

(No Model.)

D. L. RICHARDS.

CAR COUPLING.

No. 311,528.

Patented Feb. 3, 1885.

Fig. 1.

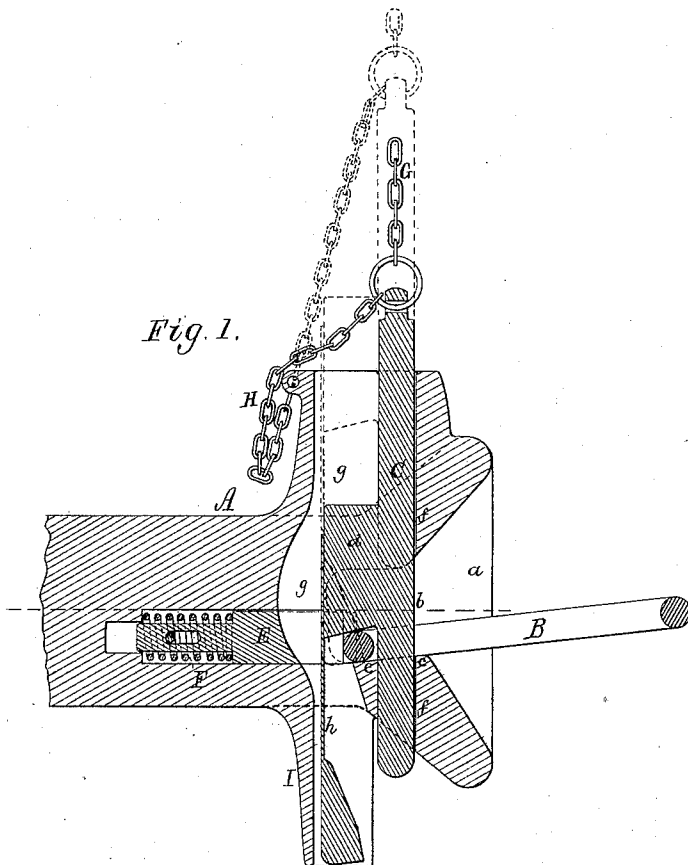
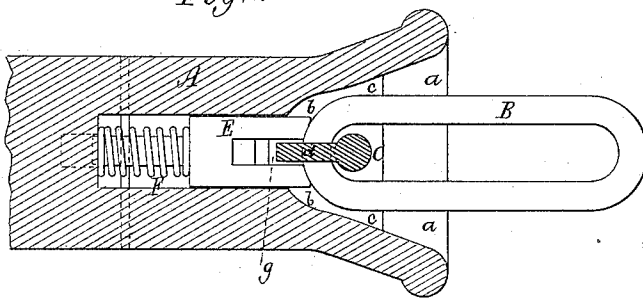


Fig. 3.



Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

DAVID LAWSON RICHARDS, OF ST. JOHN, NEW BRUNSWICK, CANADA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 311,528, dated February 3, 1885.

Application filed November 1, 1884. (No model.)

To all whom it may concern:

Be it known that I, DAVID LAWSON RICHARDS, at present residing in St. John, in the Province of New Brunswick, of the Dominion of Canada, have invented a new and useful Improvement in Railway-Car Couplings; and I do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a vertical and longitudinal section, and Fig. 2 is a horizontal and longitudinal section, of the draw-bar provided with my invention, the nature of which is defined in the claims hereinafter presented. Fig. 3 is a side view of the shackling-pin, its latch, and link-holder.

In such drawings, the draw-bar A is shown as having in rear of its flaring or trumpet mouth *a* a recess or chamber, *b*, having its bottom inclined in manner as represented at *c*, such inclined bottom being for the coupling-link B to rest on in order to bring such link into a proper position for coupling with another draw-bar.

The coupling-pin (shown at C) has extending rearward from it a projection, *d*, which I term the "link-holder," such projection, when the pin is down through the link, being to rest on such link and hold it in its position on the inclined plane *c*. In the draw-bar head there is, in rear of the shackling-pin passage *f*, another passage, *g*, which is for the projection *d*, and a spring-latch, *h*, extending down therefrom to pass through.

In raising the pin to the position as shown by dotted lines, the latch springs forward and rests on the inclined plane *c*, and in so doing holds the pin elevated. On the link being forced into the chamber or recess *b* and against the latch, the latter will be crowded off the inclined plane, so as to allow the pin to drop and shackle the link to the draw-bar.

At the back of the chamber *b* there is an auxiliary bunter, E, to play longitudinally in the draw-bar against a spring, F, arranged therein. This bunter is furcated, so as to span the latch and not interfere with its movements, and is for the link to bring up against in order for the draw-bars to meet together, when necessary.

To lift the coupling-pin, there is a chain, G, attached to its head, and there is also a supplementary chain, H, which is also connected

to the head of the pin and to the draw-bar. This latter chain is not only to determine the height to which the pin is to be raised, but to prevent it from being pulled out of the draw-bar.

To set the link of one car for coupling with the draw-bar of another car, the shackling-pin is to be dropped to extend through the link and cause the link-holder to rest thereon and hold it in an inclined position on the bottom of the link-chamber. The shackling-pin of the draw-bar to receive the link, on the cars coming together, is to be raised, so as to cause its latch to rest on the inclined plane below it. On the link being driven into the said draw-bar the latch will be forced backward off the inclined plane, and the shackling-pin will drop through the link and shackle it to the draw-bar.

From the draw-bar there extends downward a projection, I, which is grooved or chambered vertically, so as to surround the latch when it is down, such projection being to serve as a guard to prevent the latch, when down, from being accidentally struck, injured, or bent by any object.

I do not claim a car-coupling constructed as represented in the United States Patent No. 106,936, as such has in its draw-bar, as there is in mine, no chamber provided with an inclined bottom to centralize the coupling-link or hold it in an inclined position, with its outer end level with the axis of the chamber or draw-bar; nor has the patented coupling any furcated auxiliary bunter to span the coupling-pin and be struck by the link when passing into the aforesaid chamber; nor is there to the catch a spring connecting it with the pin, as in my coupling, or any grooved projection extending below the draw-bar and for guarding the catch from injury. Therefore it will be seen that there are important differences between my coupling and that of the said patent.

I claim—

1. The draw-bar having in rear of its flaring mouth the chamber provided with the inclined bottom, and also having passages for the shackling-pin, its link-holder, and latch to move in, in combination with the shackling-pin provided with such holder and latch,

all being substantially and to operate as described.

2. The combination of the furcated auxiliary bunter and its spring, arranged in the chambered draw-bar as described, with such bar
5 and with the shackling-pin and its link-holder and latch, applied and to operate in the bar essentially as set forth.

3. The combination of the draw-bar provided with the grooved or chambered projec-
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tion I, the link-receiving chamber, and the passages for the shackling-pin and its link-holder and latch to work in, with such shackling-pin and the link-holder and latch connected therewith, all being substantially as represented. 15

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Witnesses:

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