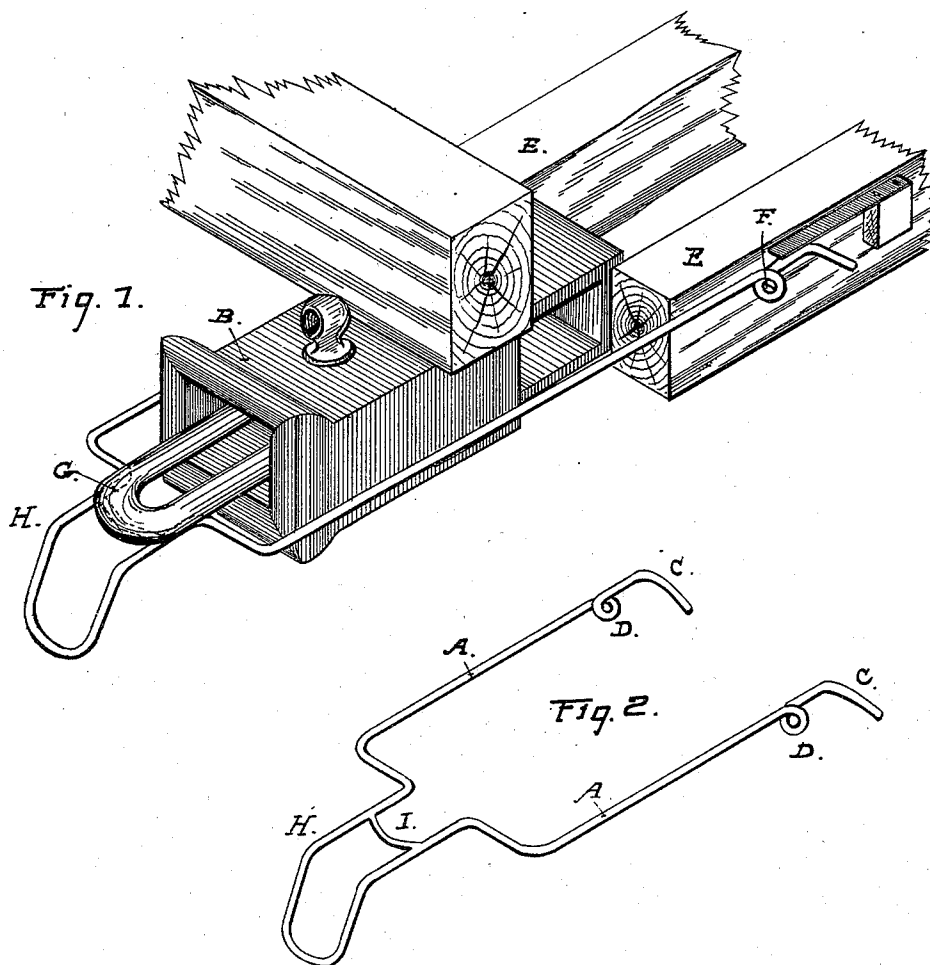


(No Model.)

V. PFAFF.
CAR COUPLING.

No. 542,597.

Patented July 9, 1895.



Witnesses:

W. B. Taylor

M. Rogers

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UNITED STATES PATENT OFFICE.

VALENTINE PFAFF, OF SAN FRANCISCO, CALIFORNIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 542,597, dated July 9, 1895.

Application filed September 4, 1894. Serial No. 522,097. (No model.)

To all whom it may concern:

Be it known that I, VALENTINE PFAFF, a subject of the Emperor of Germany, residing in the city and county of San Francisco, State of California, have invented a new and useful Automatic Link-Lifter for Draw-Heads of Railway-Cars, of which the following is a specification.

My invention relates especially to a link-lifting device employed for coupling railway-cars, and has for its object the production of a means whereby the link is suspended in such a manner and position that it will enter the draw-head of an adjacent car in an automatic manner.

To attain this end and object my invention consists, essentially, in a rectangular wire frame passing around the draw-head and pivotally connected to the framework of a car.

The outer end of the frame is provided with a curved extension-piece, which supports the link, and the inner ends of the arms of the frame are bent downward at right angles. A flat spring holds the frame extended and supports both its own weight and that of the coupling-link. By such construction the link of a car-coupling is adjusted and guided to enter the draw-head of an adjacent car in an automatic manner.

In the annexed drawings, which form part of this specification, Figure 1 is a perspective view of my automatic link-lifter in position on the draw-head of a railway-car. Fig. 2 is also a view in perspective of the link-lifting device disconnected from the draw-head.

The link-lifter A is composed of a wire rod and is rectangular to correspond with the outline of the draw-head B.

The ends of both arms are bent down at a right angle into rounded terminals C C and a loop is taken in each arm, forming an eye D, by means of which it is pivoted to the timbers E E by the pins or screws F F. Upon these points the holder may be raised or lowered when the link G is to be carried in the draw-head.

An extension-piece H is formed on the outer end of the holder and is bent downward at a right angle, or nearly so, upon which the link G rests when it is in position to enter the socket of an opposed draw-head, while a cross-rod I serves to strengthen the extended portion. As thus constructed and pivoted to the

framework of a car, a leaf-spring J is fixed to the timbers of the car-body, to which the holder is pivoted. The outer end of the spring extends over the rounded terminals and along the arms of the lifter a sufficient distance to support the latter in horizontal position when the end of the link rests upon it, as seen in Fig. 1 of the drawings, or bears upon said terminals when the lifter hangs in vertical position and prevents swinging thereof.

When supported by the lifter (shown in Fig. 1) and two cars are being coupled, the draw-head of the next car will strike the curved or bent extension of the lifter and bear it down just below the draw-head of the opposite car, in which position also the lifters on both draw-heads will be retained by the flat springs J, which do not pass over the terminals until the cars are uncoupled, when said springs automatically raise the lifter to the position shown in Fig. 1.

By the adoption and use of my invention it is believed that much of the wounding and loss of life and limb to those engaged in coupling trains of cars will be prevented.

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

In a link lifter, the combination with the draw head and link therein; of the lifting device consisting of a rectangular frame surrounding the draw-head and having a forwardly projecting and downwardly bent extension beneath the front end of the link, the side arms of said frame being bent into eyes, then carried to the rear in line with their bodies, and then bent downward in rounded terminals, pivot pins through said eyes into the beams of the car, and leaf-springs connected at their rear ends with said beams and having their forward ends bearing on the terminals of said frame-arms with sufficient power to sustain the front ends of both the frame and the link, as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal.

VALENTINE PFAFF. [L. S.]

Witnesses:

C. W. M. SMITH,
CHAS. E. KELLY.