

(No Model.)

H. BUNKER.
CAR COUPLING.

No. 466,221.

Patented Dec. 29, 1891.

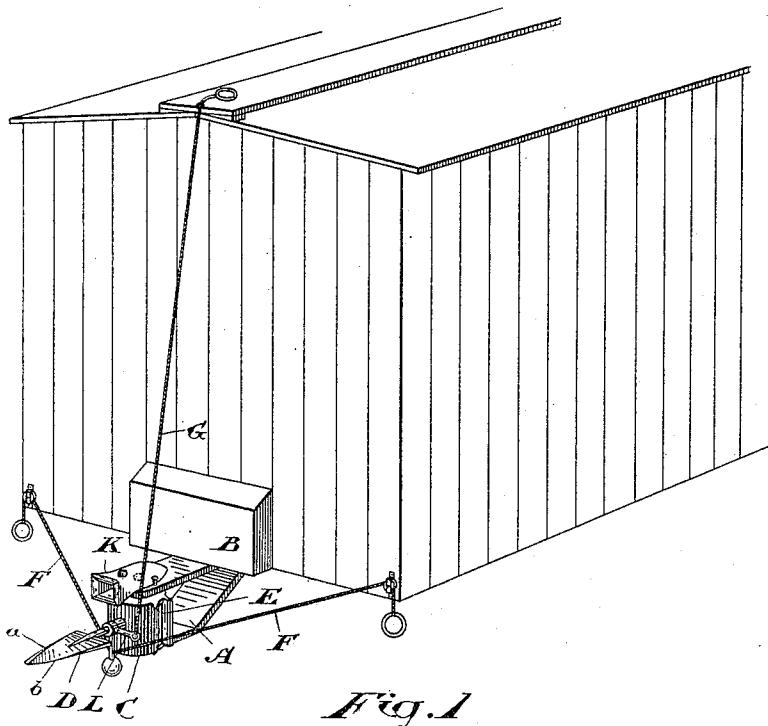


Fig. 1

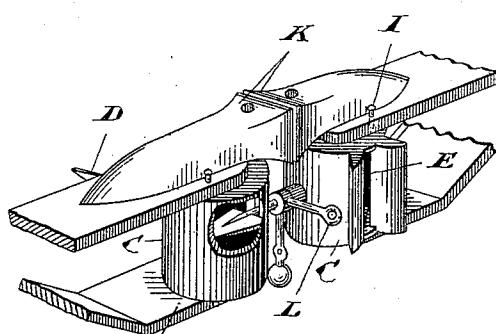


Fig. 2.

Witnesses

Eda Maybee
W. G. McMillan

Inventor

Harman Bunker
by
Donald W. & Robert E. B.
Atty.

UNITED STATES PATENT OFFICE.

HARMAN BUNKER, OF BARRIE, CANADA, ASSIGNOR OF ONE-HALF TO JAMES HERBERT MCKEGGIE, OF SAME PLACE, JOHN CHARLES MCKEGGIE AND GEORGE TAIT BLACKSTOCK, OF TORONTO, CANADA, AND MILO J. ALTHOUSE, OF WAUPUN, WISCONSIN.

CAR-COUPING.

SPECIFICATION forming part of Letters Patent No. 466,221, dated December 29, 1891.

Application filed July 16, 1891. Serial No. 399,707. (No model.)

To all whom it may concern:

Be it known that I, HARMAN BUNKER, of the town of Barrie, in the county of Simcoe, in the Province of Ontario, Canada, have invented a certain new and Improved Self-Acting Car-Coupler, of which the following is a specification.

The object of the invention is to design a simply-constructed car-coupler in which connection is made automatically and which may be uncoupled either from the side or top of the car without any necessity of entering between the ends of the car; and it consists, essentially, of an arrow-shaped link suitably journaled in a turret pivoted on the end of a draw-head fixed to a car, the said arrow-shaped link being designed to enter a passage-way formed in a similar turret pivoted on the end of a draw-head connected to another car, substantially as hereinafter more particularly explained, and then definitely claimed.

Figure 1 is a perspective view of an end of a car provided with my improved automatic car-coupler. Fig. 2 is an enlarged perspective detail, partially in section, of my improved automatic car-coupler.

In the drawings, A represents a strongly-constructed draw-head suitably connected to the end of the car B. C is a hollow turret journaled on a vertical axis in the draw-head A.

D is an arrow-shaped link suitably journaled on a horizontal axis in about the center of the turret C. The edge a on the link D is curved upwardly where the edge b on the link is curved downwardly, as indicated, so that where the point of the arrow-shaped link enters a narrow opening the edges a and b, in coming in contact with the sides of the said opening, force the link D to revolve on its axis by quarter of a turn.

E is a narrow vertical opening or slot made in the turret C, the said opening being designed to receive the arrow-shaped link D. Each turret C is provided with a link D and an opening E and is revolvable, so that the turret on one car may be set so as to bring its arrow-shaped link in position to enter the opening E in the turret on the other car.

The rods F are fixed to the spindle of the link D and extend to the outer edge of each side of the car B. A vertical rope G is connected to the crank-arm L and extends to the top of the car B. These ropes are for the purpose of enabling the link D to be revolved in order to disconnect the couplers.

The operation of my car-coupler is extremely simple, as will be observed from the following description: When the turrets are properly set and the cars brought together, the arrow-shaped link D enters the opening E. The curved edges of the arrow-shaped link, by coming in contact with the sides of the opening E, cause the link D to make a quarter-revolution, bringing the link in such a position that it will readily pass through the opening. When the bars of the arrow have passed the inner edge of the opening E, the link will immediately reassume its horizontal position, the said link being so weighted that its normal position is horizontal.

In order to disconnect the couplers, either one of the ropes F or the rope G is taken hold of and the arrow-shaped link D is revolved so as to bring it in a vertical position, when it may be drawn out of the turret.

A suitable catch should be provided for the purpose of locking the turret C.

I do not confine myself to any particular kind of lock, as various styles would suit the purpose; but for the purposes of this specification I show at I a lock suitable for holding the turret.

In order to provide means for connecting my draw-head A to a car provided with an ordinary link-and-pin draw-head, I connect such a draw-head K on either the top or bottom of the draw-head A, using the draw-head K when a car provided with my improved coupler has to be attached to a car with an ordinary link-and-pin coupling.

I do not confine myself to the use of any particular material, nor do I restrict myself to any special detail of design other than the salient points of my invention, which I have pointed out in this specification.

I am aware of the expired United States

Patent No. 47,985, in which a somewhat similar style of coupling is used; but in such case two arms are required, each carrying a part of the coupler, which arrangement necessarily takes up much room, while by the use of my hollow turret the head of the arrow-shaped link is allowed to pass to the rear of the link of the other section of the coupling, and the coupling is thus much more compact.

10. What I claim as my invention is—

The improved automatic coupler herein described, comprising a hollow turret C, suit-

ably pivoted in a draw-head A on short pivots formed on the head and foot of the turret, thus leaving a space between the pivots, and 15 an arrow-shaped link adapted to enter a slot in the turret and pass into the space between the pivots, substantially as described.

Toronto, June 29, 1891.

HARMAN BUNKER.

In presence of—

H. H. SMITH,

JOSEPH EDWARDS.