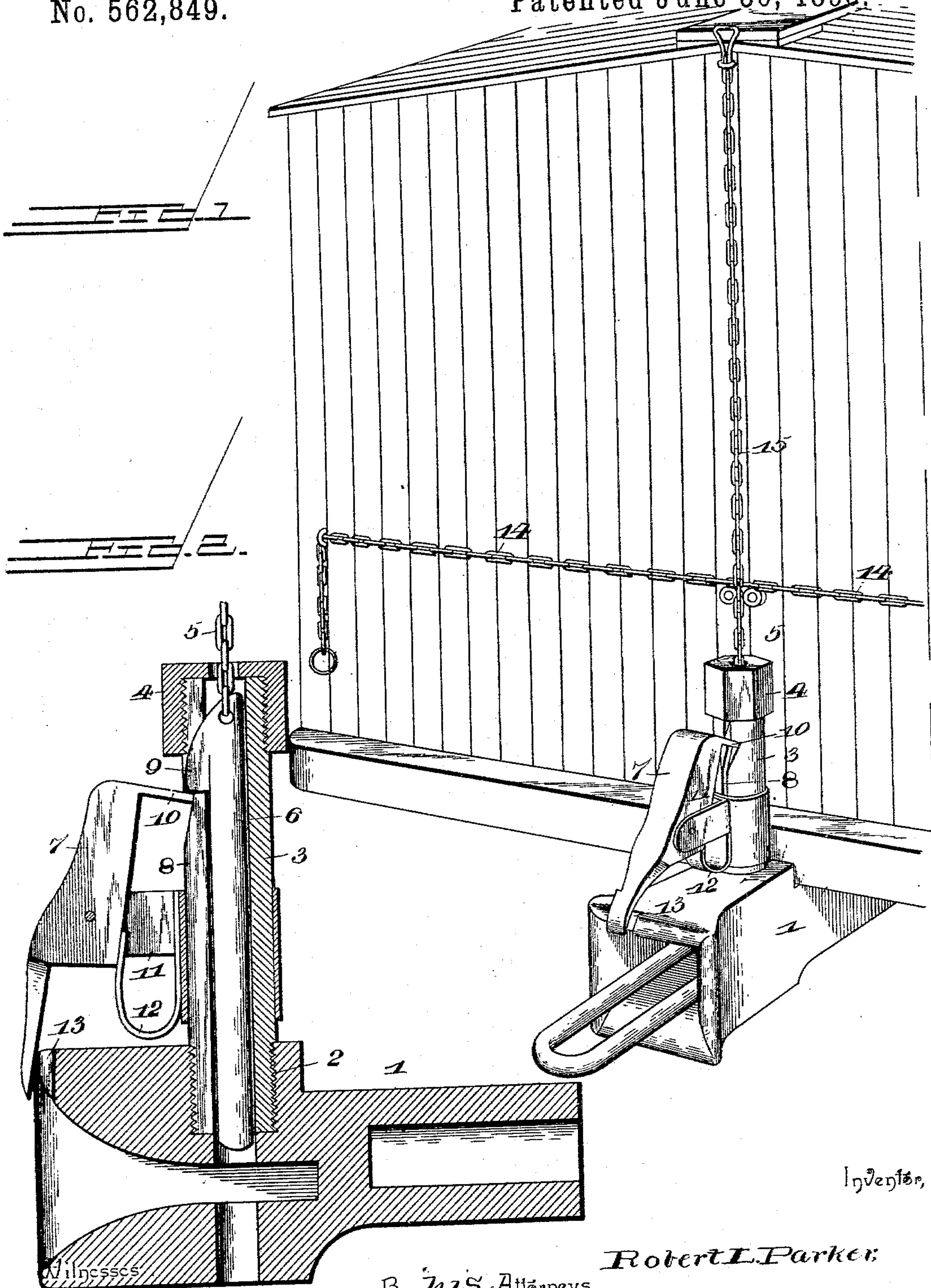


(No Model.)

R. L. PARKER.
CAR COUPLING.

No. 562,849.

Patented June 30, 1896.



Inventor,

Robert L. Parker.

By his Attorneys.

C. A. Snow & Co.

Witnesses
W. B. Doyle
J. H. H. P. R. R.

UNITED STATES PATENT OFFICE.

ROBERT L. PARKER, OF TEXAS, GEORGIA, ASSIGNOR OF ONE-HALF TO
WILLIAM B. W. HENDRICK, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 562,849, dated June 30, 1896.

Application filed June 29, 1895. Serial No. 554,459. (No model.)

To all whom it may concern:

Be it known that I, ROBERT L. PARKER, a citizen of the United States, residing at Texas, in the county of Heard and State of Georgia, have invented a new and useful Car-Coupling, of which the following is a specification.

My invention relates to improvements in car-couplings, and particularly to an attachment to a draw-head of the ordinary pin-and-link coupler for locking the pin in its elevated or disengaged position and for automatically releasing the same when the draw-head comes in contact with that of another car.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claim.

In the drawings, Figure 1 is a perspective view of a car-coupling constructed in accordance with my invention. Fig. 2 is a longitudinal section of the same, the coupling-pin being elevated.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The draw-head 1 is of the ordinary construction designed for accomplishing the engagement of a pin and link, the only difference in construction residing in the fact that the upper portion of the pin-socket in the head is counterbored, as shown at 2, for the reception of the lower end of a tubular coupling-pin guide 3. This guide is fitted with a removable cap 4, screw-threaded thereon, and the coupling-pin 6, which is mounted in the guide and is adapted to be introduced through the upper end thereof when the cap is removed, is suspended by means of the chain 5, operating through a central opening in the cap. The front side of the guide is slotted, as shown at 8, to receive an offset or shoulder 9 on the front side of the pin, said slot forming a guide for the offset to prevent the pin from turning, it being necessary to maintain the offset at the front side of the pin in position for engagement by a pivotal catch-lever 7. This catch-lever is pivotally mounted between parallel ears 11, projecting forwardly from the tubular guide, and an actuating-spring 12 is interposed between the guide

and the portion of the catch-lever below its pivotal point to normally hold the upper extremity of the catch-lever pressed toward the rear. The upper extremity of the catch-lever is extended rearwardly to form an ear 10, which projects into a cross-notch in the front side of the guide intersecting the slot 8 for engagement with the offset or shoulder 9 of the pin, said ear normally occupying a position in said notch whereby when the pin is elevated by means of the lifting-chain 5 it is automatically engaged and is thus secured in its inoperative position until the catch-lever has been disengaged therefrom.

Various means for accomplishing the disengagement of the catch-lever may be employed, that shown in the drawings consisting of a trip-arm depending below the pivotal point of the catch-lever contiguous to the front end of the draw-head and in front of a notch 13, formed in the upper side of the mouth of said draw-head, the function of the notch being to receive the trip-arm when repressed by the contact therewith of an opposing draw-head, whereby the trip-arm is not exposed to a crushing action incident to the contact of opposing draw-heads.

It will be seen that I do not depend for the operation of the trip upon a corresponding trip carried by the opposing draw-head, and hence a trip upon one draw-head may be operated when in operative relation with an opposing draw-head, whether said opposing draw-head is equipped with an automatic coupling device constructed in accordance with my invention or not.

Releasing-chains 14 and 15, extending, respectively, to the sides and top of the car, are connected with the chain 5.

From the above description it will be seen that the only change in a draw-head of the ordinary construction necessary to adapt it for my improved automatic coupling attachment is the provision of the counterbore 2 in the upper side thereof, and the notch 13 in the top of the mouth, and it is obvious also that the device embodying my invention is applicable to the draw-head by a single operation involving simply the threading of the lower extremity of the tubular guide in said counterbore. Thus the attachment may be

constructed as a separate article of manufacture adapted for application to a pin-and-link draw-head, such as those now in common use. Furthermore, it will be seen that by reason of the removable cap 4, which normally closes the upper end of the guard and prevents accidental displacement of the coupling-pin, the said pin may be readily removed in case of breakage or injury without displacing the attachment or disarranging any of the other parts of the apparatus. It frequently happens in practice that a pin becomes broken and it is desirable to facilitate the replacement thereof, and it will be seen by reference to the drawings that the cap is provided with an exterior polygonal surface or wrench-seat.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

An automatic coupling attachment for pin-and-link draw-heads comprising a tubular

guide arranged in communication with the coupling-pin opening and provided in its front side with a vertical slot which extends to the top of the guide, a removable cap for closing the upper end of said guide, a coupling-pin fitting snugly in the guide and connected to an elevating-chain extending through an opening in the cap, said pin having a shoulder fitting in and guided by said slot, the pin being removable through the upper end of the guide after displacing the cap, a spring-actuated pivotal catch-lever having an extension to engage the shoulder of the pin, and a trip on the catch-lever to occupy a position contiguous to and in advance of the upper portion of the mouth of the draw-head for contact with an opposing draw-head, substantially as specified.

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

ROBERT L. PARKER.

Witnesses:

W. E. LANE,

L. F. LANE.