

No. 649,142.

Patented May 8, 1900.

B. G. RIGGS.
CAR COUPLING.

(Application filed Aug. 31, 1899.)

(No Model.)

Fig. 1.

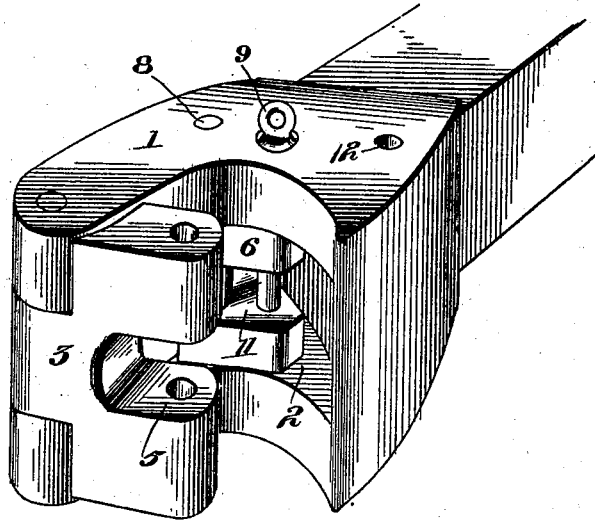


Fig. 3.

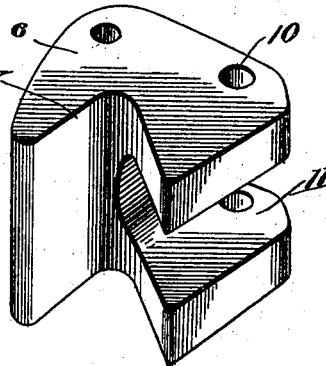
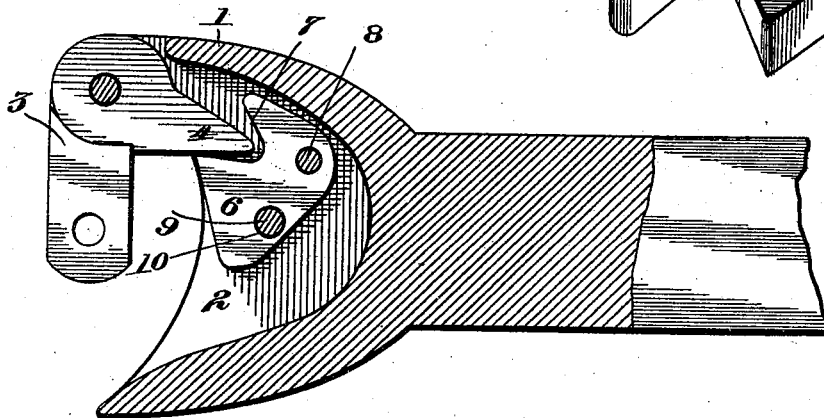


Fig. 2.



Witnesses

Flamie H. Walker

J. B. Shepard

By his Attorneys,

B. G. Riggs, Inventor

Casey & Co.

UNITED STATES PATENT OFFICE.

BENJAMIN G. RIGGS, OF KINZUA, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 649,142, dated May 8, 1900.

Application filed August 31, 1899. Serial No. 729,077. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN G. RIGGS, a citizen of the United States, residing at Kinzua, in the county of Warren and State of Pennsylvania, have invented a new and useful Car-Coupling, of which the following is a specification.

This invention relates to car-couplings of that class embodying a pivoted knuckle, and has for its object to provide improved means for locking the knuckle in the coupled position of the device and also to accommodate the latter to the ordinary pin-and-link form of coupling.

To these ends the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and the minor details of construction may be made within the scope of the appended claim without departing from the spirit or sacrificing any of the advantages of the present invention.

In the drawings, Figure 1 is a perspective view of a car-coupling constructed in accordance with the present invention. Fig. 2 is a horizontal sectional view thereof. Fig. 3 is a detail perspective view of the dog for locking the knuckle.

Corresponding parts in the several figures of the drawings are designated by like characters of reference.

Referring to the accompanying drawings, 1 designates an ordinary draw-head, which is bifurcated, as usual, and also provided with the socket or recess 2, within which the locking device of the present invention is mounted.

The knuckle 3 is of substantially L-shape and is pivoted intermediate of its ends to one side of the draw-head, so that the heel 4 is normally located longitudinally within the socket or recess 2, while the knuckle proper extends transversely across the outer end of the longitudinal bifurcation. This knuckle is also provided with a transverse horizontal slot 5 in the outer end thereof for the reception of a link in the ordinary manner.

The means for locking the knuckle comprises a dog 6, which is located within the socket or recess 2, and is also provided with

a notch 7 for receiving the heel 4 of the knuckle in the locked position thereof, as best illustrated in Fig. 2 of the drawings. It is preferable to locate the dog upon the knuckle side of the longitudinal axis of the draw-head, so that said dog may be free to swing laterally during the uncoupling operation. A suitable pivot-pin 8 passes vertically through the top and bottom of the draw-head and also through the knuckle and aligned substantially longitudinally of the heel of the knuckle, thereby eccentrically pivoting said dog. To hold the dog in its locked position, there is provided a movable coupling-pin 9, which is inserted vertically through suitable openings provided at the top and bottom of the draw-head, and also through an opening 10, formed vertically through the dog and located at one side of the pivot-pin 8 and opposite the heel 4 of the knuckle. By this means it will be seen that the dog is held against movement, and the heel 4 of the knuckle being received within the recess 7 in the adjacent edge of the dog said knuckle is effectively held in coupled position. When it is desired to release the knuckle, the coupling-pin 9 is drawn upwardly out of engagement with the dog, whereby the strain upon the knuckle is adapted to turn the dog laterally upon the pivot until the heel of the knuckle is free from the notch of the dog, whereby the knuckle may be opened to its greatest extent.

In order that the present coupling may be accommodated to the ordinary pin-and-link type, the dog is provided with a transverse horizontal slot 11, which intersects the coupling-pin opening 10 and is aligned longitudinally with the slot 5 in the knuckle. This arrangement permits of the link being inserted through the slot in the knuckle and into the slot 11 in the dog, so that when the coupling-pin 9 is placed in position said pin will be received within the inner end of the link and thereby complete the coupling. It will be noted that the knuckle is provided with a vertical opening for the reception of a coupling-pin, as is usual, and also that a separate coupling-pin is not necessary, the single pin 9 being employed in either application of the device. A suitable vertical opening 12 is provided in the upper face of the draw-head

for the reception of the coupling-pin when the latter is not in use.

Having thus described my invention, what is claimed, and desired to be secured by Letters Patent, is—

5 In a car-coupling, the combination with a draw-head, having a laterally-swinging knuckle provided with a rearwardly-extending heel, and a horizontal transverse slot located
10 in the outer end of the knuckle, of a locking-dog pivoted upon the draw-head, and provided with a notch receiving the heel of the knuckle, and also having a horizontal trans-

verse slot alined longitudinally with the slot in the knuckle, and a removable coupling- 15 pin passing vertically through the draw-head and the dog, and also intersecting the slot in the dog, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as 20 my own I have hereto affixed my signature in the presence of two witnesses.

BENJAMIN G. RIGGS.

Witnesses:

GEO. O. CORNELIUS,
FRANK A. STILSON.