

(No Model.)

I. DAVID.
CAR COUPLING.

No. 491,924.

Patented Feb. 14, 1893.

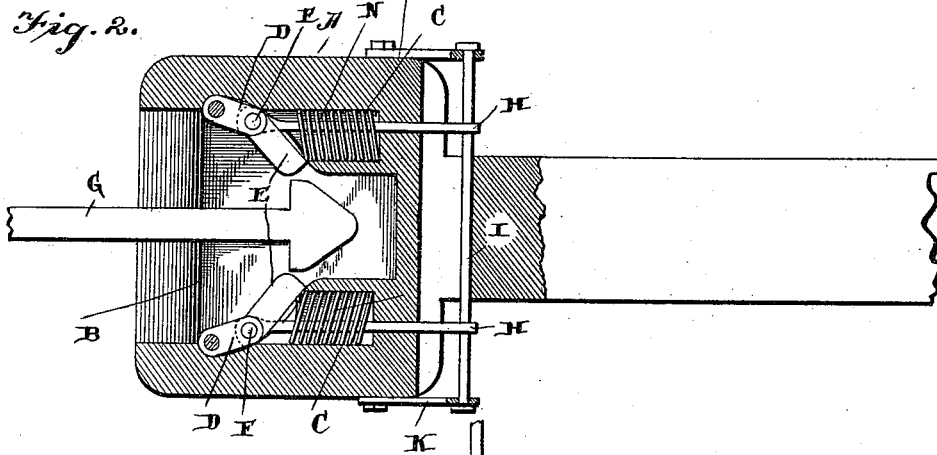
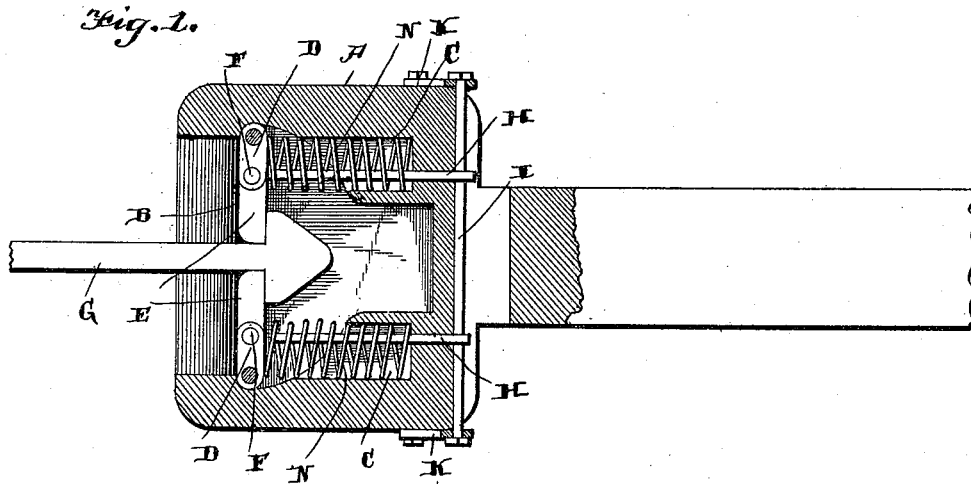
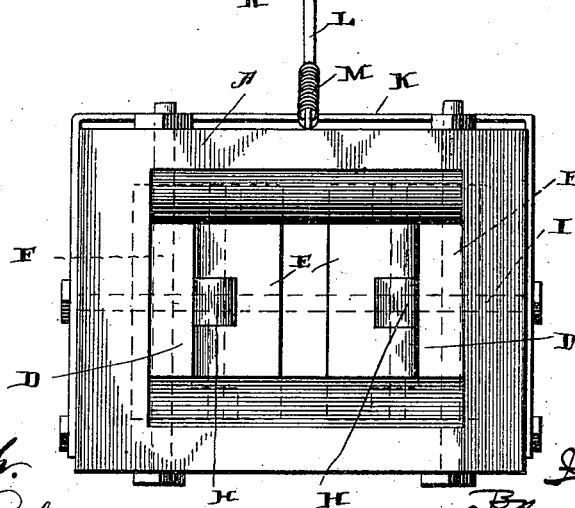


Fig. 3.



WITNESSES.

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ISAAC DAVID, OF HARVARD, NEBRASKA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 491,924, dated February 14, 1893.

Application filed November 3, 1892. Serial No. 450,851. (No model.)

To all whom it may concern:

Be it known that I, ISAAC DAVID, of Harvard, in the county of Clay and State of Nebraska, have invented certain new and useful
5 Improvements in Car-Couplings; 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 pertains to make and use it, reference being
10 had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in car couplings; and it consists in the novel combination and arrangement of parts as will
15 be fully described hereinafter, and more particularly referred to in the claims.

The object of my invention is to produce a coupler which is automatic in operation, simple in construction and most effective in holding
20 the cars securely together.

Referring to the accompanying drawings,—Figure 1 is a plan view of my improved coupling, the upper portion of the same being removed. Fig. 2 is a similar view showing the
25 latches in the position occupied when uncoupled. Fig. 3 is an end view.

A, designates the recessed head having depressions B, in its opposite inner vertical sides near its forward end, and C, rearwardly extending horizontal recesses formed in the
30 rearwardly extending sides of the head. Pivotaly secured in the depressions B, are the vertical latches D having their free ends extending inward toward each other as shown
35 and pivotally secured to the adjacent edges of these latches are the jaws E, by means of the vertical bolts F. The combined widths of the two latches and two jaws above referred to nearly close the opening in the drawhead
40 leaving only space sufficient to allow a headed link G, to pass between, that is the narrow portion of the link.

H, designates rods secured at their forward ends to the bolts F, and which extend rearward through the recesses C, and which at
45 their ends are connected to the rod I, extending through a transverse recess J, formed in the rear of the drawhead and which bolt is secured at its ends to the opposite sides of the
50 yoke K. This yoke is pivotally connected at its lower end to the drawhead and at the up-

per side of the head the sides of the yoke are contracted to form a single operating lever L. This lever is held normally in a forwardly drawn position by the spring M.

55 Confined within the recesses C, and surrounding the rods H, are the coiled springs N, which hold the rods extended forward when in a normal position as shown in Fig. 1 so as to confine the head of the link G, behind
60 the jaws E. The said coiled springs hold the jaws E, swung forward and bearing against the forward end of the drawhead so that when in coupling the head of the links in being
55 forced between the jaws pushes them backward the springs return the same to position as soon as the head has entered thus locking the latter in place.

For uncoupling all that is necessary is to draw backward the yoke K, by means of the
70 lever L, thus moving rearward the rods H, and with them the connected edges of the latches and jaws as shown in Fig. 2, thus forming a space between the latter sufficient
75 to pass the head of the link in its outward movement. It will be observed that the adjacent faces of the jaws have an outward convergence so that they constitute guides or deflectors for the head of the link in uncoupling
80 thus avoiding any possibility of a hitch after the space has been opened for its outward passage.

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

1. The combination of a recessed head, latches pivoted in the opposite sides of the recess, jaws pivotally secured to the adjacent
90 edges of the latches, a means for turning the latches rearward on their pivots, and a link, substantially as shown and described.

2. The combination of a recessed head, latches pivoted on opposite sides of the forward portion of the recess, jaws pivotally secured to the adjacent edges of the latches,
95 rearwardly extending rods connected at their forward ends to the points of connection of the said latches and jaws, springs for holding the latches and jaws normally in a forwardly extending position, a means for drawing rearward the said rods, and a link, substantially
100 as shown and described.

3. The combination of a recessed head, vertical latches pivoted on opposite sides of the recess, jaws pivotally secured to the adjacent edges of the latches, springs for holding the same in a forwardly extended position, rods
5 extending rearward from the same, a horizontal rod extending through a transverse recess in the rear end of the draw head, a yoke pivoted at one end to the draw head and between
10 the ends of which the said rod is secured, and a link substantially as shown and described.

4. The combination of a recessed draw head having depressions B, in its opposite sides and rearwardly extending recesses C, formed in
15 its opposite walls, latches pivoted in the de-

pressions B, jaws pivotally secured to the latches, rods extending from the pivotal point of the jaws and latches rearward through the recesses C, coiled springs confined in said recesses and surrounding the rods and which
20 bear against the meeting edges of the latches and jaws at their forward ends, a means for drawing rearward the said rods, and a link, substantially as shown and described.

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

ISAAC DAVID.

Witnesses:

C. E. GADDIS,

D. G. W. DAVID.