(No Model.)

# J. C. CARRICK.

## CAR COUPLING.

No. 481,525. Patented Aug. 23, 1892.

Fig. 1.

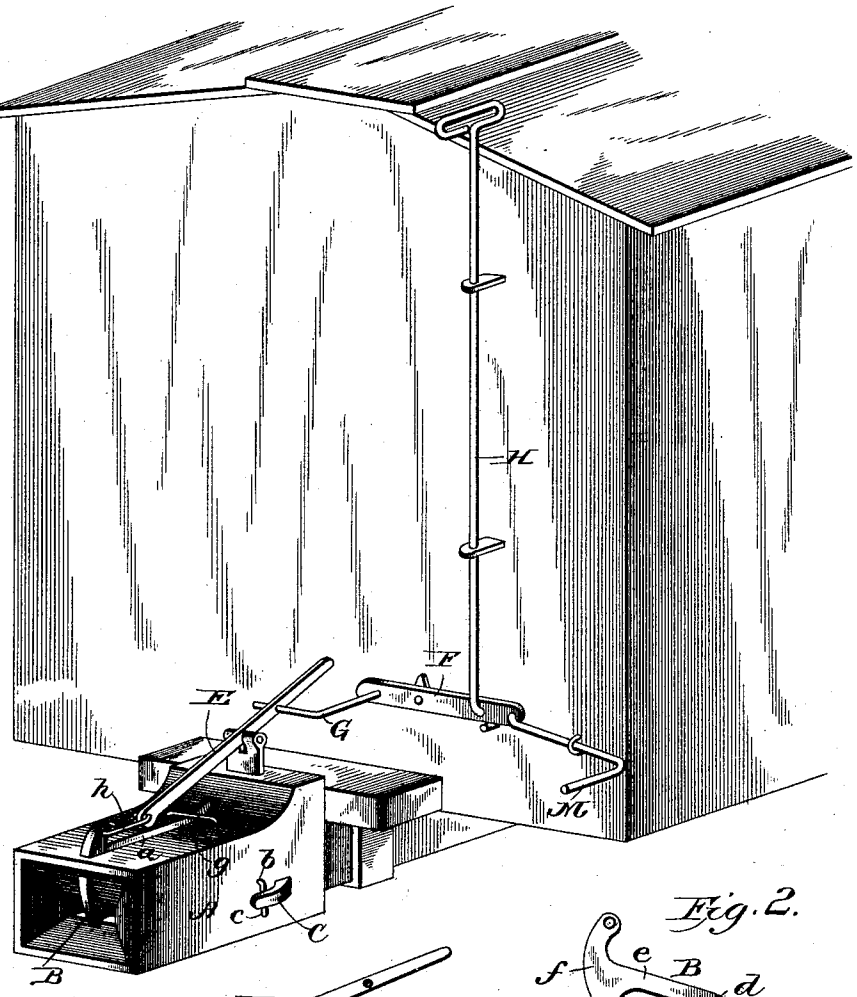



Fig. 2.

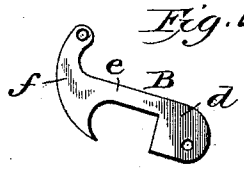
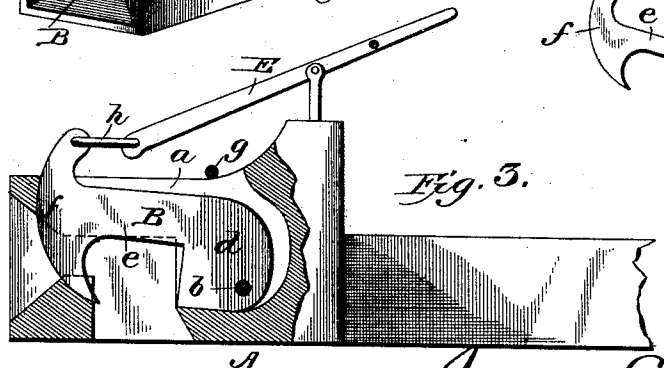



Fig. 3.




WITNESSES

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# UNITED STATES PATENT OFFICE.

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## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 481,525, dated August 23, 1892.

Application filed April 20, 1892. Serial No. 429,893. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES C. CARRICK, a citizen of the United States, residing at Spivey, in the county of Kingman and State of Kansas, have invented certain new and useful Improvements in Car-Couplers; 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.

My invention has relation to improvements in car-couplers; and it consists in the peculiar construction, certain novel combinations, and the adaptation of parts hereinafter described, and particularly pointed out in the claims appended.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a car equipped with my improved car-coupler. Fig. 2 is a side elevation of the link-engaging hook removed. Fig. 3 is a vertical longitudinal section taken at one side of the link-engaging hook.

In the said drawings similar letters designate corresponding parts throughout the several views, referring to which—

A indicates the draw-head of my improved car-coupler, which is preferably of the general form usually employed and is provided with a flaring mouth, as shown, so as to facilitate the entrance of the link. This draw-head A is provided in its top, bottom, and rear walls with a longitudinally-extending slot *a* to receive the link-engaging hook B, which is pivotally mounted adjacent to its rear end upon a transverse shaft *b*, taking through the draw-head. This shaft *b*, which is removable, so as to allow of a disconnection of the hook B when desirable, is provided at its end with an angular handle branch *c*, through the medium of which it may be readily removed.

Connected to or formed integral with one side of the draw-head A is a keeper C, which comprises the laterally and forwardly extending branches, as shown, and is designed to seat the handle branch *c* of the shaft *b*, so as to prevent the casual removal of said shaft and the consequent disconnection of the hook B. This hook B, as better shown in Fig. 2 of the drawings, comprises the body *d*, the shank *e*, and the head *f*, which extends above and below the shank and has its forward edge convexly curved, as illustrated, whereby it will be seen that when a link engages the same the hook will be raised and an automatic coupling effected. By the provision of a link-engaging hook such as described, in conjunction with the slot *a* in the draw-head, it will be readily perceived that when in its normal position the said link will bear against the rear wall, the top wall, and the bottom wall of the draw-head, and will consequently be enabled to withstand a great amount of strain.

Connected to or formed integral with the upper side of the draw-head A, adjacent to the rear end of the slot *a*, is a transverse bridge-bar *g*, which crosses said slot and is designed to limit the upward play of the hook B.

Fulcrumed at an intermediate point in its length upon a standard rising from the draw-head is a longitudinally-extending lever E, which is connected at its forward end, through the medium of a link *h*, with the upper end of the head *f* of the hook B. This lever E is rocked to raise the hook B by a transverse rocking lever F, which is fulcrumed upon the front of the car and is connected to said lever E in rear of its fulcrum-point by an angular arm G, as shown, whereby it will be seen that when the outer end of the lever F is raised the link-engaging hook B will also be raised.

Pivotally connected to the lever F adjacent to its free end and extending upwardly therefrom through suitable guides is a handle H, through the medium of which said lever may be rocked from the top of the car, and pivotally connected to said lever F adjacent to its free end and extending laterally and downwardly therefrom is a handle M, through the medium of which the lever F may be rocked and the hook B raised, when desirable, without the objectionable necessity of the attendant going between the cars.

From the foregoing description, taken in conjunction with the annexed drawings, it will be readily perceived that I have provided a car-coupler of an exceedingly cheap, simple, and durable construction adapted to be read-

ily manipulated from the top or side of the car and adapted when in operation to withstand great strain.

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

1. In a car-coupling, the combination, with the draw-head A, having the longitudinally-extending slot *a* in its top, bottom, and rear walls, of the link-engaging hook mounted in said slot and comprising the body *d*, pivotally connected to the draw-head, the shank *e*, with head *f*, extending above and below the shank and having its forward edge convexly curved, and the bridge-bar *g*, spanning the slot *a* to limit the movement of said hook, substantially as and for the purposes specified.

2. In a car-coupler, substantially as described, the combination, with the draw-head, the transverse shaft *b*, taking through the draw-head and having the angular branch *c* at one end, and the link-engaging hook pivotally connected to said shaft, of the keeper C, connected to the draw-head and adapted to engage the branch *c* of the shaft *b*, so as to prevent a casual displacement of the same, substantially as and for the purpose set forth.

3. In a car-coupler, substantially as specified, the combination, with the draw-head and the link-engaging hook pivotally mounted therein, of the longitudinally-extending lever E, a link connecting the forward end of said lever with the link-engaging hook, the transverse rocking lever F, the angular arm connecting the inner portions of the levers E F, the upwardly-extending handle H, pivotally connected to the lever F adjacent to the free end thereof, and the laterally and downwardly extending handle also connected to the lever F adjacent to the free end thereof, substantially as specified.

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

JAMES C. CARRICK.

Witnesses:
FRANKLIN L. BETTY,
WILLIAM W. MAGRUDER.