W. N. HUTCHINSON.

CAR-COUPLING.

No. 180,346. Patented July 25, 1876.

Fig. 1.

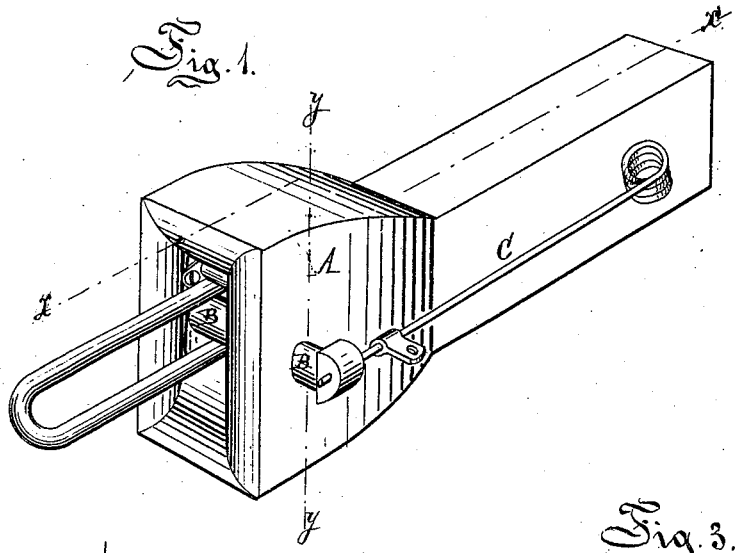


Fig. 2.

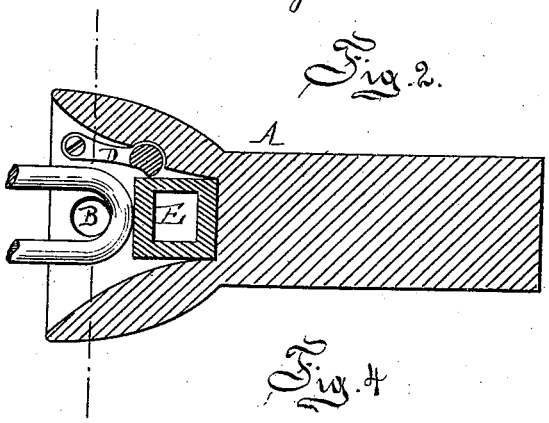


Fig. 3.

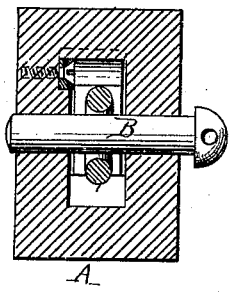
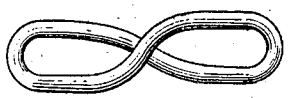


Fig. 4



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UNITED STATES PATENT OFFICE.

WARREN N. HUTCHINSON, OF SOUTH BAY CITY, MICHIGAN.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **180,346**, dated July 25, 1876; application filed January 7, 1876.

To all whom it may concern:

Be it known that I, WARREN N. HUTCHINSON, of South Bay City, in the county of Bay and State of Michigan, have invented an Improvement in Car-Couplings, of which the following is a specification:

The nature of my invention relates to an improvement in car-couplings of that class wherein a vertically-presented link is engaged automatically by a laterally-moving pin, actuated by a spring on the side of the draw-head; and it consists in the combination, with the solid draw-head, of a rubber buffer in the mouth of the same, adapted to press the link against the coupling-pin; and, further, in the combination, with the said solid draw-head, of the said rubber buffer, the vertically-presented link, and the horizontally-moving spring-pin, all as more fully hereinafter explained.

Figure 1 is a perspective view of the draw-head. Fig. 2 is a longitudinal vertical section, showing the link engaged, taken through the line *x x*. Fig. 3 is a horizontal section at *y y*. Fig. 4 is a view of a link for coupling with the ordinary draw-head.

In the drawing, A represents a draw-head of the usual form, with the exception that the mouth is a vertical slot, adapted to receive a link turned up edgewise. B is the pin, which passes horizontally through holes cored in the sides of the bell-mouth to receive it. It is forced inward and prevented from being entirely withdrawn by a spring, C, of the form shown, secured to one side of the draw-head. D is a gravity latch or stop, pivoted in a recess in the cheek of the bell-mouth, in which the hole which receives the point of the pin is made, in such a manner that when the pin is partially withdrawn the head of the latch will drop into its path across the mouth.

When a link enters the mouth of the draw-head, the stop is pushed back by the link until the pin is released, when the latter is shot across by the spring C passing through and engaging the link.

E is a rubber buffer in the base of the link-socket, which buffer presses the link forward against the pin, so as to hold the link in position to couple.

Where a car fitted with this coupling is to be coupled with another having the ordinary horizontal link, a link having a quarter-twist turned in it is used, and to meet such contingencies such a link should be hung by a chain permanently to the draw-head.

The rubber buffer is preferably hollow, so as to be easily compressed by the link, and, at the same time, to exert sufficient pressure to hold the link against the coupling-pin and prevent the said pin and link from rattling in the draw-head when the car is in motion. This rubber buffer forms a very cheap device for the purpose, and, in connection with the solid draw-head, vertically-presented link, and horizontally-moving spring-pin, makes a simple, cheap, and effective car-coupling.

What I claim as my invention is—

1. The combination, with the solid draw-head A, of the rubber buffer E in the mouth of the same, adapted to press the link forward against the coupling-pin, constructed and arranged substantially as described and shown.

2. The combination, with the solid draw-head A, of the vertically-presented link, the horizontally-moving spring-pin B, and the rubber buffer E, all constructed, arranged, and operating substantially as described and shown.

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Witnesses:

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