invention relates to a new and useful improvement in brake-beam fulcrums, the object being to make a fulcrum of two like parts which may be cast from one pattern, the two parts in being assembled on the beam being locked by a movement separating the lever-jaws, a stop being provided for spacing the jaws the proper distance apart.

With this object in view the invention consists in the novel details of construction, arrangement, and combination of the several parts, all as is hereinafter more fully described, and specifically pointed out in the claims.

In the drawings, 1 indicates a brake-beam, shown in this instance as a deck-beam, although it is obvious, as will hereinafter appear, that my improved fulcrum can be applied in position upon brake-beams having different cross-sectional areas—such, for instance, as a tubular beam, a rectangular bar-beam, a channel-beam, an I-beam, or different pressed-metal beams. I will describe one of the jaws, it being understood that this description applies to both jaws, which are preferably made from the same pattern.

2 indicates a jaw or blade having an appropriate opening 3 for the passage of the brake-lever pivot-pin. Jaw 2 is preferably strengthened by a marginal flange 4 and extends forwardly from the base portion 5, which is designed to embrace the beam member, said base portion 5 being strengthened by a marginal flange 6 for well-understood purposes. The jaw 2 is arranged, as usual, at an angle of forty degrees with relation to the longitudinal axis of the beam 1, and the base portion 5 is cut away adjacent the inner face of the jaw 2, as at 6^a, to provide a recess to receive a companion jaw. The marginal flange 6 of the base portion is continued to form an overhanging hook 7 to one side of this cut-away portion 6^a, which hook 7 is designed to engage and coöperate with the marginal flange 4 of the companion casting.

The base portion 5 is shaped to partially embrace the beam 1 and is preferably reinforced at its marginal edges by the flange 6, the said base portion being provided with a rivet-opening 8 near its rear end.

In applying the two parts to a beam for which their respective base portions are designed to fit the companion jaws are placed on opposite sides of the beam-section with the rivet-holes out of alinement, as shown in Fig. 2, or with the edges of the recesses 6^a abutting each other. The two jaws are now moved in a direction which separates them, so that the hooks 7 fully engage with the marginal flanges 4, at which time the rivet-holes 8 are in alinement, when the rivet can be driven through said openings and the registering rivet-opening in the beam-section 1.

By this construction it will be seen that the side movement of the brake-lever cannot work the two parts at the lock nor can the parts be unlocked when the lever is in position. Another important point is that the fulcrum is very stiff in the direction of the pull, the deep side of each jaw being locked to the shallow side of its companion by the widened hook 7, which firmly locks both parts against movement in a direction tending to separate them and also against movement exerted in a direction at right angles to the longitudinal axis of the beam. The presence of the brake-lever post between the jaws resists any tendency of the jaws to collapse. It will be further observed that the construction is exceedingly simple and cheap, both parts being cast from the same pattern, and instead of moving the jaws toward each other to lock them, as in other constructions with which I am familiar and in which the side strains of the lever will exert an unlocking movement on the parts, in this construction the same strains will tend to hold the parts rigidly together.

I am aware that minor changes in the con-

struction, arrangement, and combination of the several parts of my device can be made and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

Having thus described the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The herein-described brake-beam fulcrum, the same consisting of two like parts adapted to be locked by a separating movement of the jaws; substantially as described.

2. The herein-described brake-beam fulcrum, the same consisting of two parts having locking projections which are engaged when the jaws are moved in a direction tending to separate them; substantially as described.

3. The herein-described brake-beam fulcrum, the same consisting of two separable parts having interlocking recesses and projections designed to be engaged one with the other when the parts are moved in a direction tending to separate them; substantially as described.

4. The herein-described brake-beam fulcrum, the same comprising two parts, each provided with a hook open at its side, and means on each part for laterally entering and engaging the hooked portion of the other part; substantially as described.

5. The herein-described brake-beam fulcrum, the same comprising two locking parts made from the same pattern, each having a recessed portion permitting the parts to be moved toward each other, and each having a locking portion for engaging the companion part in a separating movement; substantially as described.

6. The combination with a brake-beam, of a two-part fulcrum, and means on the respective parts of said fulcrum whereby the strains, exerted by the brake-lever when the same is in position between the jaws, tend to lock said fulcrum parts more firmly together; substantially as described.

7. The combination with a brake-beam, of a fulcrum composed of two like parts having rivet-openings adapted to be alined with each other, and means on the respective parts of the fulcrum for engaging each other when the fulcrum-jaws are moved in a direction tending to separate them, said means also constituting a stop for spacing the jaws apart; substantially as described.

8. The herein-described fulcrum, the same comprising two like parts, each having means for engaging the other part when the jaws are moved in a direction tending to separate them, said locking means also constituting a stop for spacing the jaws the proper distance apart; substantially as described.

9. The herein-described fulcrum member, the same comprising a jaw, a base portion having a deep side and a shallow side, and a locking projection on the shallow side; substantially as described.

10. The herein-described fulcrum member, the same comprising a jaw having a marginal strengthening-flange, the rear portion of said base being provided with a rivet-opening, and said jaw being provided with an opening for the pivot of the brake-lever, said base portion being recessed, as at 6^a, and having a locking projection 7 at one side of said recess; substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 4th day of January, 1905.

JOHN F. O'CONNOR.

Witnesses:
C. H. WILLIAMS, Jr.,
CHARLES F. HUNTOON.