(No Model.) 2 Sheets—Sheet 1.

C. WHITUS.

CAR COUPLING.

No. 423,463. Patented Mar. 18, 1890.

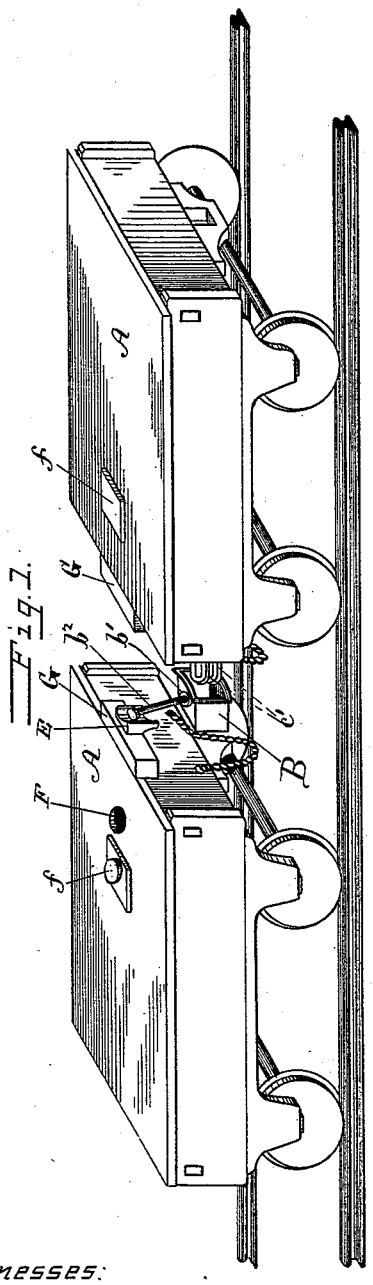

Fig. 1.

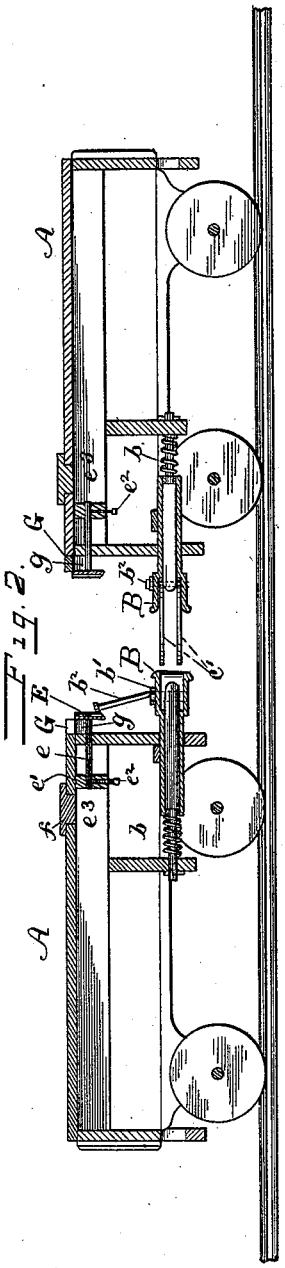

Fig. 2.

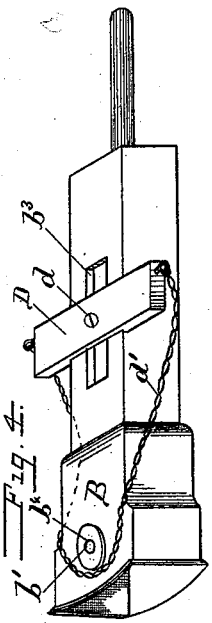

Fig. 4.

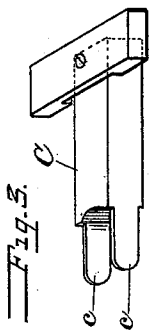

Fig. 3.

Witnesses:
R. A. Balderson.
Thos. Houghton.

Inventor:
Charles Whitus
By His Attorney
John S. Duffie

(No Model.) 2 Sheets—Sheet 2.

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Fig. 5.

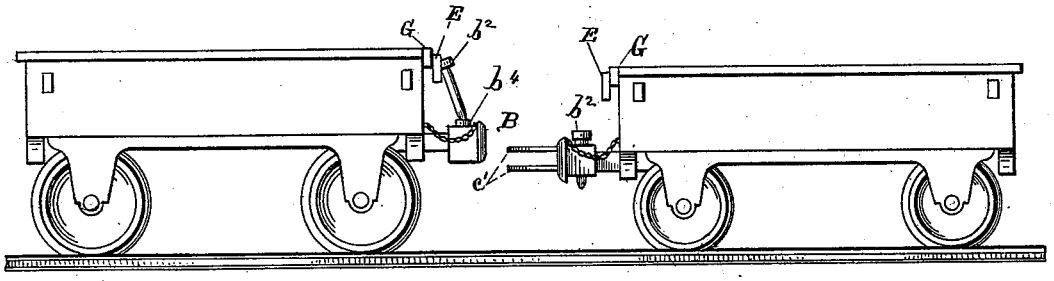
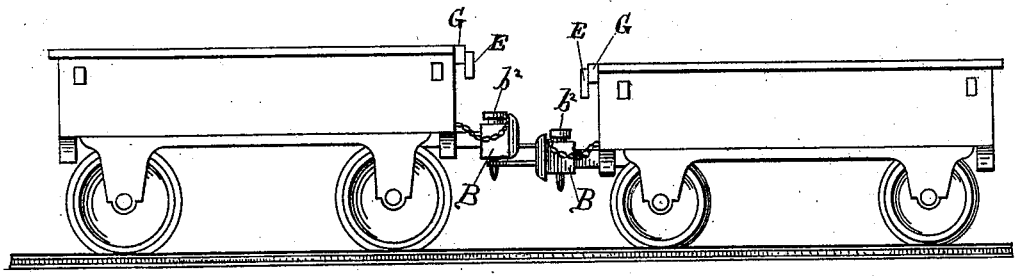


Fig. 6.



Witnesses
Thos. Houghton.
M. C. Lansdale.

Inventor
Charles Whitus.
By his Attorney
John C. Griffie

UNITED STATES PATENT OFFICE.

CHARLES WHITUS, OF CHESTER, SOUTH CAROLINA, ASSIGNOR OF ONE-HALF TO JOHN W. WILKES.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 423,463, dated March 18, 1890.

Application filed July 30, 1889. Serial No. 319,208. (No model.)

To all whom it may concern:

Be it known that I, CHARLES WHITUS, a citizen of the United States, residing at Chester, in the county of Chester and State of South Carolina, have invented certain new and useful Improvements in Link-and-Pin Car-Couplers; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention has relation to car-couplers; and it consists in the novel construction and arrangement of its parts.

In the accompanying drawings, Figure 1 is a perspective view of two car-trucks with my invention attached thereto. Fig. 2 is a longitudinal sectional view of Fig. 1. Figs. 3 and 4 are detail views. Fig. 5 is a side view of two car-trucks, one truck being taller than the other, with my invention in position to couple when the two are run together. Fig. 6 is a side view showing the two above-mentioned trucks coupled.

My invention is designed to be used on any kind of railway-cars and is self-coupling, and it is so constructed that I may use one or two links, and I may use such links whether the trucks are the same height or not.

My invention is described as follows:

A represents two trucks of the same height, to which are attached bulk-heads B, provided with suitable bumper-springs *b*. These bulk-heads are provided with the usual coupling-pin holes *b'*, coupling-pins b^2, and links *c'*. Said bulk-heads are hollow and each contains a man C, the front edge of which is slotted, leaving two arms *c*, which are narrower than the said man is deep, so that when said man is in place one coupling-link may be thrust in the bulk-head above said arms and the other below said arms, the spaces between the edges of said arms and the inner face of said bulk-head being just large enough to receive said links and to hold them firmly and cause them to stand directly out to the front. (See Figs. 2 and 5.) The upper face of each bulk-head is also provided with a slot b^3, and over the top of each bulk-head is a cross-piece D, and a strong screw *d* passes down through said cross-piece and through said slot and into the said man C, so that the said man may be moved backward and forward in said bulk-head the length of said slot. Said cross-piece D is also provided with a chain *d'*, fastened to each end of the same and long enough to reach forward and rest on the forward end of the bulk-head. Each bulk-head is also provided with a thimble b^4, secured to the same immediately over its pin-hole to receive and hold steady the lower end of the coupling-pin until it is ready to be thrown into place.

Each truck is provided with a pin-rest E, the front end of which is hollowed out for the upper end of the coupling-pin to rest in. Said pin-rest has a neck *e*, which passes through a perforation in the front end of the truck and is secured in the block *e'* by a screw-bolt e^2. Said block *e'* fits between two guides e^3, so that said pin-rest may be drawn forward or pushed backward until in proper position to give the coupling-pin, be it long or short, the proper slant, so that when the two trucks are run together the pin will drop through the thimble b^4 and down through the links *c'* and man C, and thus couple the cars. It is manifest that I may use only one link; but two are used for greater safety, and, though two are used, the cars are allowed, so to speak, that universal joint motion which is so essential to safety and to easy rolling, which motion is to a great extent destroyed or prevented by couplers that do not use the link.

It is not unfrequently the case that one truck is taller than the other, and I by my invention am enabled to couple two cars together and yet use two links, though one may be as much as five inches taller than the other, the operation being exactly the same, only one of the coupling-pins must be considerably longer, and one of the links passes under the bulk-head instead of into it.

My invention is operated as follows: The trucks being in position pretty near together, the operator steps in between them, takes hold

of the chain d', and drags the man C forward. He then inserts one link into the mouth of the bulk-head B, above the arm c, and another under the same, and puts in one of the coupling-pins. He then takes the other coupling-pin, places its lower end in the thimble b^4, and pulls out the pin-rest E to a position that will give the coupling-pin the proper slant and rests its upper end against said pin-rest. All is then ready for the cars to be coupled. He then steps back from between the cars out of danger and signals to the engineer to back up, in which case the two links run into the abutting bulk-head and the jolt throws the pin into the pin-hole and through the links, and thus the trucks are coupled. In coupling the cars where one is taller than the other the operation is just the same. Through the floor of each truck and immediately over the slots b^3 is a trap F, so that the screw d may be reached, unscrewed, and the man C taken out without removing the bulk-head when it becomes necessary to repair it or for any other purpose. Said traps F are provided with trap-doors f. Each truck is also provided with a pin-rest protector G to protect and strengthen said rests, having a recess g, into which said rest is retreated when not in use that it may be out of danger.

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

1. The combination, with the car-trucks A, of the hollow bulk-heads B, each provided with the slots b^3, man C, having the arms c and secured in place by means of the cross-piece D and screw d, chain d', secured to each end of said cross-piece, pin-rests E, secured in the end of said trucks, links c, and pins b^2, all substantially as shown and described, and for the purposes set forth.

2. In a car-coupler, substantially as described, the combination, with the trucks A, of the pin-rests E, having the concave head and the neck e, block e', screw e^2, and guides e^3, substantially as shown and described.

3. In a car-coupler, substantially as above described, the combination, with the trucks A, of the pin-rest protector G, having the recess g, and pin-rest E, provided with the concave head and neck e, its rear end secured in the sliding block e', said sliding block working to and fro between the guides e^3, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES WHITUS.

Witnesses:

M. DORIAN,

MARY EMMA LANSDALE.