

G. W. IRISH.
Car Coupling.

No. 108,598.

Patented Oct. 25, 1870.

Fig. 1.

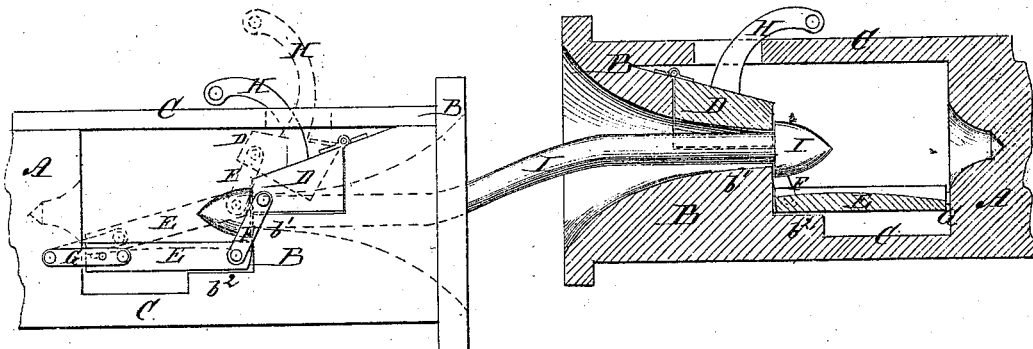
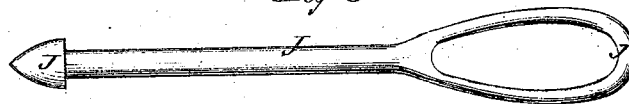


Fig. 2.



Fig. 3.



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GEORGE W. IRISH, OF MEMPHIS, NEW YORK.

Letters Patent No. 108,598, dated October 25, 1870.

IMPROVEMENT IN CAR-COUPPLINGS.

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, GEORGE W. IRISH, of Memphis, in the county of Onondaga and State of New York, have invented a new and useful Improvement in Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a side view of my improved car-coupling, partly in section, to show the construction.

Figure 2 represents one form of coupling-pin.

Figure 3 represents a combined coupling-pin and link.

Similar letters of reference indicate corresponding parts.

My invention relates to car-couplings which have hinged pieces to close behind the shoulders of the coupling-pin; and

My object is to combine such feature of construction as will cause this block to fall quickly behind, and to lock firmly with the shoulders of said pin.

A represents the draft-bar of the coupling, which is connected with the frame-work of the car in the ordinary manner.

B is the head-block of the coupling, which may be cast of malleable iron, and which is connected with the draft-bar A by the wrought-iron bars C.

The head-block B may serve as a bumper-head, and its interior is made hopper-shaped, or in the shape of a flaring cone, as shown in fig. 1.

The inner side of the block B is made in the form of steps or shoulders, as shown in fig. 1.

Upon the upper step or shoulder, b^1 , is placed a block or plate, D, which is hinged at its upper forward edge to the block B, and its lower surface is concaved, to form a continuation of or a part of the cavity of the block B.

Upon the lower step or shoulder, b^2 , of the block B, rests the forward end of the block or plate E, the forward part of which is connected to the hinged block D by the straps F, so that the block E may be raised by raising the block D, and so that the weight of the two blocks may act together to bring the block D down to its seat after it has been raised.

The rear end of the block E is connected and pivoted to the bar A by two straps, G.

To the upper block or plate D is attached an arm,

H, which projects through a slot in the upper strap or bar C, for convenience in raising the block D to uncouple the cars.

A lever, bar, or chain may be connected with the arm H, to enable the cars to be conveniently uncoupled from the platforms of said cars.

I is the coupling-pin, which, for cars of the same height, is made straight, as shown in fig. 2, and for cars of unequal height should be bent, as shown in fig. 1.

Upon the ends of the pin I are formed round, tapering, or conical heads, as shown in figs. 1 and 2.

When it is desired to couple a car provided with my improved coupling to one provided with an ordinary coupling, the combined link and pin J is used, which is made with a link or elongated hole in one end, and with its other end similar to the end of the pin I, as shown in fig. 3.

In using the coupling, one end of the pin I is secured in one of the parts of the coupling; then, as the cars are run together, the end of the pin I enters the mouth of the block B, and raises the block or plate D. As the head of pin I passes the block D, the weight of the blocks D E bring them down to their places, as shown in fig. 1, coupling the cars.

By this construction the draft-strain is sustained by the step b^1 , against the shoulder of which the head of the pin rests, and by the block or plate D, against the inner edge of which the head of the pin I rests, and the outer edge of which rests against a shoulder of the block B, as shown in fig. 1, so that, the greater the draft-strain upon the coupling, the more securely will the pin be held in place.

To uncouple the cars, the arm H is operated to raise the block D above the head of the pin. The same movement raises the block E, which lifts the head of the pin I above the shoulder of the step b^1 , so that, when the cars are drawn apart, the pin may be drawn out of the coupling.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

In car-couplings, the head-block B, having shoulders b^1 b^2 , combined with connected blocks D E, respectively, hinged and pivoted, as and for the purpose described.

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