(No Model.)

J. W. WOLFE.

CAR COUPLING.

No. 589,457. Patented Sept. 7, 1897.

Fig. 1.

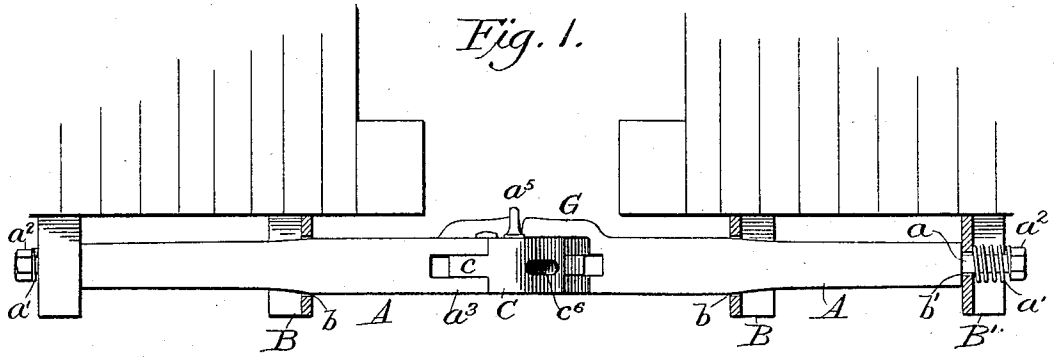


Fig. 2.

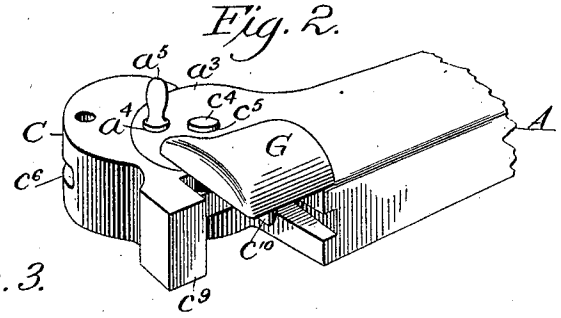


Fig. 3.

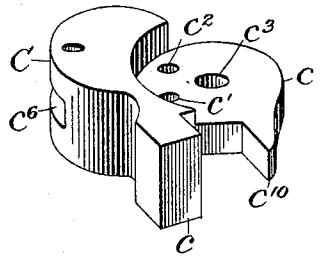
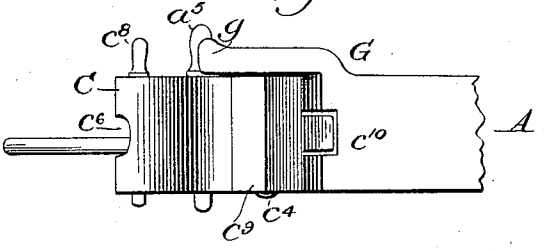


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

JAMES WALTER WOLFE, OF BELVIDERE, ILLINOIS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 589,457, dated September 7, 1897.

Application filed October 21, 1896. Serial No. 609,589. (No model.)

To all whom it may concern:

Be it known that I, JAMES WALTER WOLFE, a citizen of the United States, residing at Belvidere, in the county of Boone and State of Illinois, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in car-couplings, and has more particular relation to such couplings as may be used either in connection with an ordinary link-coupling or to couple automatically at the will of the operator.

This invention consists of certain novel constructions, combinations, and arrangements of parts, all of which will be hereinafter more particularly set forth and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 represents a detail side elevation of the platforms of two cars with my improved coupling applied thereto. Fig. 2 represents a detail perspective view of my improved draw-bar. Fig. 3 represents a detail perspective view of the jaw that is pivotally mounted upon said draw-bar. Fig. 4 represents a detail side elevation of my improved coupling, the pivoted jaw being in the position it occupies when used in connection with the ordinary link-and-pin coupling of the adjoining car.

A in the drawings represents the draw-bar, B B′ the guide-plates for the same, and C the pivoted jaw. The said draw-bar is preferably made hollow and is mounted in the carrier or guide plates B B′, that are secured to the car-platform. The front plate B is provided with a square aperture b, through which the draw-bar is adapted to slide, while the rear plate B′ is provided with a small round aperture b', through which a rearwardly-extending pin a of said draw-bar passes. A stiff spiral spring a' is applied about said pin a behind said guide B′ and between it and the head a^2 upon the end of the said pin a.

It will be observed from the above that the action of the draw-bar will be under spring-tension, and thus prevent all injurious jars to the coupling. The forward end of the draw-bar is provided with two forwardly-projecting spaced lugs or ears a^3, between which is pivotally mounted a disk c, forming a part of the pivotal jaw C. The said disk c is provided with three apertures c', c^2, and c^3, the latter provided for the passage of a pivot-pin c^4, which passes therethrough and also through suitable apertures c^5, formed in the lugs a^3. The said lugs a^3 are each provided with an aperture a^4, through which a pin a^5 is adapted to be passed to engage either one or the other of the apertures c' or c^2 to hold the jaw C either in a closed or open position. The said pivoted jaw C is provided with a link-receiving recess c^6, into which an ordinary coupling-link c^7 may be secured by means of a pin c^8, which passes through the walls of said recess and said link. This link is brought into use when the coupling is to be employed in connection with an ordinary link-and-pin coupling of an adjoining car. When this ordinary coupling is to be made, the pivoted jaw is held in its closed position by inserting the pin a^5 through the apertures a^4 and c^2, respectively. The pivoted coupling-jaw C is provided with two spaced projections c^9 c^{10}, respectively, the projection c^9 acting as a coupling-head, while the projection c^{10} restrains the coupling-head upon the adjoining car in position between said head c^9 and itself. The couplings upon the adjoining cars will also have to be mounted in reverse positions—that is, the coupling upon one car will have the heads or projections of its pivoted jaw projecting toward one side, while those in the adjoining car will project in the opposite direction, so as to cause said heads to automatically interlock when the cars come together.

It will be observed from the above that it is the work of but an instant to transform my coupling into either an automatic coupler or the ordinary type of link-and-pin coupling commonly in use. The device is thus capable of being used in connection with cars upon which a like coupling is mounted, as well as cars employing the ordinary link-and-pin coupling. To uncouple my improved coupling, it is simply necessary to throw one pivoted head away from the other pivoted head by a suitable rod or chain, thus causing the heads of the respective jaws to separate.

I also provide the respective upper and lower sides of each draw-bar with a bumper-plate G, having an enlarged head *g*.

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

In a car-coupling, the combination with a draw-bar having spaced lugs formed with vertical pin-passages, of a jaw pivotally mounted between said lugs and formed with a link-receiving recess, a pin-passage intersecting said recess, and a plurality of pin-passages arranged concentrically about its pivot, and a pin adapted to be passed through the passages formed in the spaced lugs and any one of the passages formed in the pivoted jaw so as to hold the latter in any of its adjusted positions, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JAMES WALTER WOLFE.

Witnesses:
A. W. HOPKINS,
F. J. BRANNAR.