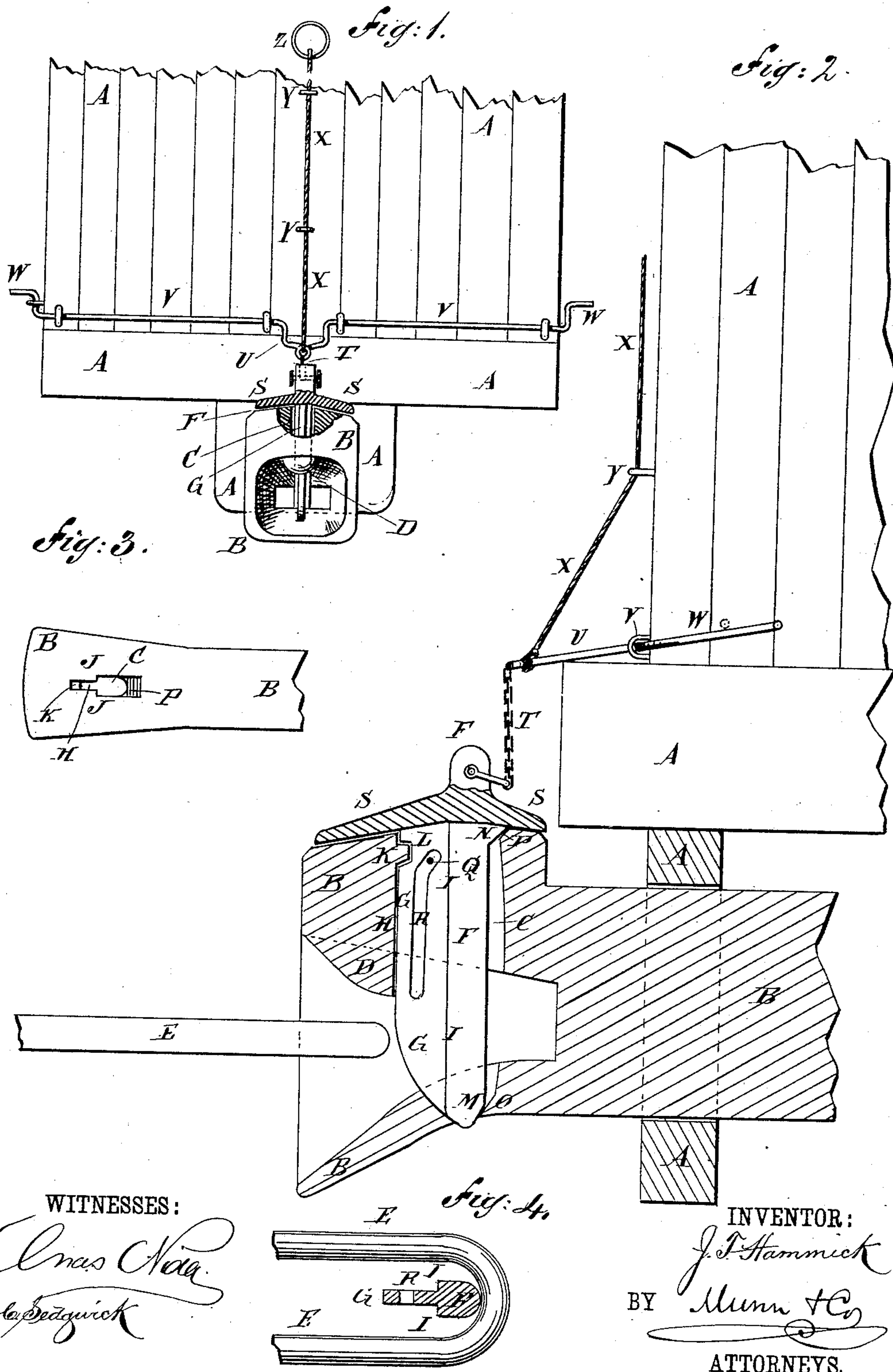


(No Model.)

J. T. HAMMICK.
CAR COUPLING.

No. 348,739.

Patented Sept. 7, 1886.



UNITED STATES PATENT OFFICE.

JOSEPH T. HAMMICK, OF RHINEBECK, NEW YORK.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 348,739, dated September 7, 1886.

Application filed July 6, 1886. Serial No. 207,253. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH T. HAMMICK, of Rhinebeck, in the county of Dutchess and State of New York, have invented a new and useful Improvement in Car-Couplings, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of a part of a car to which my improved car-coupling has been applied, parts being broken away. Fig. 2 is an enlarged side elevation of the same, partly in section. Fig. 3 is a plan view of the draw-head. Fig. 4 is a sectional plan view of the coupling-pin and a plan view of part of a coupling-link.

The object of this invention is to improve the construction of the car-couplings for which Letters Patent were allowed May 26, 1886, Serial No. 191,766, in such a manner as to make them simpler in construction and more convenient in use.

The invention consists in the construction and combination of various parts of the car-coupling, as will be hereinafter fully described and then claimed.

A represents the body of a car, with which the draw-head B is connected in the ordinary manner. The mouth of the draw-head B is made very flaring, and upon the lower side of the top of the said draw-head, just in front of the pin-hole C, is formed a rib, D, the outer end of which is inclined or beveled, so that it will guide the end of an entering link, E, that strikes against it, toward the lower part of the said mouth. The rib D is made short and narrow, so that it will not prevent the free play of the link E, even when the said link is in the upper part of the mouth of the draw-head.

F is the coupling-pin, the inner part of which is made round or oval to provide a suitable bearing-surface for the inner surface of the end of the link E. Upon the outer side of the pin F is formed a longitudinal flange, G, to fit into a corresponding groove, H, in the draw-head B, at the outer side of the pin-hole C. Upon the outer side of the pin F, at the opposite sides of the flange G, are formed square shoulders I, to fit against corresponding square

shoulders, J, formed in the draw-head B, at the outer side of the pin-hole C, and at the opposite sides of the groove H, so that the said pin will be firmly supported against the draft-strain.

Upon the inner surface of the upper part of the draw-head B, at the outer edge of the groove H, is formed a projection, K, to fit into a recess, L, in the outer edge of the flange G, to prevent the coupling-pin F from rising when under a draft-strain.

Upon the lower end of the inner side of the pin C is formed an incline, M, and at the upper end of the said side is formed an inclined shoulder, N, to engage with corresponding inclines, O P, formed in the draw-head B at the lower and upper ends of the inner side of the pin-hole C, so that as the pin F drops into place the said inclines will force it outward and cause the recess L to engage with the projection K and lock the said pin in place. The outer edge of the lower part of the flange G is rounded, as shown in Fig. 2, so that as the end of an entering link strikes the edge of the flange G the first effect will be to force the pin F inward, disengaging the recessed flange G from the projection K, and the second effect will be to raise the pin F so that the end of the said link can pass the end of the said pin when the pin drops through the link and the cars are coupled automatically. The pin F is kept from being raised out of the pin-hole C by the pin Q, which passes transversely through the upper part of the draw-head and through a longitudinal slot, R, in the flange G. The middle and lower parts of the slot R are vertical, but its upper part is inclined inward, as shown in Fig. 2, to allow the coupling-pin F to move inward or outward, to disengage from or engage with the projection K and cause it to move up and down vertically when free from the said projection.

Upon the upper part of the coupling-pin F is formed a flange, S, which overlaps the upper side of the draw-head B around the pin-hole and serves as a cap to protect the said pin and pin-hole from rain, snow, and ice, so that the said pin will work properly at all times and in all kinds of weather.

To the upper end of the coupling-pin F is attached the end of a short chain, T, the other

end of which is secured to a crank, U, formed upon or attached to the middle part of a rod, V, rocking in bearings attached to the end of the car-body A.

5 To the ends of the rod V, at the sides of the car-body A, are attached cranks W, by means of which the said rod V can be turned from either side of the track to raise the coupling-pin F and uncouple the cars. To the upper
10 end of the chain T is also attached the lower end of a cord or chain, X, which passes up through guides Y, attached to the end of the car-body A, and has a ring, Z, or other handle attached to its upper end, so that the
15 coupling-pin can be readily raised from the roof of the car to uncouple the cars by operating the said cord or chain X.

This coupling can be easily adapted to many of the ordinary couplings now in use.

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

1. In a car-coupling, the draw-head B, formed, substantially as herein shown and described, with a groove, H, at the outer side
25 of the pin-hole C, a projection, K, in the upper part of the said groove, and inclines O P at the lower and upper parts of the inner side of the said pin-hole, to adapt the said pin-hole
30 to receive a correspondingly-shaped coupling-pin, as set forth.

2. In a car-coupling, the coupling-pin F, formed, substantially as herein shown and described, with a longitudinal flange, G, on its
35 outer side, a recess in the upper part of the said flange, an incline on the inner side of the lower end, and an inclined shoulder at the inner side of the upper end of the said pin to adapt the said pin to engage with a correspondingly-
40 shaped hole in the draw-head, as set forth.

3. In a car-coupling, the combination, with the draw-head B, having pin-hole C, a groove, H, at the outer side of the said pin-hole, a
45 projection, K, in the upper part of the said groove, and inclines O P at the lower and upper parts of the inner side of the said pin-hole,

of the coupling-pin F, having a longitudinal flange, G, with a rounded lower end on its outer side, a recess, L, in the upper part of the said flange, and an incline, M, on the lower
50 end, and an inclined shoulder, N, on the upper end, of the inner side of said pin, substantially as herein shown and described, whereby the said pin will be moved forward and locked as
55 it nears the end of its downward movement and will be pushed inward and raised by the impact of the entering link, as set forth.

4. In a car-coupling, the combination, with the draw-head B, having pin-hole C and groove H at the outer side of the said pin-hole, and
60 the coupling-pin F, having longitudinal flange on its outer side, and slot K, with inwardly-inclined upper end in the said flange, of the pin Q, attached to the said draw-head and passing through the said slot, substantially as
65 herein shown and described, whereby the said coupling-pin is kept from being raised out of the said draw-head, as set forth.

5. In a car-coupling, the combination, with the coupling-pin F, provided with a flange, G,
70 having rounded lower end, of the draw-head B, having a pin-hole, C, a groove, H, at the outer side of the said pin-hole, and a rib, D, upon the inner surface of its upper part at the
75 outer side of the said groove, substantially as herein shown and described, whereby the end of an entering link is guided into position to raise the said pin, as set forth.

6. In a car-coupling, the combination, with the draw-head B, having pin-hole C, and
80 groove H at the outer side of the said pin-hole, of the coupling-pin F, having flange G on its outer side and a cap-flange, S, on its upper end, substantially as herein shown and
85 described, whereby the pin-hole of the draw-head is protected from snow, rain, and ice, as set forth.

JOSEPH T. HAMMICK.

Witnesses:

GEO. ESSELSTYN,
J. C. MCCARTY.