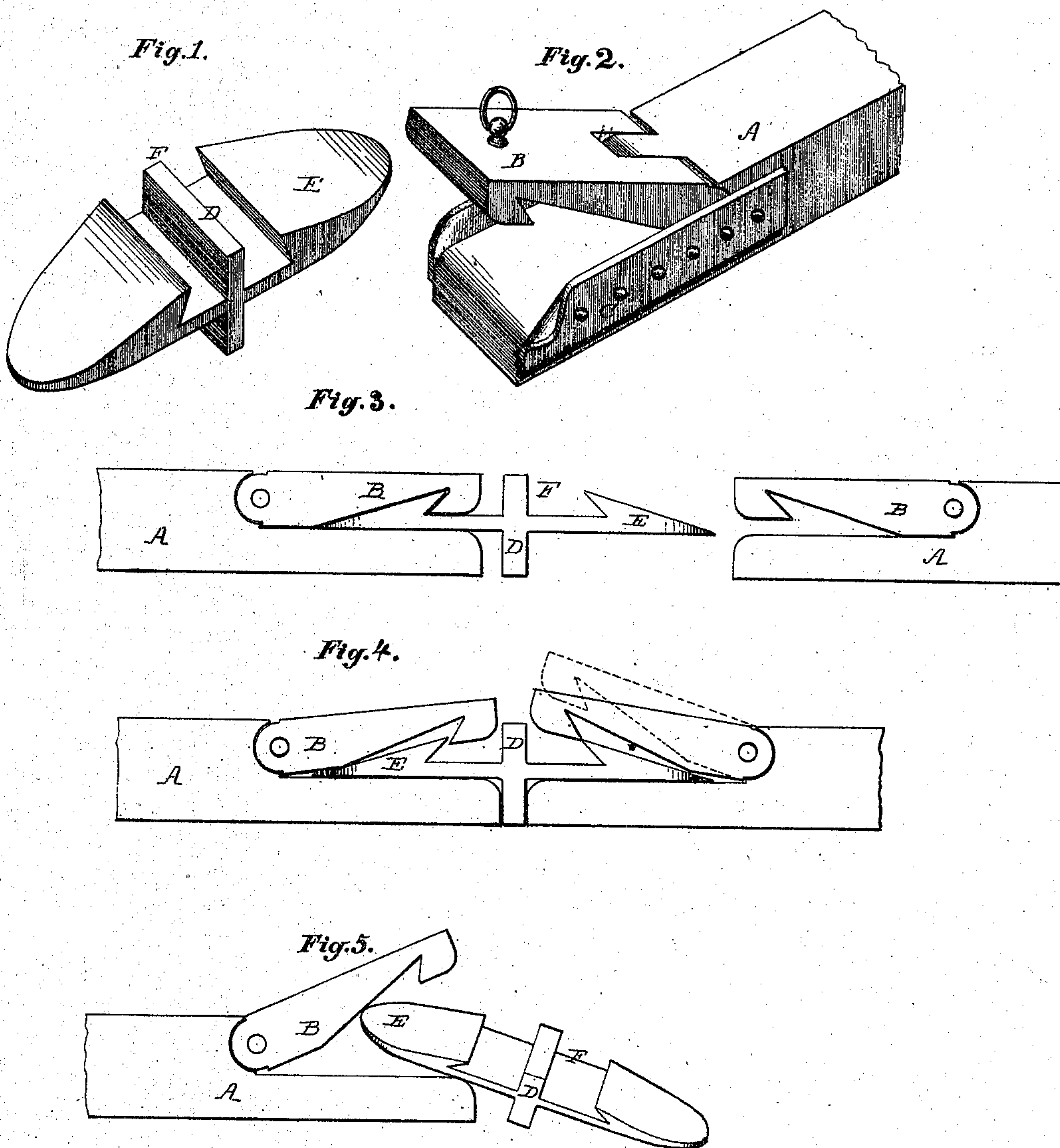


T. J. DELANY.

Car Coupling.

No. 103,156.

Patented May 17, 1870.



Witnesses:
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Phil. T. Dodge.

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United States Patent Office.

THOMAS J. DELANY, OF LOUDOUN COUNTY, VIRGINIA, ASSIGNOR TO HIMSELF AND CLINTON LLOYD, OF WASHINGTON, DISTRICT OF COLUMBIA.

Letters Patent No. 103,156, dated May 17, 1870.

IMPROVEMENT IN RAILWAY CAR-COUPLING.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, THOMAS J. DELANY, of the county of Loudoun and State of Virginia, have invented certain improvements in Car-Couplers, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to car-couplings, and consists in constructing the ends of the draw-heads in a novel manner, and in providing them with a hinged jaw, in connection with a novel coupling-block, so that when the cars are coupled by means of this block and the jaws on the draw-heads, they will immediately uncouple, should either be thrown from the track, as hereinafter explained.

In the drawings—

Figure 1 is a perspective view of my coupling-block.

Figure 2 is a perspective view of the end of the draw-head.

Figure 3 is a longitudinal vertical section of the draw-heads, and coupling-block attached to one of them.

Figure 4 is a longitudinal vertical section of same, showing manner of coupling, and

Figure 5 is a plan view showing manner of uncoupling when one of the cars is thrown from the track down an embankment.

In constructing my coupling devices I make the draw-heads A of the same shape, and as clearly shown in fig. 2, out of any suitable material and of any size desired.

The upper side of their outer end is cut away or sunk sufficiently to allow a locking-jaw B, to be hinged therein, as shown in the same figure. This jaw when closed extends to the end of the draw-head, and its upper side is flush with the upper side of the draw-head, as shown in fig. 3.

The edge of the end of the draw-head is curved, as shown in fig. 2, and its sides are provided with strong metallic strips C, arranged so as to extend up along the outer edges of the jaw B, when closed and having their outer, upper ends curved outwardly as clearly shown in the same figure, these side pieces may be made solid with the head itself, so as to form an integral part of it.

In connection with the draw-heads thus constructed, I make a coupling-block D, out of a single piece of metal, with a catch E on each end, and a transverse partition between them, forming and shaping the whole as shown in fig. 1. The catches on this block

correspond with those on the jaws of the draw-heads, and their ends are made tapering or wedged shaped so that they will slide readily under the locking-jaw, as shown in figs. 3 and 4, while their end edges are curved, so that when turned, the coupling-block will the more easily free itself from the locking-jaw.

In operating my coupling devices I engage one end of the coupling-block with the catch on the end of one of the jaws of the draw-heads, as shown in fig. 3, and then as the other draw-head approaches, the tapering or wedge-shaped end of the block will pass under the catch on its jaw, and the cars will be coupled, or the block may be simply held between the approaching ends of the draw-heads, and its ends will slide under the locking-jaw of each, and couple them as shown in fig. 4, the portion of the partition D, on the under side of the block serves for the ends of the draw-heads to strike against, and prevents the ends of their hinged jaws from coming too close together.

Besides the strength, cheapness and simplicity of a coupling device of this kind, it will immediately uncouple when either of the cars are thrown from the track, and especially if the one thrown from the track goes down an embankment, for the reason that as soon as the coupling is thrown out of line the catches become disengaged, as shown in fig. 5, and when this line is downward and to one side the edge of the block following the curved end of the side-strips C, become positively and immediately disengaged, and this disengagement, is if possible still more certainly secured by the curved ends of the coupling-block.

Having thus described my invention,

What I claim is—

1. A draw-head for cars, consisting of the bar A having the side pieces C, curved at their outer ends, attached thereto, with the hinged hook B, all constructed and arranged to operate substantially as described.

2. In combination with the draw-head constructed as above set forth, the connecting-link, having the hooks E and cross-bar D, when arranged to operate as herein described, so that when a car is thrown from the track, it shall be automatically detached from the train.

THOMAS J. DELANY

Witnesses:

CLINTON LLOYD,
M. DELANY.