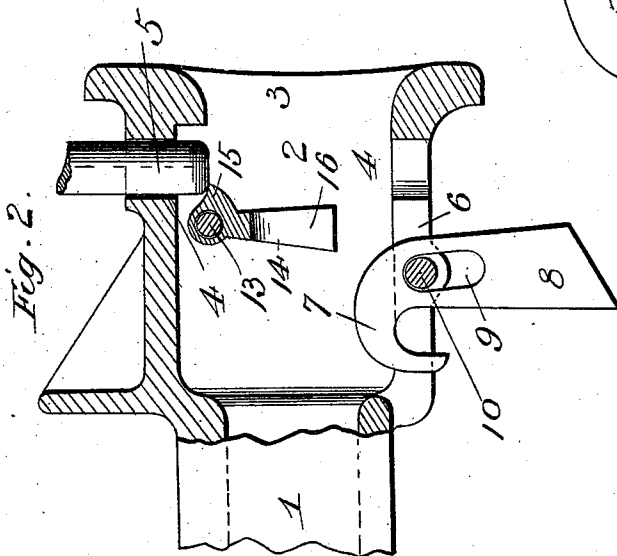
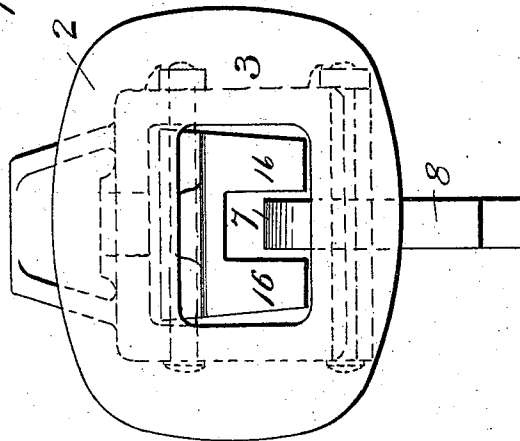
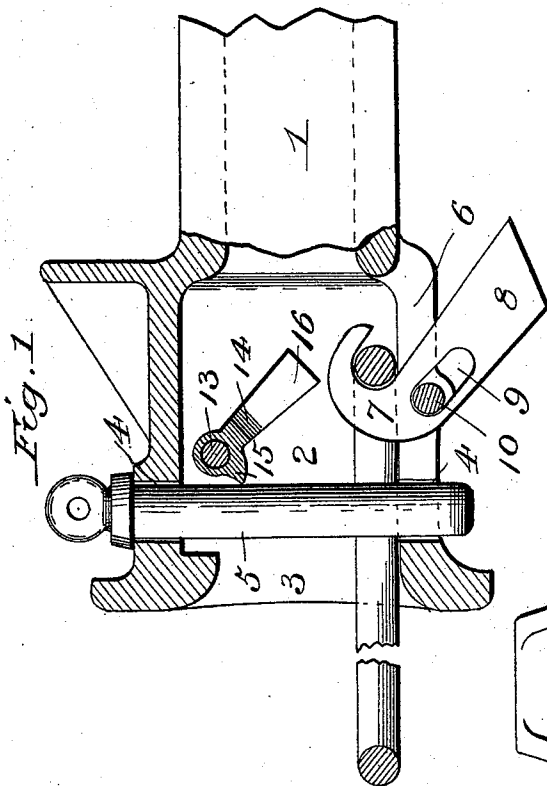


(No Model.)

F. W. BRIDENBECKER.
CAR COUPLING.

No. 574,383.

Patented Jan. 5, 1897.



Witnesses:

J. L. Orand
J. L. Leombs

Inventor:

Frank W. Bridenbecker
By Samuel Baggett & Co.
Attorneys

UNITED STATES PATENT OFFICE.

FRANK W. BRIDENBECKER, OF FRANKFORT, NEW YORK.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 574,383, dated January 5, 1897.

Application filed May 22, 1896. Serial No. 592,536. (No model.)

To all whom it may concern:

Be it known that I, FRANK W. BRIDENBECKER, a citizen of the United States, and a resident of Frankfort, in the county of Herkimer and State of New York, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain improvements in "pin-and-link" couplings.

One of the advantages, among several, of this old type of couplings over the so-called "knuckle-couplings," which have recently come into general use, is that by the pin-and-link form of coupling there is always a certain amount of "slack" between the cars composing a train, so that the train, however long it may be, is started comparatively easy and also stopped easily and gradually; but the use of knuckle-couplings and other couplings of the same type involves a solid or compact train, without any appreciable slack or play between the individual cars, so that such a train is not only very hard to start, involving a tremendous strain upon the engine to set it in motion, but owing to its great momentum as a solid compact mass it is very difficult to stop, even by the prompt application of the air-brakes.

The object of my invention is, therefore, to provide a pin-and-link coupling which, while possessing all the advantages of that form of coupling, shall yet be without its well-known drawbacks, and which can be operated automatically and with the same ease and certainty as knuckle-couplings and similar devices of more modern type.

In the accompanying drawings, Figure 1 is a longitudinal sectional view of a car-coupling constructed according to my invention, showing a draw-head and a link engaged therewith. Fig. 2 is a similar view of another draw-head, showing the parts in position to receive the link. Fig. 3 is a front view of the same.

In the said drawings the reference-numeral 1 designates the draw-bars, which may be of

any suitable construction, and which are secured to the cars in any manner found convenient or desirable. These bars, at their front or outer ends, are provided with draw-heads 2, formed with the usual flaring mouth 3. Formed in the upper and lower side of the draw-head is a cylindrical aperture 4 for the reception of an ordinary coupling-pin 5. The lower outer side of the draw-head is formed with a longitudinal slot 6, in which is located a hook 7, having a weighted end 8. This hook is formed with an elongated slot 9 for the passage of a transverse rod 10, which forms the fulcrum of the hook.

Pivoted to a transverse rod 13, extending across the draw-head, is a pin-holder 14, provided with a lip 15, upon which the lower end of the coupling rests when in position to engage with a link carried by an approaching car. This pin-holder is provided with two downwardly-extending arms 16, which are struck by the link and the pin-holder turned or rotated to disengage the lip from the pin.

The operation is as follows: When the cars are to be coupled, the link is inserted in the draw-head and the coupling-pin then passed through the apertures in the draw-head, as seen in the right-hand draw-head in Fig. 1, the hook engaging with the rear end of the link to hold it in a horizontal position, so that it will be properly presented to the opposite draw-head to enable it to readily enter the same as the two draw-heads approach each other. In the draw-head with which the link is to be connected (seen at the left in Fig. 1) the coupling-pin is inserted in the upper opening of the draw-head, with its lower end resting on the lip of the pin-holder. As the draw-heads come together the link will strike the pin-holder, when it will turn the latter, releasing the pin and allowing it to drop.

The object of the slot in the weighted hook is for the purpose of allowing the latter to have a play or movement to accommodate the coupler to cars of varying heights and for turning curves.

Having thus fully described my invention, what I claim is—

1. In a car-coupling, the combination with the draw-head having aligned apertures for the passage of a coupling-pin, and an elongated slot in its lower side, of the pin-holder located

in the draw-head and pivotally connected therewith, having a lip forming a support for holding a coupling-pin in an elevated position, and the weighted hook passing through
5 said slot and pivotally connected with the draw-head, and having its upper end curved backwardly to engage with a coupling-link, substantially as described.

2. In a car-coupling, the combination with
10 the draw-head having alined pin-apertures and a slot in its lower side, of the pivoted pin-

holder formed with a holding-lip, the weighted hook having an elongated slot, and the fulcrum-rod passing therethrough; substantially
as described. 15

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

FRANK W. BRIDENBECKER.

Witnesses:

E. LA GRANGE SMITH,
E. S. LAMBERSON.