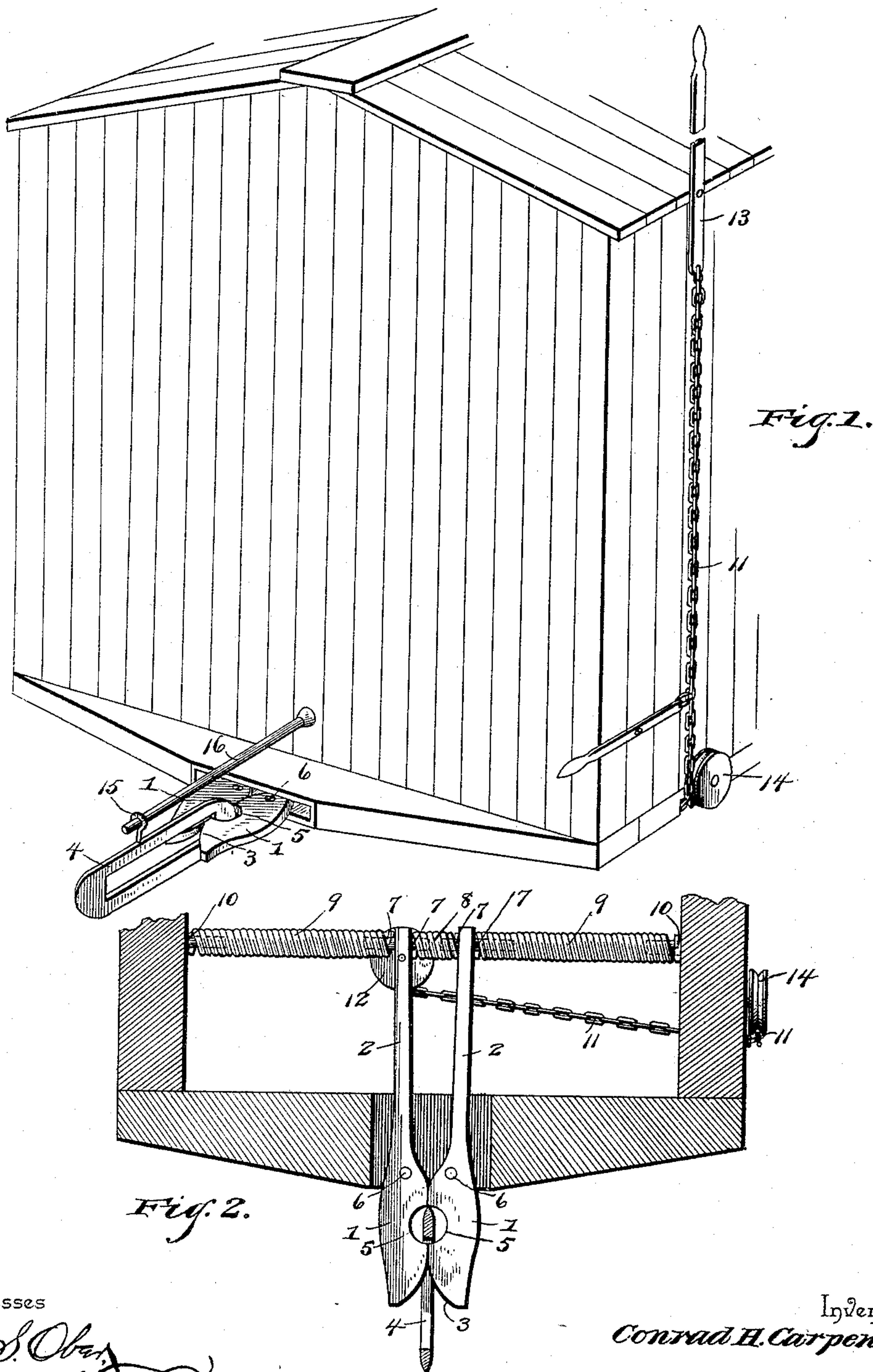


(No Model.)

C. H. CARPENTER.
CAR COUPLING.

No. 488,963.

Patented Dec. 27, 1892.



Witnesses

B. S. O'Connell
N. F. Riley

Inventor

Conrad H. Carpenter

By *his* Attorneys,

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UNITED STATES PATENT OFFICE.

CONRAD H. CARPENTER, OF LANNIUS, TEXAS, ASSIGNOR OF ONE-FOURTH
TO S. L. WILLYERD AND G. W. WOLF, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 488,963, dated December 27, 1892.

Application filed October 22, 1892. Serial No. 449,699. (No model.)

To all whom it may concern:

Be it known that I, CONRAD H. CARPENTER, a citizen of the United States, residing at Lannius, in the county of Fannin and State of Texas, 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 simplify and improve the construction of car couplings, and to provide one which will couple automatically, and in which a link will always be maintained in proper position for coupling, and which may be readily uncoupled without necessitating a person 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 claims hereto appended.

20 In the drawings—Figure 1 is a perspective view of a car coupling constructed in accordance with this invention. Fig. 2 is a horizontal sectional view.

25 Like numerals of reference indicate corresponding parts in both the figures of the drawings.

30 1, 1 designate a pair of horizontally disposed draw-hooks pivotally mounted intermediate of their ends, and having rearwardly extending shanks 2. The heads of the hooks at the ends are oppositely beveled to form a flaring mouth 3 adapted to receive a link 4 which is arranged edgewise or vertically, and which has its ends tapered to readily spread the hooks 1. The necks 5 of the hooks or jaws have their opposite edges curved and form a circular link receiving opening adapted to permit cars to move freely in rounding curves and the like without cramping the link. In rear of the necks at the middle of the hooks the latter are enlarged to receive the pivots 6. The rear ends of the shanks are provided with laterally extending lugs 7 which receive and fit within the ends of spiral springs 8 and 9. The spiral spring 8 is interposed between the rear ends of the shank and the springs 9 are arranged at the outer sides of the shank and engage the same, and are connected with the car by lugs 10 similar to the lugs 7. The

springs hold the draw-hooks normally closed, and are adapted to yield readily to any movement of the draw-hooks, and to permit the same to swing laterally incident to rounding curves without opening.

The jaws or hooks are spread for uncoupling by means of a chain 11 extending from one side of the car across the bottom thereof to the farther shank on which is mounted a pulley 12 around which passes a chain, and the latter has one end secured to the other shank. The other end of the chain is attached to a lever 13 fulcrumed at one side of the car near the top, and the portion of the chain extending up the side of the car is arranged near a pulley 14 against which the chain is moved in drawing the upper end of the lever toward the adjacent end of the car. The operation of uncoupling may be readily performed at the top of the car, and it is designed to provide a lever near the bottom of the car to enable the car to be uncoupled from the side thereof.

The link 4 which is arranged edgewise or vertically is provided at its upper edge with an eye 15 adapted to fit on a horizontally disposed resilient rod 16 extending outward from the car for supporting the link in proper position for coupling. The width of the link is disposed vertically so that cars may vary somewhat in height and still couple.

It will be seen that the car coupling is simple and comparatively inexpensive in construction, that a link is always maintained in proper position for coupling, and that the coupling is automatic, and that the uncoupling is performed without necessitating a person going between cars.

What I claim is—

1. In a car coupling, the combination of the opposite horizontally disposed draw-hooks pivoted intermediate of their ends and having rearwardly extending shanks, said hooks having beveled front ends forming a flaring mouth and having the opposite edges of their necks curved and forming a circular opening, springs for holding the extending shanks separated to close the hooks, and a link arranged edge-wise, substantially as described.

2. In a car coupling, the combination of the opposite horizontally disposed pivoted hooks

having rearwardly extending shanks, a spiral spring interposed between the shanks and holding the same separated, spiral springs engaging the shanks at the outer faces thereof, 5 a pulley mounted on one of the shanks and a chain secured to the other shank and passing around the pulley, and adapted to draw the shanks together to open the hooks, substantially as described.

10 3. In a car coupling, the combination of the opposite horizontally disposed pivoted hooks having rearwardly extending shanks, a spiral spring interposed between the shanks and holding the same separated and closing the 15 hooks, spiral springs engaging the outer faces of the shanks, a pulley mounted on one of the shanks, a chain secured to the other shank and passing around the pulley and extending to one side of the car, a pulley arranged at 20 that side of the car, and a lever fulcrumed on

the car and connected with the chain, substantially as described.

4. In a car coupling, the combination of the opposite pivoted hooks, a rod extending outward from the car and a link suspended edgewise from the rod, substantially as described. 25

5. In a car coupling, the combination of the opposite pivoted hooks, the horizontally disposed resilient rod arranged above the hooks, and the link provided at its upper edge with 30 an eye arranged on said rod, whereby the link is suspended edgewise from the rod, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 35 the presence of two witnesses.

CONRAD H. CARPENTER.

Witnesses:

WILLIAM H. NUNN,
GEO. H. MARKHANN.