

J. F. BURNER.
Car-Couplings

No. 149,372.

Patented April 7, 1874.

Fig. 1.

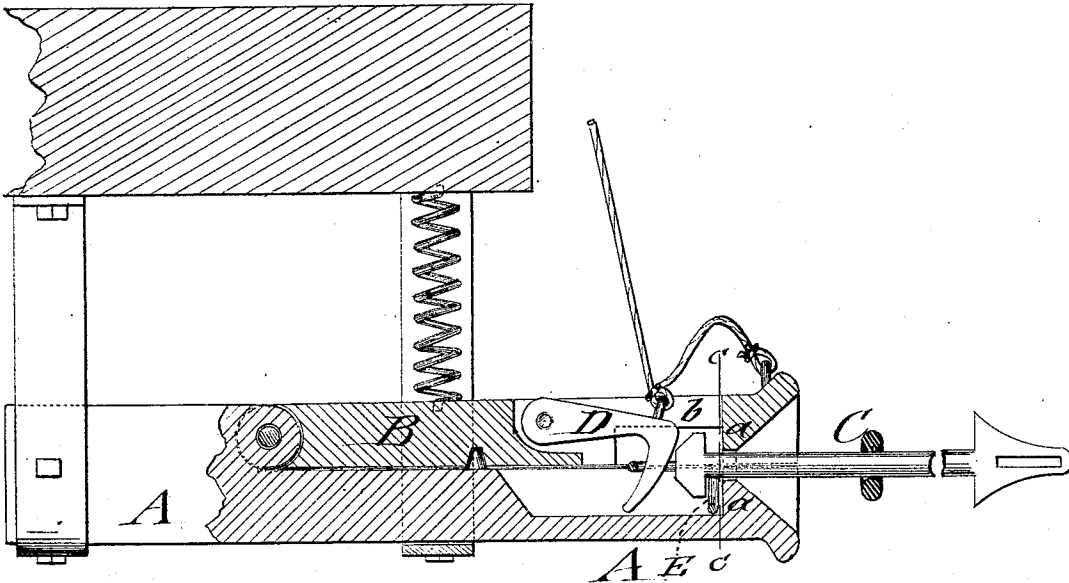
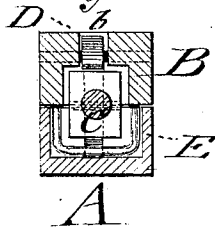


Fig. 2.



WITNESSES:

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JACOB F. BURNER, OF ELKO, NEVADA.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **149,372**, dated April 7, 1874; application filed February 7, 1874.

To all whom it may concern:

Be it known that I, JACOB FRANKLIN BURNER, of Elko, in the county of Elko and State of Nevada, have invented a new and Improved Car-Coupling, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical longitudinal section of my improved car-coupling; and Fig. 2, a vertical transverse section of the same on the line *cc*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention relates to improvements in automatic car-coupling; and consists of a stationary lower jaw with hinged upper spring-jaw, which is provided with a pivoted hook and yoke for coupling the slotted arrow or other shaped link, and lifting the same for uncoupling, so as to detach it from the hook ends of the jaws. The pivoted jaw and hook are connected, by a chain, with a suitable mechanism to raise them and uncouple the link.

In the drawing, A represents the lower jaw or stationary draw-bar of the coupling, which jaw is firmly applied below the bottom of the car to iron yokes, or attached in other suitable manner. The upper jaw B is hinged to the lower one, and acted upon by a strong spiral steel or rubber spring placed in the yoke between the car-frame and the upper jaw. The upper jaw B is thereby forced down on the lower jaw, but has sufficient flexibility to admit and release the entering coupling-link C. The front ends of the jaws A and B are formed, in the usual manner, with a tapering mouth, with hook-shaped projections, *a*. Both jaws are recessed in suitable manner for the link C, the upper jaw, also, being provided with a longitudinal slot, *b*, to the rear part of which a hook, D, is pivoted, that swings down into the recess of the lower jaw, and is connected, by a chain or rope, with the front part of the upper jaw and the usual mechanism on the platform, top, or side of the car, for raising or lowering the hook and jaw, and produces thereby the coupling and uncoupling of the

draw-heads. The upper hinged jaw B is further provided, immediately back of its hook, with a downward-extending yoke, E, which serves for the purpose of raising the coupling-link with the jaw, and enables the easier separation from the hook-shaped ends of the jaws. The coupling-link C may be made solid with arrow or spear shaped slotted heads, or with one arrow-head, the other having, instead of the slot, a link or ring shaped end, so as to couple with the common link-and-pin draw-head; or the common link may be used, it being coupled by the pivoted hook D.

The advantage of the arrow-head with slot or ring end lies in the twofold connection of the same with the draw-head, one being formed by the interlocking of the arrow-shaped head with the hook ends of the jaws, the other by the locking of the pivoted hook D into the slot or ring of the arrow-head. A strong coupling with sufficient play of the link is thereby obtained, which cannot uncouple, as the pressure of the spring forces the hinged jaw firmly on the stationary jaw released by the action of the uncoupling mechanism, or forced asunder by entering link.

By means of a central rubber ring or projection of the link, the same may be placed in horizontal position or inclined for coupling conveniently with the draw-heads of adjoining cars.

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

1. The combination of stationary lower jaw and hinged upper spring-jaw, having pivoted hook and lifting-yoke, with the coupling-link, constructed with slotted or ring-shaped arrow-head, substantially as specified.

2. The upper hinged spring-jaw, having recess and slot and downward-extending yoke, in combination with the pivoted hook, and for the purpose as set forth.

JACOB F. BURNER.

Witnesses:

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