

(No Model.)

M. Q. KEITH.  
CAR COUPLING.

No. 495,493.

Patented Apr. 18, 1893.

Fig. 1.

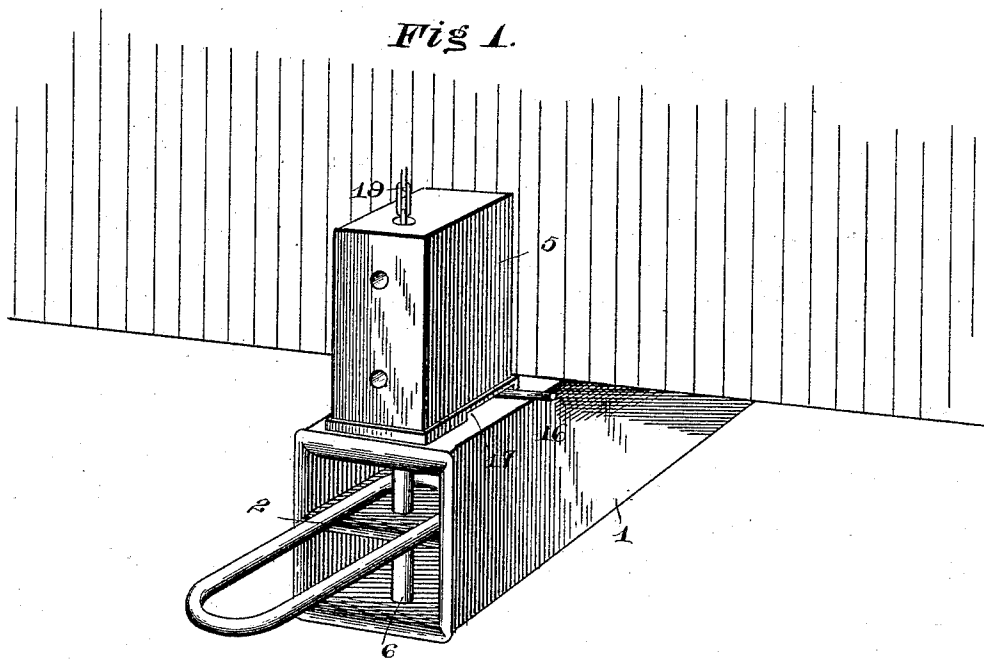


Fig. 2.

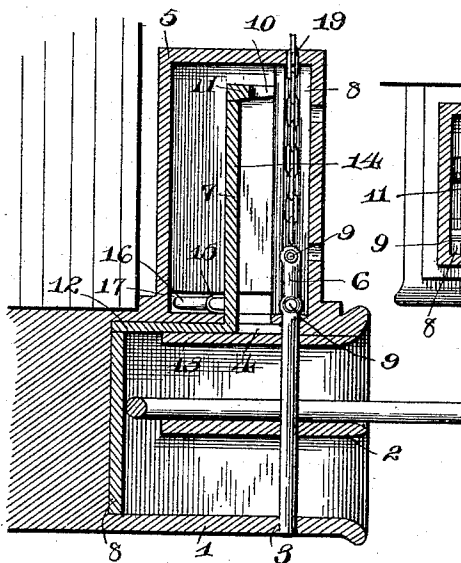


Fig. 4.

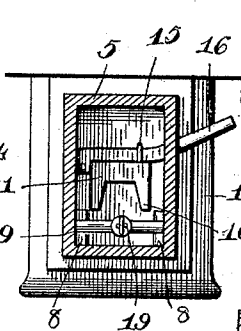
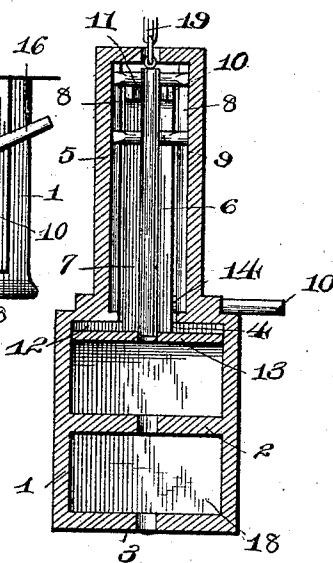


Fig. 3.



Witnesses

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Inventor

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By *his* Attorneys,

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# UNITED STATES PATENT OFFICE.

MADDISON Q. KEITH, OF CENTERSIDE, ASSIGNOR OF ONE-HALF TO HELUM  
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## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 495,493, dated April 18, 1893.

Application filed February 6, 1893. Serial No. 461,185. (No model.)

*To all whom it may concern:*

Be it known that I, MADDISON Q. KEITH, a citizen of the United States, residing at Centerside, in the county of White and State of Georgia, have invented a new and useful Car-Coupling, of which the following is a specification.

The invention relates to improvements in car couplings.

10 The object of the present invention is to simplify and improve the construction of car-couplings, and to provide an inexpensive one by which cars may be readily coupled and uncoupled without going between them.

15 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claims hereto appended.

20 In the drawings—Figure 1 is a perspective view of a car coupling embodying the invention. Fig. 2 is a central vertical longitudinal sectional view. Fig. 3 is a transverse sectional view. Fig. 4 is a horizontal sectional

25 view. Like numerals of reference indicate corresponding parts in all the figures of the drawings.

30 I designates a draw-head provided with a horizontal partition 2 forming upper and lower link cavities to adapt the draw-head for coupling at different heights. The draw-head has a coupling pin perforation 3 and is provided in its top with a longitudinal opening 35 4, and over the latter and the coupling pin perforation is arranged a rectangular casing 5, secured to the top of the draw-head and receiving the upper portion of a coupling pin 6 and a pin support 7, adapted to hold the pin 40 in an elevated position for coupling. The rectangular casing 5 is provided at its opposite sides adjacent to its front wall with vertical ways 8, in which are arranged parallel laterally projecting arms 9 extending from 45 the coupling pin at the top thereof. The coupling pin is adapted to be engaged between its laterally extending arms and held elevated, preparatory to coupling, by forwardly extending projections 10 of a bifur-

50 cated plate 11 arranged at the top of the pin support. When the pin support is moved forward the upper arms 9 of the coupling pin rest upon the projections 10, whereby the coupling pin is held elevated.

55 The pin support is approximately L-shaped and consists of a horizontal plate 12 arranged in a horizontal way 13 at the top of the draw-head, and a vertical stem 14 rising from the front end of the plate and extending upward 60 through the opening 4 of the draw-head into the rectangular casing 5. The vertical stem of the pin support is provided at its rear side with an eye 15, which receives a horizontal lever 16; and the latter has its inner end fulcrumed at one side of the opening 4 and extends therefrom across the opening 4 through 65 an opening 17 at the bottom of the casing 5. By means of the lever the pin support may be moved forward to engage the coupling pin.

70 In order to enable the coupling to be automatic the pin support is provided with a depending link engaged portion 18 adapted, when cars come together for coupling, to have the coupling link come in contact with it and move it rearward to disengage the projections 75 10 from the coupling pin to cause the latter to fall and engage the link. The way 13 in which the plate of the pin support slides communicates at its rear end with the link cavities or openings of the draw-head, and the 80 portion 18 depends from the rear end of the plate 12 of the pin support.

The coupling pin is connected to a chain 19, which extends through an opening in the top of the casing, and any suitable means 85 may be provided for connecting the coupling pin and the lever 16 with the top and sides of a car to enable the car coupling to be operated at those parts, without necessitating persons going between cars. 90

It will be seen that the car coupling is simple and inexpensive in construction, that it is effective in operation and does not employ springs which might be easily rendered inoperative, and that it does not necessitate going 95 between cars either in coupling or uncoupling.

Changes in the form, proportion and the minor details of construction may be resorted

to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

5 1. In a car coupling, the combination of a draw-head, a casing mounted thereon and provided with vertical ways, a pin support mounted in the draw-head and extending upward in the casing and provided with forwardly extending projections, and a coupling pin hav-  
10 ing laterally extending arms arranged in the ways and adapted to be engaged by said projections, substantially as described.

2. In a car coupling, the combination of a  
15 draw-head provided with a casing, a pin support mounted in the draw-head and provided with a depending link engaged portion, and a coupling pin provided with opposite laterally extending arms adapted to rest upon and  
20 be supported by the top of the pin support, substantially as described.

3. In a car coupling, the combination of a draw-head, a casing having vertical ways, a coupling pin provided with parts of laterally  
25 extending arms arranged in said ways, a movable pin support mounted on the draw-head and having a stem arranged in the casing and provided at the top thereof with forwardly

extending projections adapted to engage the upper arms of the pin, and a link engaged  
30 portion 18 depending from the back of the pin support, substantially as described.

4. In a car coupling, the combination of a draw-head having a horizontal way at its top communicating with the link cavity at the  
35 back thereof, a casing mounted on the draw-head and provided with vertical ways, a pin support comprising a plate arranged in the horizontal way of the draw-head, a vertical stem rising from the front of the plate and  
40 provided at its upper end with forwardly extending projections and a depending portion arranged at the back of the plate and adapted to be engaged by a link, a coupling pin hav-  
45 ing laterally extending arms arranged in said ways, a lever fulcrumed in the casing and connected with the pin support and extending outside of the casing, substantially as described.

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

MADDISON Q. KEITH.

Witnesses:

J. W. H. UNDERWOOD,  
JOHN J. KINNEY.