

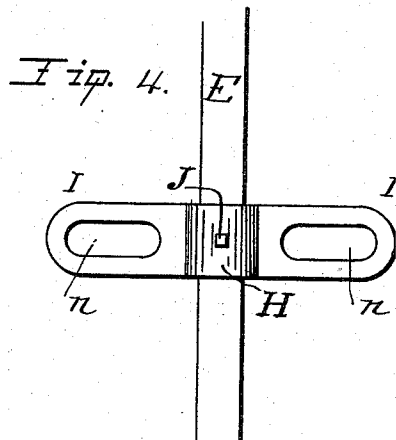
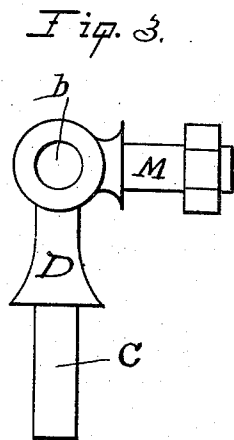
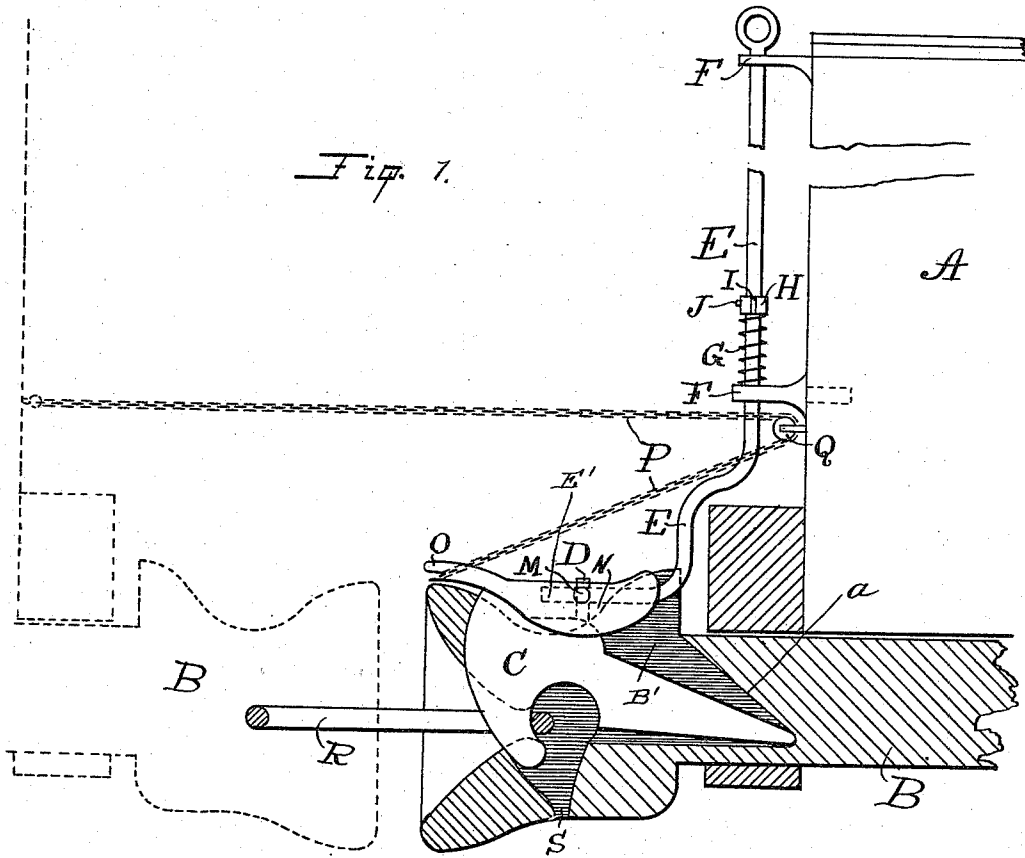
(No Model.)

3 Sheets—Sheet 1.

C. WHITMORE.
CAR COUPLING.

No. 535,151.

Patented Mar. 5, 1895.



Witnesses
Melby Hayes
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(No Model.)

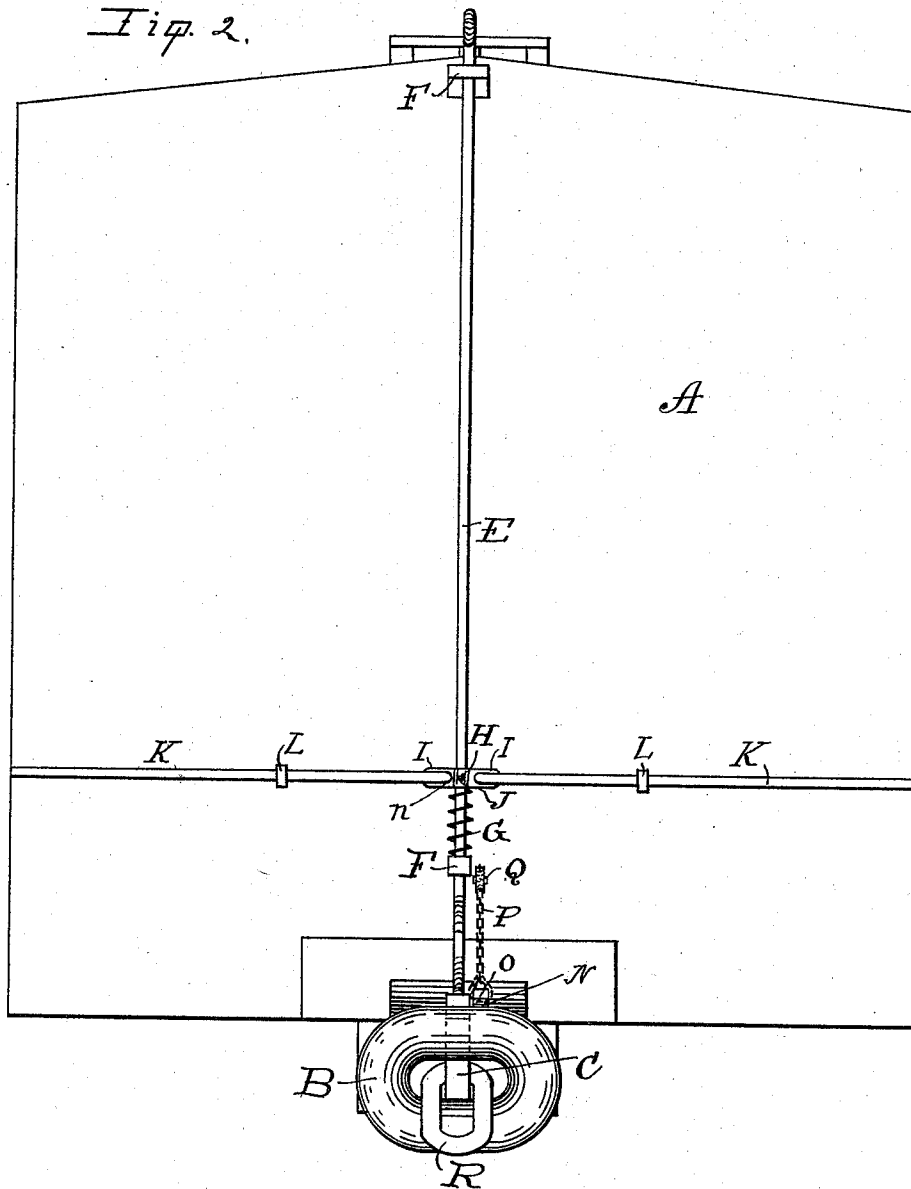
C. WHITMORE.
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Fig. 2.



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Fig. 5.

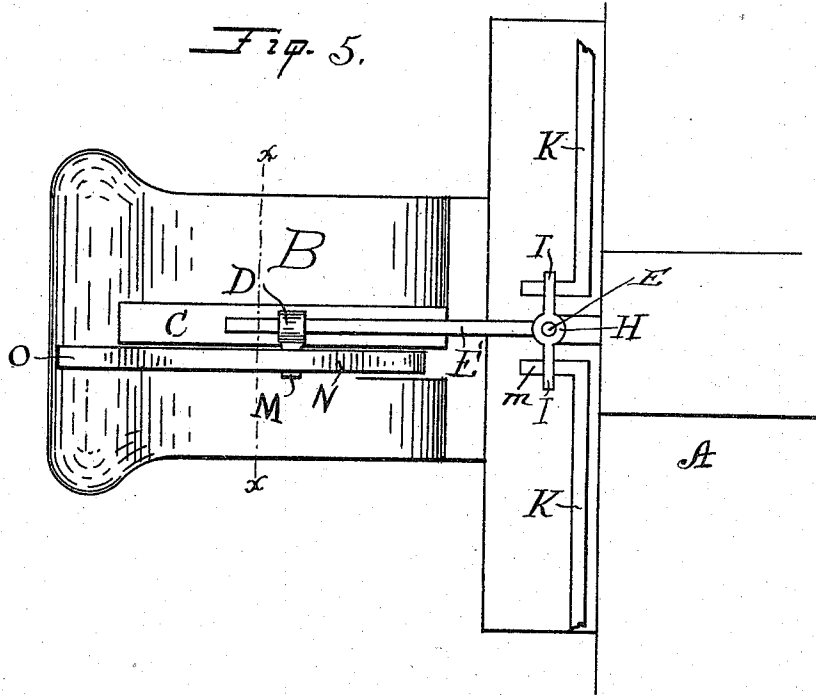
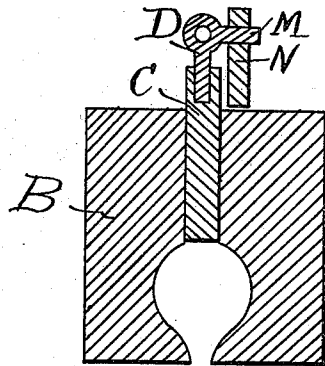


Fig. 6.



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UNITED STATES PATENT OFFICE.

CARLOS WHITMORE, OF STOCKTON, CALIFORNIA, ASSIGNOR, BY DIRECT
AND MESNE ASSIGNMENTS, OF ONE-HALF TO WALTER E. BIDWELL
AND WILLIAM B. O'MALLEY, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 535,151, dated March 5, 1895.

Application filed March 20, 1894. Serial No. 504,414. (No model.)

To all whom it may concern:

Be it known that I, CARLOS WHITMORE, a citizen of the United States, residing at Stockton, in the county of San Joaquin and State of California, have invented certain new and useful Improvements in Car-Couplings; 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 relates to improvements in car couplers; and its novelty will be fully understood from the following description and claims, when taken in connection with the annexed drawings, in which—

Figure 1, is a view illustrating a portion of one car equipped with my improvements, in longitudinal section, and a portion of another car in dotted lines. Fig. 2, is a detail front elevation of a car equipped with my improvements. Figs. 3, and 4, are enlarged detail views of parts of my improved mechanism. Fig. 5, is a detail plan view illustrating the drawhead and parts connected therewith, and Fig. 6, is a transverse section taken in the plane indicated by the line x, x , of Fig. 5.

Referring by letter to said drawings:—A, indicates a car body, and B, indicates the draw head of my improved coupler which may be connected to the car body in any approved manner. This draw head B, is chambered in the usual manner to receive the coupling link R, and it is provided in its upper side with a vertical, longitudinal slot B', to receive the link-engaging hook C, and in its bottom with an opening S, designed to drain water from its interior and prevent the same from rusting and impairing the usefulness of the working parts.

The slot B', in the draw head preferably has its rear end wall a , inclined and its forward end wall curved as shown, and the hook C, which is arranged loosely in said slot has its forward end curved to conform with the forward end of the slot and its rear portion tapered toward its rear wall a , and the bot-

tom end which bears in the rear end of the slot, so as to enable it to swing vertically between the inclined rear wall a , and the bottom of the slot. Said hook C, is provided on its upper side with a fixedly connected pin D, and this pin is provided at its upper end with a horizontally disposed eye b , and a lateral branch or arm M, the purpose of which will be presently described.

E, indicates a vertically movable rod which is mounted in guides F, connected to the end of the car body and has a forwardly extending arm E', at its lower end which takes through the eye b , of the pin D, as shown. This rod E, is surrounded by a coiled spring G, which bears at one end against the lowermost guide F, and it is provided above said spring with a collar H, which is adjustably fixed in position by a set screw J, whereby it will be seen that it may be adjusted to increase or diminish the tension of the spring which has for its function to assist in raising the hook C, when the same is engaged by a link.

The hook C, may be raised by a person on top of the car through the medium of the rod E, and may be raised by a person standing at either side of the car through the medium of one of the levers K, better illustrated in Fig. 2. These levers K, are fulcrumed in suitable bearings L, on the front of the car and they are provided at their inner ends with angular branches m , which take through the slots n , in the lateral branches I, of the collar H, whereby it will be seen that when the outer end of either of said levers is depressed, the rod E, and consequently the hook C, will be raised.

In order to effect an automatic uncoupling of the cars when one is derailed, I provide the cam lever N. This lever N, is preferably of the configuration shown in Fig. 1, to conform to the upper side of the draw head, and it is mounted on the lateral branch or arm M, of the post D, and has its outer end O, connected, by a cord or chain P, which takes around a pulley Q, on the front of the car, with the front of the other car.

In practice the cam levers N, of both draw heads will be connected by cords or chains

with the fronts of the opposite cars and consequently it will be seen that if either car is derailed or tilts forward or sidewise, it will through the medium of the cord or chain P, and cam lever N, raise the hook C, of the draw head of the opposite car so as to effect an automatic uncoupling and prevent the derailed car from dragging the other after it.

Having described my invention, what I claim is—

1. In a car coupler, the combination of a car, a draw-head connected to the car and having a slot in its upper side, the rear wall *a*, of which is inclined, the hook C, arranged in the slot of the draw head and having its rear portion tapered toward its rear end and also having the post D, provided with an eye *b*, and with a lateral branch or arm M, the vertically-movable rod E, arranged in guides F, on the front of the car and having the forwardly-extending portion E', taking through the eye of the post D, on the hook, the collar H, adjustably fixed on the rod E, above one of the guides F, and having the lateral slotted branches I, the coiled spring surrounding the rod E, and interposed between the collar H, and one of the guides F, the levers K, fulcrumed at an intermediate point of their

length in bearings on the front of the car and having angular branches at their inner ends resting in the slots of the branches I, on the collar H, the cam lever N, mounted on the arm M, of the post D, and bearing on the top of the draw-head and a chain or cord connected to the forward end of said cam lever and taking around a pulley on the front of the car and adapted to be connected to the front of an opposite car, all substantially as specified.

2. In a car coupler, the combination of a car, a draw head connected to the car and having a slot in its upper side, a hook arranged in the slot of the draw head and having the post D, provided with a lateral branch or arm M, the cam lever N, mounted on the arm M, of the post D, and bearing on the top of the draw-head, and a chain or cord connected to the forward end of the cam lever and taking around a pulley on the front of the car and adapted to be connected to the front of an opposite car, substantially as specified.

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

CARLOS WHITMORE.

Witnesses:

JOSHUA B. WEBSTER,
MOLBRY HAYNES.