

(No Model.)

F. M. COX.
CAR COUPLING.

No. 493,251.

Patented Mar. 14, 1893.

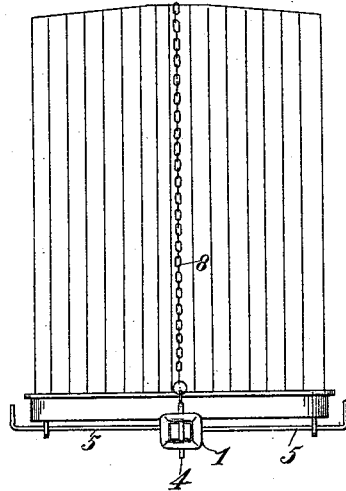


Fig. 1.

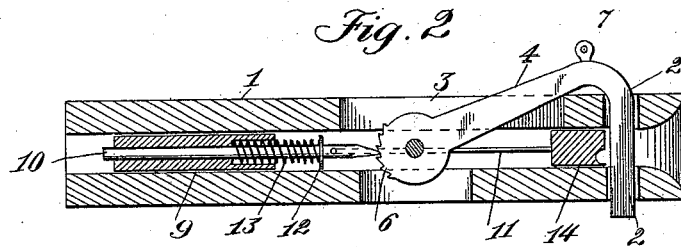


Fig. 2.

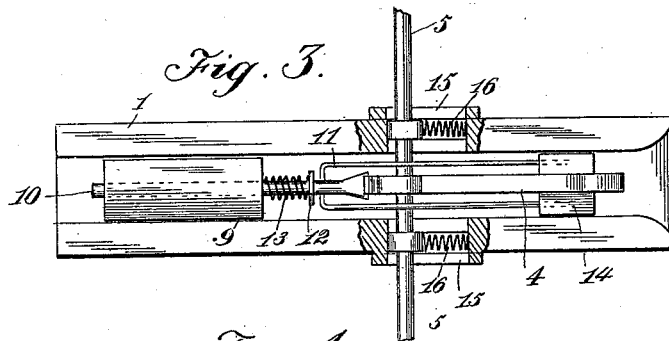
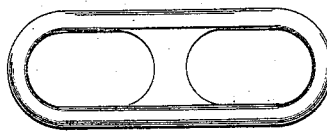


Fig. 3.

Fig. 4.



Attest:

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UNITED STATES PATENT OFFICE.

FRANCIS MELVILLE COX, OF HAYNES, ARKANSAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 493,251, dated March 14, 1893.

Application filed December 2, 1892. Serial No. 453,809. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS MELVILLE COX, a citizen of the United States, residing at Haynes, in the county of Lee and State of Arkansas, have invented a certain new, useful, and valuable Improvement in Car-Couplers, of which the following is a full, clear, and exact description.

My invention has relation to car-couplers, adapted to be coupled and uncoupled without the necessity of the operator going between the cars.

The device consists principally of a pivoted hook adapted to be held up by a pawl engaging suitable ratchets in the rear end of the hook, said pawl being disengaged by the link in the backing car striking a block in the throat of the coupler, which is connected with the said pawl.

In the accompanying drawings: Figure 1, is an end view of a car having my coupler attached thereto. Fig. 2, is a sectional view of the coupler. Fig. 3, is a plan view of the coupler the top being removed. Fig. 4. is a detail view of the link best adapted to be used with the coupler.

My invention is described as follows: The coupler consists of drawhead 1, provided with the usual perpendicular perforations 2, 2, and the elongated perforation 3. The hook 4, is pivoted in the throat of the coupler on the rod 5, the ends of which run through to either side of the car and are bent up to form handles. (See Fig. 1.) The end of the hook 4, passes through the perforations 2, 2, and the rear end of the said hook is made circular in shape with a suitable set of ratchets 6, in its periphery. The hook 4, is also provided with the eye 7, by means of which it is connected with a chain 8, with the top of the car. A block 9, is secured in the rear part of the coupler and through said block passes the rod 10, the front end of which is made to form a pawl which engages the ratchets 6, on the end of the hook 4. The said rod 10 is provided with a shoulder 12 between which and the block 9, is the spiral spring 13, encircling the said rod. This spring will keep the pawl against the ratchets.

In the front part of the coupler immediately behind the perforations 2, 2, is the sliding block 14, which is connected by the rods

11, 11, with the rod 10. Thus it will be seen that when the block 14 is pushed back the pawl will disengage the ratchets and the hook will fall.

To set the coupler it is only necessary to raise the hook either by pulling the chain 8, or by turning the rod 5, from either side of the car. The link in the backing car will strike the block 14, and thereby cause the said hook to fall which will engage the link, and the cars are coupled. In using this coupler it is preferable to use a link as shown in Fig. 4, but any kind of link may be used. After being coupled when the cars start off, to prevent the weight from coming on the rod 5, where it passes through the coupler; the said coupler is provided with the elongated bearings 15, 15. Thus when the train starts the front edge of the hook 4, will come against the front walls of the perforations 2, 2. The springs 16, 16, in the said elongated bearings 15, 15, serve to push the rod 5, back when the strain is taken off the hook 4; whereby the said hook can be raised.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A car coupler consisting of a drawhead having a pivoted hook the rear end of which is circular and provided with suitable ratchets, a suitable pawl engaging said ratchets a sliding block connected with said pawl and adapted to disengage the pawl from the ratchets, substantially as shown and described.

2. A car coupler consisting of a drawhead having a pivoted hook, the rear end of said hook being circular and provided with a set of ratchets, a pawl adapted to engage the said ratchets, a sliding block in the front part of the drawhead and connected with the said pawl, a spring holding said pawl against the said ratchets, and the elongated spring bearings in the sides of the drawhead, adapted to hold the pivot rod of the said hook, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

FRANCIS MELVILLE COX.

Witnesses:

S. M. PATRICK,
J. D. THOMAS.