(No Model.)

R. W. RIGGINS.

CAR COUPLING.

No. 590,022. Patented Sept. 14, 1897.

Fig. 1.

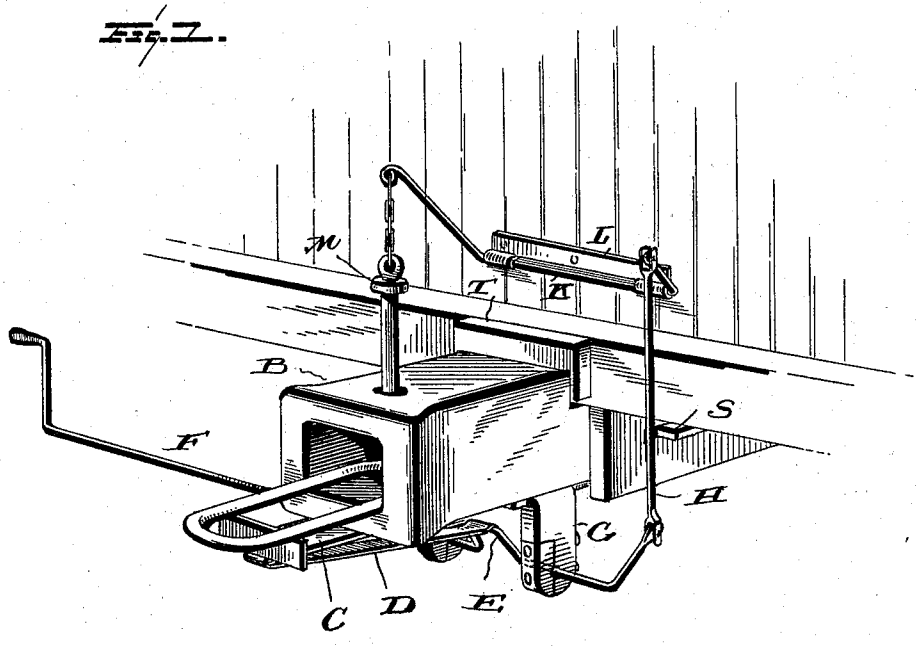
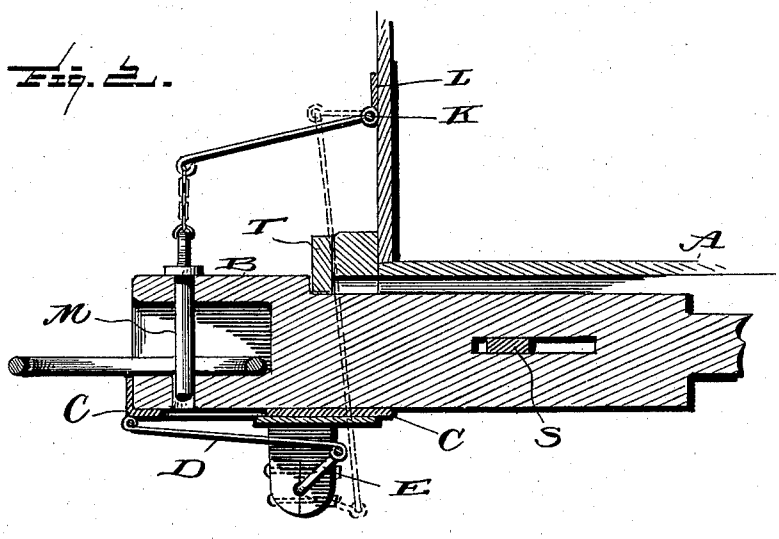


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

ROBERT WILLIAM RIGGINS, OF MAURY CITY, TENNESSEE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 590,022, dated September 14, 1897.

Application filed April 29, 1897. Serial No. 634,434. (No model.)

To all whom it may concern:

Be it known that I, ROBERT WILLIAM RIGGINS, a citizen of the United States, residing at Maury City, in the county of Crockett and State of Tennessee, have invented certain new and useful Improvements in Car-Couplers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in car-couplers, and especially to a pin-and-link coupler in which provision is made for guiding the link into the draw-head in connection with means for lowering a locking-pin through the draw-head by one movement of a crank-rod.

A further part of the invention resides in the provision of means for guiding the link within the draw-head by having the link-carrying plate slide horizontally in a suitable guideway underneath the draw-head, and in connection with the said plate of a lever-and-crank mechanism connected with a pin, whereby as the pin is raised the sliding link-conveyer is thrown out and when the link enters the draw-head, as in the coupling operation, the plate carrying the same travels inward as the pin is lowered.

To these ends and to such others as the invention may pertain the same consists, further, in the novel construction, combination, and adaptation of parts, as will be hereinafter more fully described, and then specifically defined in the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which drawings—

Figure 1 is a perspective view of my improved coupler. Fig. 2 is a longitudinal section of the coupler.

Reference being had to the details of the drawings by letter, A designates the platform of a car, to the under side of which is carried the draw-head B, which is held by suitable tail-pins to the under structure of the car. This draw-head is of the ordinary construction and has secured to its under surface, working in a suitable slot, the guide-plate C, which travels horizontally in the recess underneath the draw-head. The outer end of the said guide-piece C is upturned and is designed to carry and guide a link as it is to be coupled within the draw-head. Pivoted near the bent end of the said plate, under its under side, is the bar D, which has its other end connected to the crank E, formed in the shaft F, which is journaled in the brackets G underneath the draw-head. One end of the said shaft is provided with an operating-handle and its other end is connected to a rod H, which is connected at its upper end to the bent end of the rod K, which is journaled in the bracket L, fastened to the end of the car. The other end of the said rod K is outwardly bent and carries at its end the pin M directly above the aperture in the draw-head provided to receive the same.

Mounted on the sides of the draw-head and working through the slots in the sides of the under structure of the car are the guides S to limit the movement of the draw-head, and at the front end of the car is provided a bumper T, against which the shouldered portion of the draw-head abuts.

From the foregoing it will be seen that a link may be carried on the plate provided therefor, which slides in a slot in the under side of the draw-head and is operated by means of the shaft journaled under the draw-head, and by the peculiar arrangement of the crank-arms it will be seen that as the link is lifted and guided into the draw-head the pin through its connection with the operating-handle, is lowered through the aperture in the draw-head and the coupling is effected. When it is desired to uncouple the car, the same shaft is operated in a reverse direction, the pin is lifted, and the sliding link-carrier is forced outward, carrying with it the link, and the uncoupling of the link from the draw-head is effected.

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

In a car-coupler, the combination with the draw-head, the longitudinally-slotted link-carrying plate C, designed to slide against the lower face of the draw-head, the brackets G mounted on the draw-head, the crank-shaft journaled in said brackets the link D connecting the crank E with the forward end of

the link-carrying member, the shaft K journaled in the hanger secured to the end of the car, the rod H connecting the bent ends of the shaft K and the said shaft carried in the said brackets G, one end of the said shaft being bent at right angles and carrying a pin M, all substantially as shown and described.

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

ROBERT WILLIAM RIGGINS.

Witnesses:
J. H. CHANDLER,
J. H. RIDDICK.