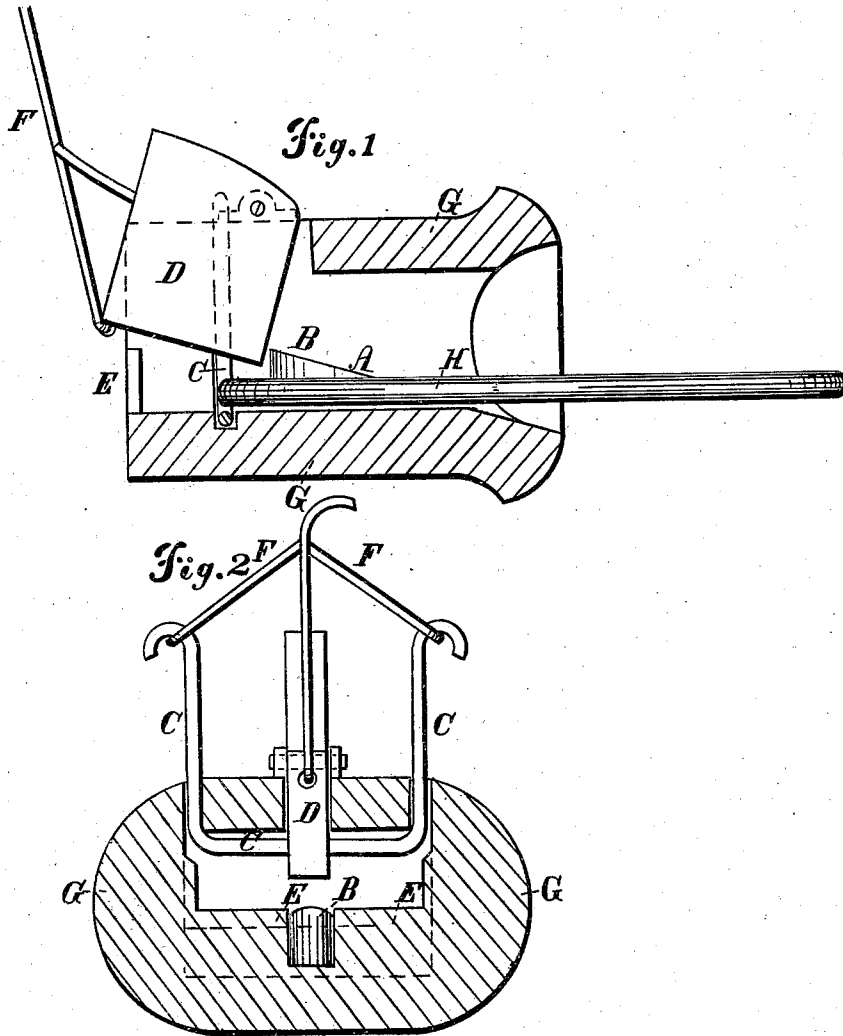


T. H. BOMAR.
Car Coupling.

No. 81,741.

Patented Sept. 1, 1868.



Witnesses:
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THOMAS H. BOMAR, OF ATLANTA, GEORGIA.

Letters Patent No. 81,741, dated September 1, 1868.

IMPROVEMENT IN CAR-COUPPLINGS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, THOMAS H. BOMAR, of Atlanta, in the county of Fulton, and in the State of Georgia, have invented certain new and useful Improvements in Car-Couplings; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the construction and general arrangement of a car-coupling, which is different from any other now in use, and which combines lightness and simplicity as well as strength, and is not liable to get out of order. And the advantages of the same are, that it is self-acting, so that cars can be coupled from the engine without the supervision of a coupling-hand. It does away with the danger heretofore attending the coupling of cars. It saves time in the making up of trains and shifting of cars. A brakeman on the top of the cars can cut them loose at any time, in case of fire or other accident, even while running. It can be used with common coupling, besides many others, which will be readily seen.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation, referring to the annexed drawings, which form a part of this specification, and in which—

Figure 1 is a side section, and

Figure 2 a rear view.

G represents a coupling-box, made in any of the known and usual ways, and provided in the centre of its lower side with an inclined plane, A, which is slanting towards the mouth of the box.

In the rear of and close to said inclined plane is a wrought-iron pin, B, which passes through the bottom of the box, and firmly secured thereto. The top of said pin is bevelled, so as to form a continuation of the inclined plane.

When the coupling-link H is inserted into the mouth of the coupling-box, it glides up along the inclined plane A and top of the pin B, falling down in rear thereof, thus coupling the cars. By this arrangement, the weight of the train falls on a solid support, unconnected with any kind of movable pin, hinge, ball, or bar, and as both the inclined plane and the wrought-iron pin, backing the same up, are very strong, they cannot be broken; and since they are permanently fixed, they cannot be lost.

In case of wear, the pin B can be readily replaced at small expense; thus the bumper will last several years longer than any heretofore invented.

The top of the coupling-box is provided with a slot, the front end of which is just above the pin B, and in this end a movable arm, D, is pivoted, said arm falling down and striking the rear side of the said pin B above the coupling-link. This arm serves to hold the link horizontal, the more readily to enter the next coupling, and also to prevent the link from being forced or thrown above the top of the inclined plane, and thus severing the train.

In the rear part of the coupling-box are stops, E E, which are necessary to make the link climb the inclined plane, and force back the movable arm when inserted into the other coupling-box. Were it not for these stops the coupling-link would push through.

In rear of the pin B, and between it and the stops E E, is an elevating-link, C, which consists of iron, or other suitable material, and passes from above the box in grooves on its sides and bottom. The upper ends of this link are attached to chains, F, which are passed up to the platform of the cars, or to their top, and by this improvement, cars can be uncoupled not only when an engine is attached to pull out the links, but also when standing still on the track, for, by a few jerks of the chain, the elevating-link C throws the coupling-link above and on top of the inclined plane, thus cutting asunder the train.

The movable arm D is also connected to the same chains, F F, and the connection so arranged that the arm will be raised before any motion is imparted to the elevating-link.

By passing the coupling-link H back through the open space above the stops E E, the coupling is so

adjusted as not to couple, (and at the same time not to lose the link,) this adjustment to be used when it is desired to push back a few cars without connecting them.

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

The arrangement of the pivoted arm D, angular elevating-link C, stops E E, inclined plane A, and pin B in the draw-head G, all constructed and used substantially as specified.

In testimony that I claim the foregoing, I have hereunto set my hand, this 1st day of June, 1868.

THOS. H. BOMAR.

Witnesses:

D. F. HAMMOND,

OLIN WELLBORN.