J. D. FERGUSON.
Car-Coupling.

No. 206,779. Patented Aug. 6, 1878.

Fig. 1.

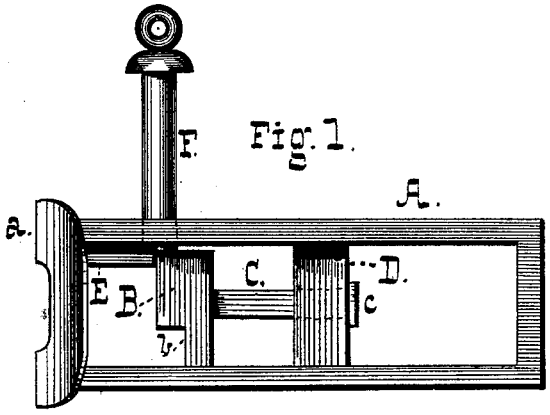
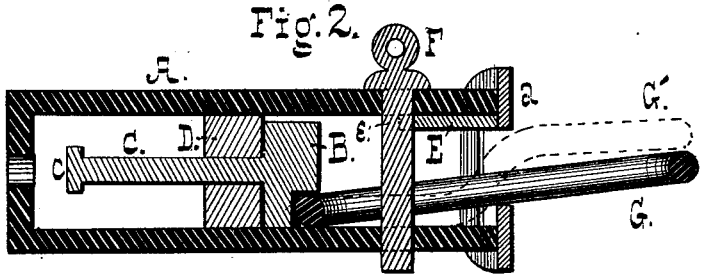


Fig. 2.



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UNITED STATES PATENT OFFICE.

JAMES D. FERGUSON, OF WILMINGTON, DELAWARE, ASSIGNOR OF ONE-HALF HIS RIGHT TO ROBERT McCLINTOCK, OF BALTIMORE, MD.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **206,779**, dated August 6, 1878; application filed July 10, 1878.

To all whom it may concern:

Be it known that I, JAMES D. FERGUSON, of the city of Wilmington, New Castle county, State of Delaware, have invented certain new and useful Improvements in Car-Couplings; and I hereby declare the same to be fully, clearly, and exactly described as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation, and Fig. 2 a vertical longitudinal sectional view, of the device.

The object of my invention is to lessen the danger of injury to brakemen in coupling railway-cars; and it consists in certain means for directing the link, whether straight or crooked, into the opening of the coupler, and for releasing the pin, as hereinafter set forth.

In the accompanying drawings, A represents the draw-head, having buffer *a*, the opening in which is somewhat narrower than the internal diameter of the draw-head. The latter is perforated, as usual, for the insertion of the pin F.

On the inside of the draw-head, and partially encircling the aperture for the pin, is a lug, E, which serves to direct the pin and insure its falling into the lower hole in the draw-head.

B is a block, having a recess, *b*, cut in its face near the bottom, which recess is curved to conform to the shape of the end of the link G. The block is mounted on a rod, C, which passes through a block, D, firmly secured within the draw-head. The bottom of the recess, when the block B is withdrawn, is arranged to be at a distance from the buffer *a* slightly in excess of the half-length of the link G, the object of which construction is to prevent any strain from falling on the block D or the link when the cars are brought together.

The operation of the device is as follows: The link G being placed in position, as shown in Fig. 2, in one of the couplings, the block B of the other is drawn forward, and the pin F is allowed to rest thereon. As the link G strikes this block the pin is released and falls into the lower hole in the draw-head, and the coupling is complete.

It will be observed that the edge of the bumper *a* extends somewhat above the bottom of the draw-head, so that a straight link resting thereon is inclined upward, so as to enter the opening centrally of a bumper at the same level as the one carrying the link, and as a natural sequence insuring the entrance of the link into buffers somewhat above or below this level. Moreover, the angle of the straight link may be altered by causing the block B to approach or recede from the pin. Being situated, when retracted, at a distance from the end of the buffer slightly greater than half the length of a link, the block B will secure a crooked link, G, in such position that its straight portions are horizontal. (See Fig. 2.) The lug E, having a semicircular recess, *e*, embracing the pin, assists in directing the pin to a vertical fall, and may, if desired, be situated on the upper side of the draw-head, in which case a head, *c*, is secured upon the end of the rod C, in order to limit the forward motion of the block B.

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

1. The draw-head A, having lug E, in combination with the block B and pin F, substantially as described.

2. In combination with the draw-head A, having lug E and stationary block D, the buffer *a* and sliding block B, having recess *b*, substantially as set forth.

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