

(No Model.)

C. R. COOK.
CAR COUPLING.

No. 385,505.

Patented July 3, 1888.

Fig. 1.

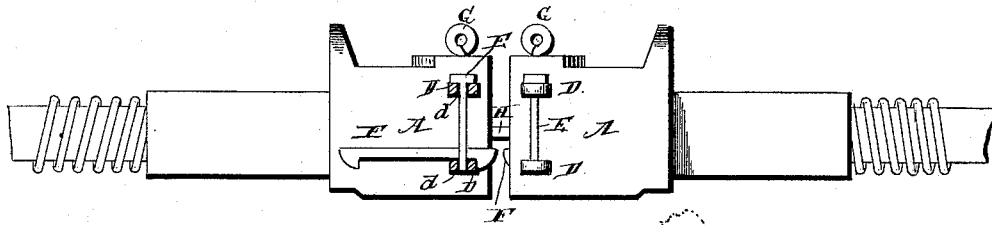


Fig. 2.

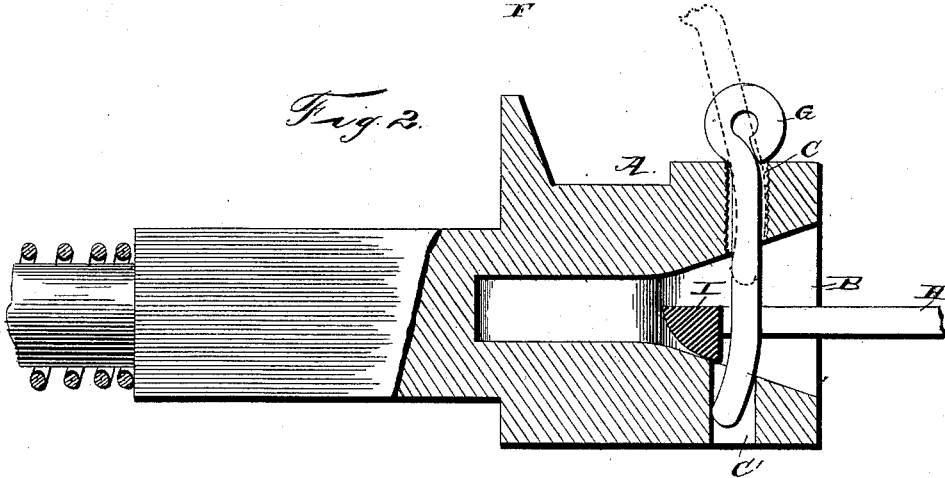
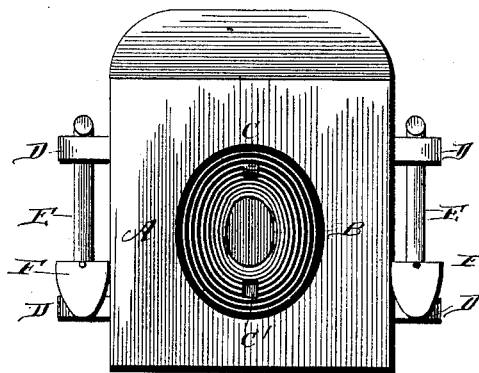


Fig. 3.



Witnesses.

Geo. Thompson
O. E. Hayle.

Fig. 4.

Inventor.

Conover R. Cook.

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C. R. Cook

UNITED STATES PATENT OFFICE.

CONOVER R. COOK, OF YORKVILLE, ILLINOIS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 385,505, dated July 3, 1888.

Application filed January 14, 1888. Serial No. 260,774. (No model.)

To all whom it may concern:

Be it known that I, CONOVER R. COOK, a citizen of the United States, residing at Yorkville, in the county of Kendall and State of Illinois, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification.

My invention relates to improvements in car-couplings, and it has for its object to provide an automatic coupler which is simple and easily operated and in which the link is guided to its place in the draw-head by improved means.

The invention consists in a certain novel construction and combination of devices, which is hereinafter more fully set forth in connection with the accompanying drawings, wherein—

Figure 1 is a side view of two couplers connected. Fig. 2 is a longitudinal central section of the same. Fig. 3 is a front view of one of the couplers. Fig. 4 is a detail perspective view of the link.

Referring by letter to the drawings, A designates the draw-head, which is provided with a recess, B. This recess is tapered or funnel-shaped in form and its mouth is elliptical in shape, with the major diameter of the ellipse in a vertical position.

Aligned openings C C' are formed in the upper and lower sides of the draw-head near its mouth, and the upper opening, C, is elongated in shape and is grooved or corrugated, for a purpose to be explained hereinafter.

The sides of the draw-head are provided with lateral ears D D, which are provided with aligned apertures *d d*, in which are disposed the removable pins E E. On these pins are adapted to be hung the links which are not in use in the draw-head, it being desirable under certain circumstances to carry one or two extra links for an emergency, and in this way they are always within reach and cannot become lost.

F represents an extra link, which is engaged by one of the pins. The coupling-pin G is curved slightly, and when its lower end is engaged in the upper opening, C, the pin is held in an elevated position, as shown in dotted lines in Fig. 2.

The link H is provided at each end with a tapered head, I, which is reduced to a point. It will be seen that if the said point of the head strikes within the edge of the mouth of the recess the end of the link will be guided by the tapered head, sliding on the sides of the tapered or funnel-shaped recess to its proper position.

The coupling-pin is arranged so that its lower end projects slightly (say about one inch or more) below the upper side of the tapered recess in the draw-head, so that when the link enters the said recess it strikes the projecting end of the pin, thereby tripping it and causing it to fall and engage in the opening C'. As the pin falls it passes through the longitudinal slot of the link, and thus secures the latter in the draw-head and completes the coupling.

The device, as will be seen from the foregoing description, is simple, and the parts are so arranged that they are not only strong and durable, but operate very effectively.

When the recess in the draw-head and the ends of the link are shaped as herein described, there is no danger of the link failing to properly enter the draw-head.

I claim—

1. In a car-coupling, the combination of the draw-head having the openings C C' in its upper and lower sides, the upper opening being corrugated, the pin engaging at its lower end in the upper opening when in its elevated position, and the link adapted to trip the pin when it enters the draw-head to cause it to fall, substantially as specified.

2. In a car-coupling, the combination of the draw-head having the elongated and roughened opening C in its upperside and the opening C' in its lower side, and the pin to engage in the said openings, substantially as specified.

3. In a car-coupling, the combination of the draw-head having the lateral apertured ears D, the removable pins engaged in the apertures, and the coupling-link adapted to be engaged by one of the said pins when not in use, substantially as and for the purpose specified.

4. In a car-coupling, the combination of the draw-head having the tapered or funnel-shaped recess B therein and the aligned openings C

C' in its upper and lower sides, the curved coupling-pin adapted when in the elevated position to be engaged in the upper opening, C, and project slightly below the upper side
5 of the recess B, and the coupling-link having the tapered heads I I on its opposite ends, all constructed and arranged substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CONOVER R. COOK.

Witnesses:

WILLIAM H. HOPKINS,
GEO. ELLIOTT.