

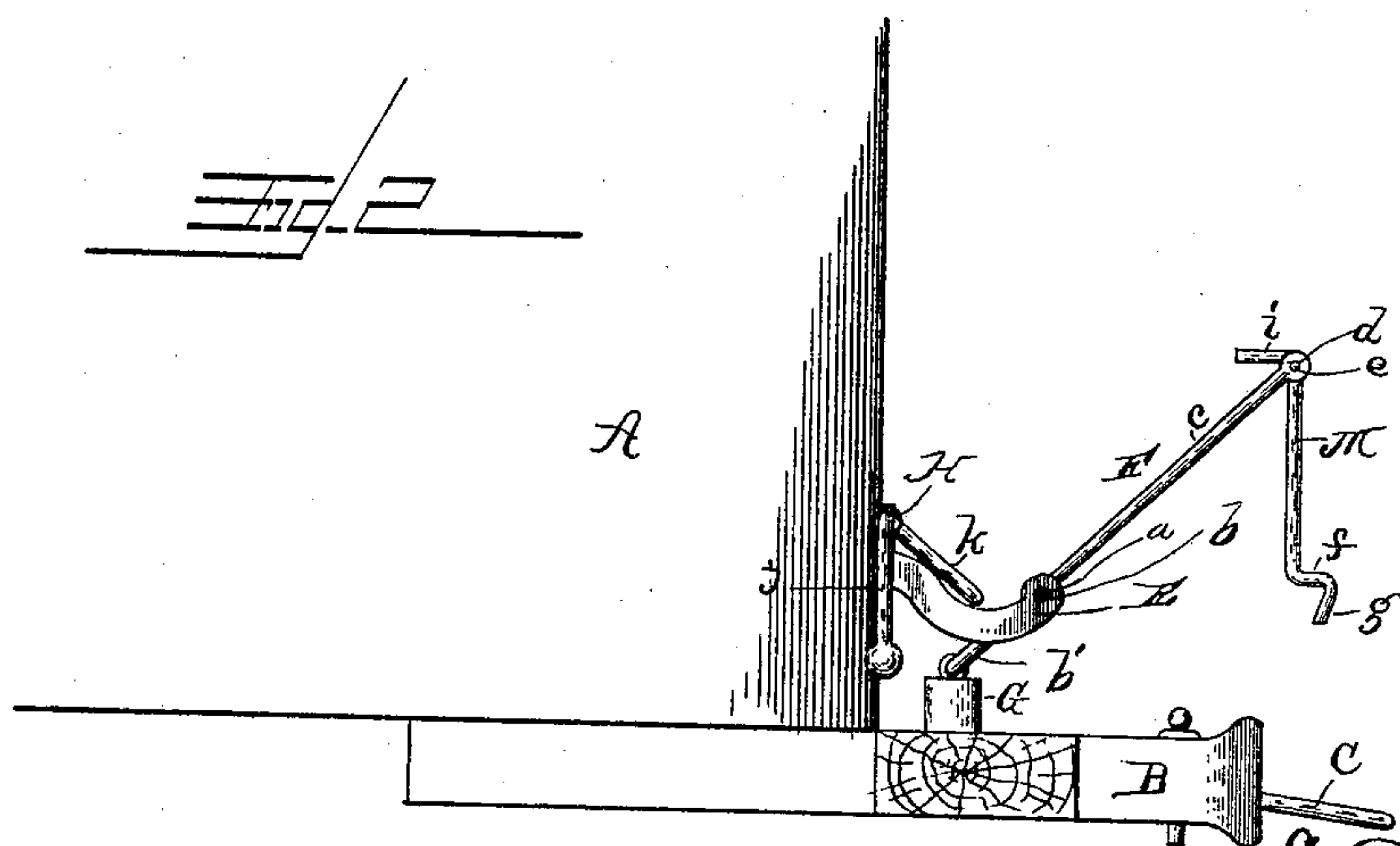
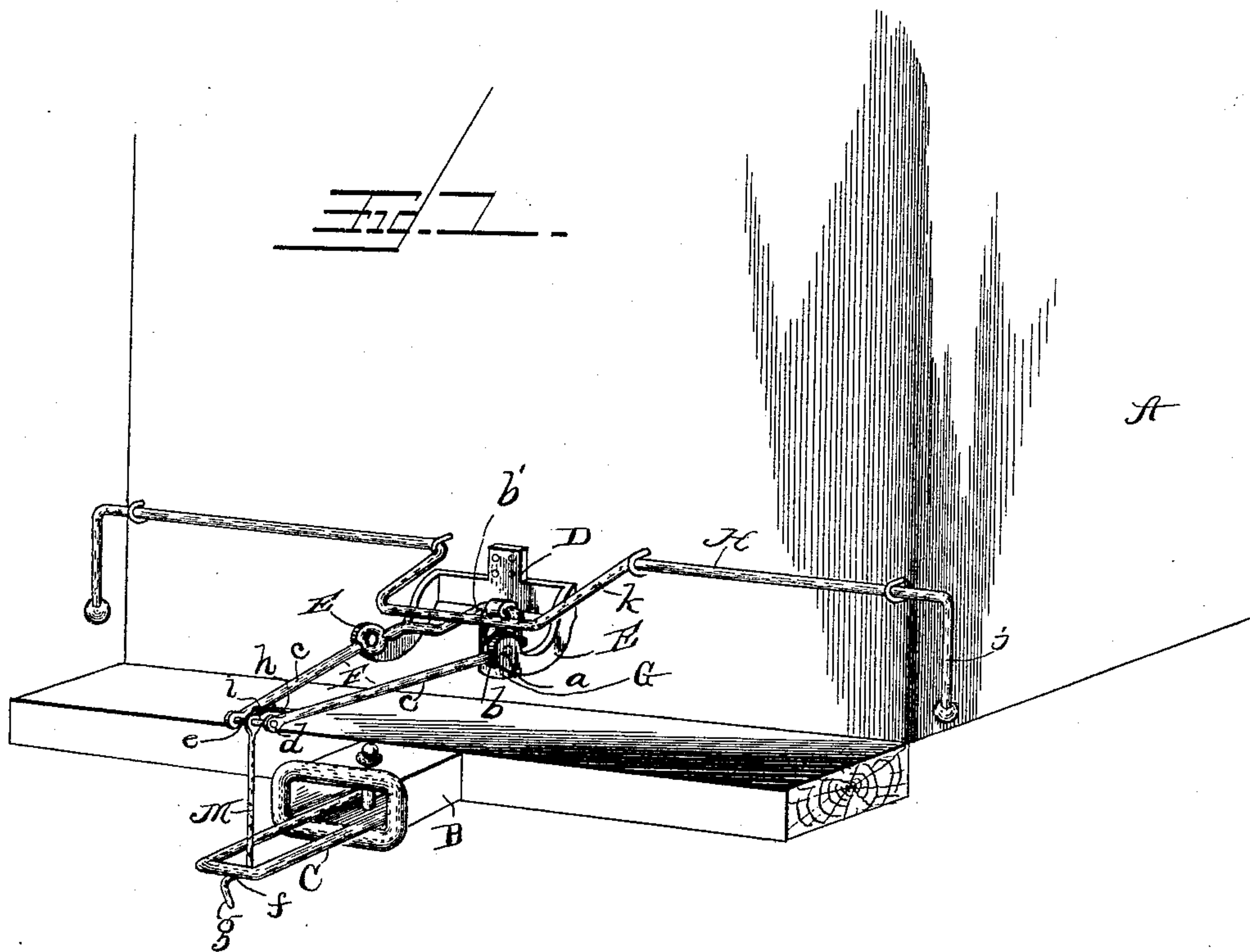
(No Model.)

E. C. WELCH.

CAR COUPLING.

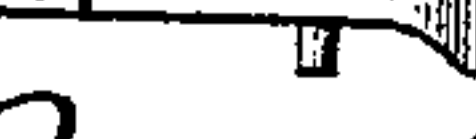
No. 481,449.

Patented Aug. 23, 1892.



WITNESSES

C. S. Frye
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UNITED STATES PATENT OFFICE.

EVERETT C. WELCH, OF FRIEDENS, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 481,449, dated August 23, 1892.

Application filed April 23, 1892. Serial No. 430,397. (No model.)

To all whom it may concern:

Be it known that I, EVERETT C. WELCH, a citizen of the United States, residing at Friedens, in the county of Somerset and State of Pennsylvania, have invented certain new and useful Improvements in Link-Supporters for 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.

My invention has relation to improvements in link-supporters for car-couplings; 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 with my improvements applied, the same being illustrated as supporting a link; and Fig. 2 is a side elevation of the same with the parts in the position they assume when the supported link has been engaged by a draw-head.

Referring by letter to the said drawings, A indicates a car, B a draw-head, and C a link, all of which may be of the ordinary or any approved form and construction.

Fixedly connected to the front of the car at a suitable elevation above the draw-head is a bracket D, which is provided with the forwardly-extending arms E, as illustrated. These arms E are provided at or adjacent to their forward ends with transverse apertures *a*, in which are journaled the lateral trunnions *b* of the forwardly and rearwardly extending lever F. This lever F, as better illustrated in Fig. 1 of the drawings, is preferably formed of a single rod or wire, which is bent to form the rearwardly-extending loop *b'* and the forwardly-extending and slightly-converging arms *c*, which are provided adjacent to their ends with transverse apertures *d*, designed to receive the lateral trunnions *e* of the swinging hook M, which is bent laterally adjacent to its lower end to form the link-seat *f* and the depending branch *g*, whereby it may be readily grasped and placed in engagement with or disengaged from the link.

Fixedly connected to or formed integral

with the arms *c* of the lever F, adjacent to the forward ends thereof, is a transverse bridge-bar *h*, which is designed to be engaged by the angular extended end *i* of the hook M, which serves in practice to prevent said hook from assuming a horizontal position or a position in advance of the lever F when the same is thrown upwardly, as presently described.

Suitably connected to the inner loop end *c* of the lever F is a weight G, which is designed in practice to raise the lever F and the hook M, so as to prevent damage to said hook by the draw-heads when two of the same come together.

Journaled in suitable bearings upon the front end of the car in a plane slightly above the bracket E is a rock-shaft H, which is provided with angular handle branches *j* at its ends and is provided at an intermediate point in its length with a bail *k*, which is designed to engage and bear upon the inner end *c* of the lever F to raise the link C to various angles. Through the medium of this rock-shaft H it will be perceived that a person standing at the side of the car may readily depress the inner end of the lever F and raise the free end of the link C so that it will take into the draw-head of an approaching car.

In operation the hook M is engaged with the link, as shown in Fig. 1 of the drawings, and the link is raised through the medium of the shaft H, so that it will take readily into the draw-head of the other car. Now it will be seen that the draw-head of the approaching car will engage the hook M before the draw-heads come together and will disengage said hook from the link, when, by reason of the weight G, the lever F and hook M will be raised, as shown in Fig. 2, and damage to the hook and lever thereby prevented.

From the foregoing description it will be readily perceived that I have not only provided a link-supporter of a cheap, simple, and efficient construction, but one adapted to be readily applied to a car without in any manner altering the construction of the same.

Although I have in some respects specifically described the construction and relative arrangement of the several elements of my improved supporter, yet I do not desire to be

understood as confining myself to the same, as such changes or modifications may be made as fairly fall within the scope of my invention.

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

1. In a link-supporter, substantially as described, the combination, with the lever fulcrumed at an intermediate point in its length, the hook pivotally connected to the forward end of said lever and adapted to engage a link, and the weight connected to the rear end of the lever, of the rock-shaft having angular branches at its ends and having a bail at an intermediate point in its length, adapted to engage and depress the rear end of the lever, substantially as specified.

2. In a link-supporter, substantially as described, the combination, with the lever, of the hook pivotally connected to said lever

and bent adjacent to its free end to form the link-seat *f* and the depending branch *g*, substantially as and for the purpose specified.

3. In a link-supporter, substantially as described, the combination, with the lever comprising the arms having transverse apertures and the bridge-bar connecting said arms adjacent to the apertures therein, of the link-engaging hook having lateral trunnions adjacent to one end and having its portion above said trunnions bent at an angle to the main portion and adapted to engage the bridge-bar of the lever-arms, substantially as specified.

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

EVERETT C. WELCH.

Witnesses:

A. F. DICKEY,
ISAIAH GOOD.