

(No Model.)

I. TILLSON.
CAR COUPLING.

No. 344,420.

Patented June 29, 1886.

Fig. 1.

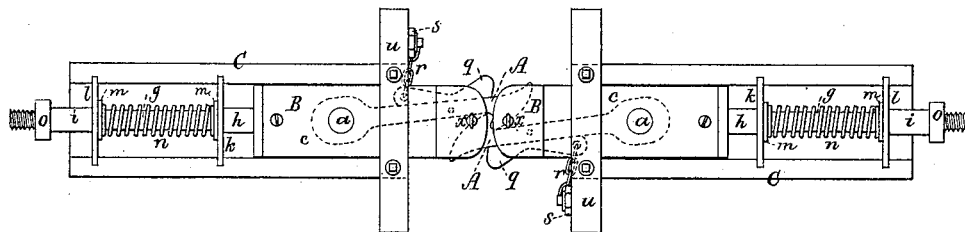


Fig. 2.

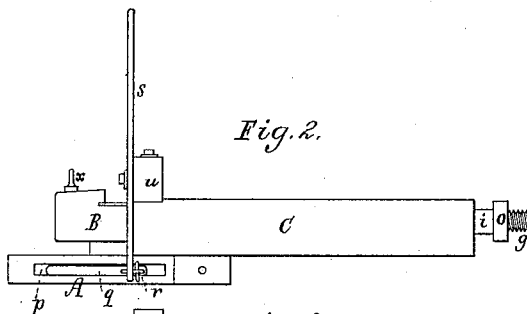


Fig. 3.

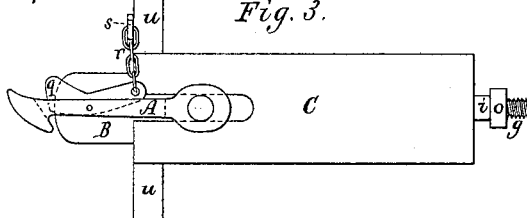


Fig. 4.

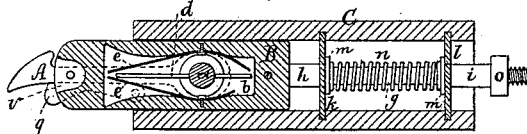
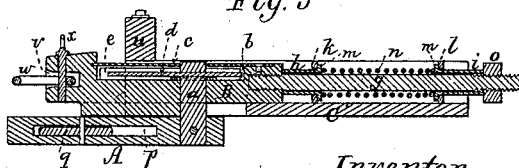


Fig. 5.



Witnesses.

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UNITED STATES PATENT OFFICE.

ISAIAH TILLSON, OF SOUTH ABINGTON, MASSACHUSETTS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 344,420, dated June 29, 1886.

Application filed April 5, 1886. Serial No. 197,796. (No model.)

To all whom it may concern:

Be it known that I, ISAIAH TILLSON, of South Abington, in the county of Plymouth, of the Commonwealth of Massachusetts, have
5 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—

10 Figure 1 is a top view of two of my improved car-couplings in engagement with each other. Fig. 2 is a side elevation, Fig. 3 an under side view, Fig. 4 a horizontal section, and Fig. 5 a longitudinal and median section,
15 of one of such couplings.

The nature of my invention is defined in the claim hereinafter presented.

This coupling is of the class in which there is a hook to engage with that of another such
20 coupling in order to connect or couple two cars together. In the drawings, the said hook is shown at A as arranged below and pivoted to a draw-bar, B, adapted to slide lengthwise in a trough, C. The pivot *a* of the hook projects up through a chamber, *b*, in the draw-
25 bar, provided with a movable cap, *c*. Through the said pivot and in the said chamber is a bar, *d*, that extends between the free ends of two springs, *e e*, arranged as represented and
30 secured within the chamber. From the draw-bar a rod, *g*, projects rearwardly through two flanged tubes or thimbles, *h i*, which are arranged as represented, and to slide lengthwise in two partitions, *k l*, extending across the
35 trough, there being between the heads or flanges *m* and encircling the rod *g* a spiral spring, *n*. The rod at its rear end is screw-threaded, and has a nut, *o*, screwed upon it and against the end of the rearmost thimble. The hook A is
40 slotted horizontally and lengthwise of it, as shown at *p*, and has within the slot a bent lever, *q*, which at or near its middle is fulcrumed

to the hook. A chain, *r*, connects the tail of the lever with the lower arm of another lever, *s*, the latter lever being fulcrumed to a bar, *u*,
45 extending across and fastened to the trough. Furthermore, there is within the draw-bar head a mouth, *v*, to receive a link, *w*, for connecting the draw-bar to another, as occasion may require, a pin, *x*, for engaging the link
50 going down through the said mouth.

When two cars provided with couplings, as set forth, are brought together for being coupled, the two hooks of the couplings will
55 each press the other aside until their heads may pass one another, which taking place, each will be forced toward the other and will hook upon or couple with it. To disengage them we have only to so move one of the levers
60 in each hook as to cause such lever to crowd the two hooks out of engagement with each other. On the draw-bar being pulled forward within the trough, the front thimble will serve as
65 an abutment to support the spiral spring, which will be contracted lengthwise by the rear thimble being drawn against it. So on
the draw-bar being moved rearward in the trough the rear thimble will in like manner serve as an abutment to the spring, and such
70 spring will be contracted lengthwise by the front thimble being forced against it.

I claim—

The combination of the draw-bar B, provided with the link-receiving mouth and pin, with the supporting-trough C, having trans-
75 verse partitions *k l*, the rod *g*, nut *o*, thimbles *h i*, and spring *n*, the hook A, its tripping-lever *q*, and the bar *d*, and springs *e e*, for actuating such hook, all being arranged and to operate substantially as set forth.

ISAIAH TILLSON.

Witnesses:

R. H. EDDY,
R. B. TORREY.