

(No Model.)

R. BURNHAM.
CAR COUPLING.

No. 573,858.

Patented Dec. 29, 1896.

Fig. 1.

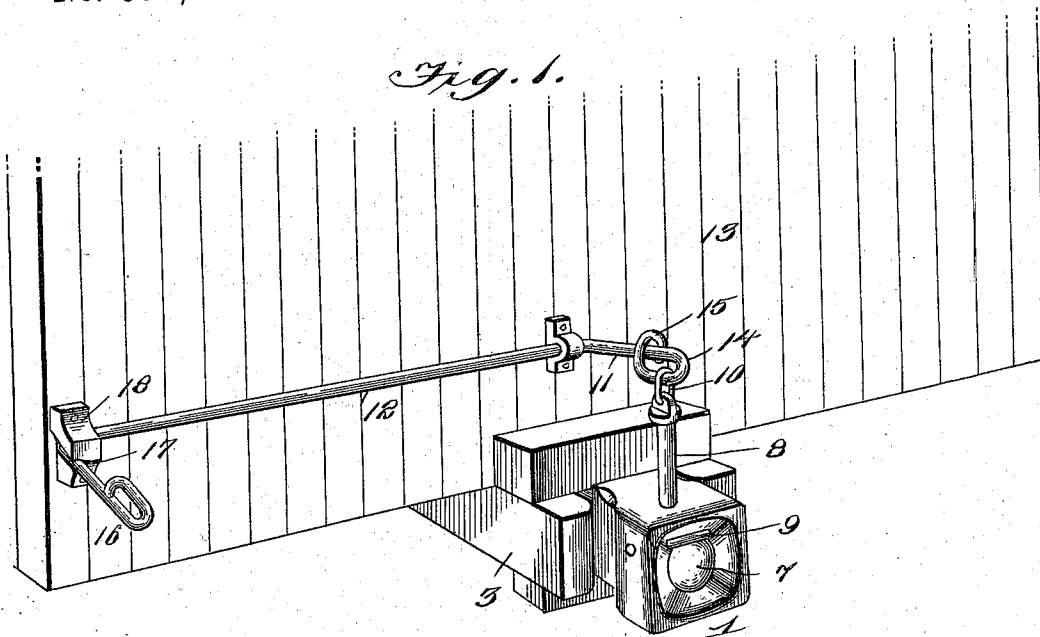


Fig. 5.

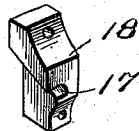


Fig. 3.

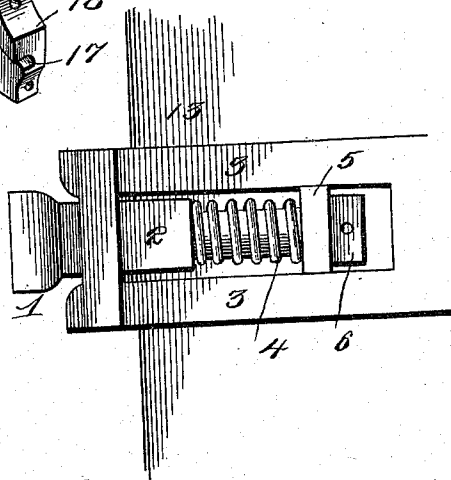


Fig. 2.

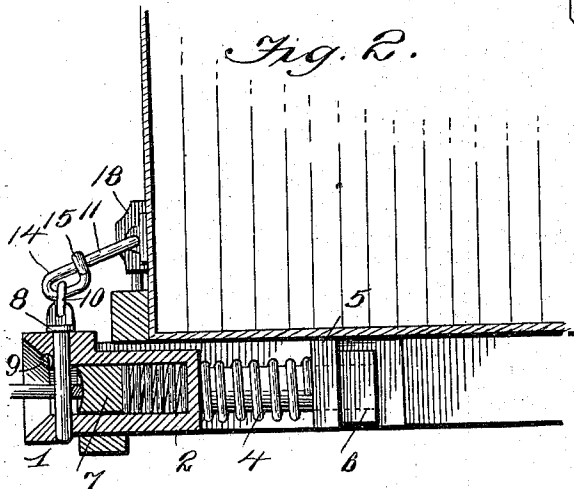


Fig. 6.

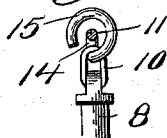
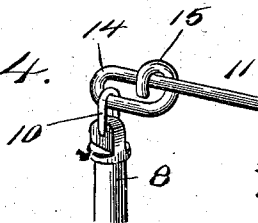


Fig. 4.



Witnesses

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By his Attorneys,

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ROLLIN BURNHAM, OF STORM LAKE, IOWA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 573,858, dated December 29, 1896.

Application filed January 16, 1896. Serial No. 575,758. (No model.)

To all whom it may concern:

Be it known that I, ROLLIN BURNHAM, a citizen of the United States, residing at Storm Lake, in the county of Buena Vista and State of Iowa, have invented a new and useful Car-Coupling, of which the following is a specification.

The invention relates to improvements in car-couplings.

10 The object of the present invention is to improve the construction of pin-and-link car-couplings and to enable them to couple automatically and to be readily uncoupled without going between cars.

15 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

20 In the drawings, Figure 1 is a perspective view of a car-coupling constructed in accordance with this invention and shown applied to a car. Fig. 2 is a longitudinal sectional view. Fig. 3 is a reverse plan view. Fig. 4 is a detail perspective view illustrating the manner of connecting the pin with the rock-shaft. Fig. 5 is a detail perspective view of the outer bearing of the rock-shaft. Fig. 6 is a detail sectional view illustrating the construction of the terminal of the loop of the rock-shaft arm.

25 Like numerals of reference designate corresponding parts in all the figures of the drawings.

30 1 designates a draw-head having a draw-bar 2, mounted between timbers 3 and connected by a spiral spring 4, which is disposed on a reduced portion of the draw-bar and interposed between the shoulder formed by such reduction and a cross-piece 5. The rear end of the shank of the draw-bar passes through an opening of the cross-piece 5 and is secured by a collar 6 or any other suitable fastening device.

35 The draw-head is provided with a circular opening or cavity, and within the same is arranged a spring-actuated block 7, adapted to support a coupling-pin 8 in an elevated position preparatory to automatic coupling and capable of being forced inward by a link entering the draw-head to withdraw the support from beneath the coupling-pin to cause

the same to fall and engage the link, whereby automatic coupling is effected. The spring-actuated block is round, and a spiral spring 55 is disposed between the rear end thereof and the back of the draw-head. The front end of the block is normally arranged beneath the upper portion of the coupling-pin perforation in position to support the coupling-pin 8, and the forward movement of the block is limited by a transverse pin 9, arranged at the top of the draw-head in the perforation thereof.

60 The coupling-pin is connected detachably by a ring or link 10 with an arm 11 of a transverse rock-shaft 12, which is journaled on a car 13 in inner and outer bearings. The arm 11 of the rock-shaft extends outward over the draw-head, and is bent downward on itself to form a substantially U-shaped loop 14, having its terminals 15 curved and disposed transversely of the arm 11 and arched over the same. This construction of loop prevents the link or ring of the coupling-pin from becoming accidentally disengaged, and at the same time enables the pin to be detached when desired.

75 The rock-shaft is provided at its outer end with a handle 16, and the coupling-pin is held elevated for uncoupling or to prevent coupling by engaging the handle 16 with a groove 17 of the outer bearing 18 of the rock-shaft. The rock-shaft is capable of a limited longitudinal movement to engage the handle with and disengage it from the groove 17. The latter forms a shoulder or support for the handle, and the upper wall of the groove is extended laterally, and also prevents any jar from swinging the handle upward and throwing it off its support. The handle 16 and the arm 11, which are located at the terminals of the rock-shaft, form stops to limit the longitudinal movement of the same.

80 Any suitable means may be employed for enabling the operation of uncoupling to be performed from the top of a car, and, if desired, the rock-shaft may be extended entirely across the car.

85 It will be seen that the car-coupling is exceedingly simple and inexpensive in construction, that it is positive and reliable in operation, and that it is capable of coupling automatically and being readily uncoupled without going between cars.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

5 What I claim is—

10 In a car-coupling, the combination with a car, of a draw-head mounted thereon and capable of longitudinal movement, a coupling-pin arranged in the draw-head and provided at its upper end with a link or ring, and
15 a transverse rock-shaft journaled on the car and provided with an arm disposed over the draw-head, and bent downward beneath itself and longitudinally of it to form a longitudinal loop to receive the link or ring, and permit the coupling-pin to have a limited longitudinal movement on the arm to agree with

the longitudinal movement of the draw-head, the terminal of the loop being curved transversely of the arm and extending upward, 20 over and partially around the same, whereby the rear end of the loop is practically closed to the coupling-pin, when the latter is in its normal position, and the said coupling-pin is permitted to be disconnected from the arm 25 when it is removed from the draw-head, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ROLLIN BURNHAM.

Witnesses:

GEO. W. WEDGWOOD,
IRA W. RUSSELL.