P. T. HANDIGES.
CAR COUPLING.

APPLICATION FILED MAY 1, 1902. NO MODEL. Fig.II.

United States Patent Office.

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 719,792, dated February 3, 1903.

Application filed May 1, 1902. Serial No. 105,510. (No model.)

To all whom it may concern:

Be it known that I, PHILIP T. HANDIGES, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Car-Couplings, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to means in a carcoupling for holding the locking-pin of the coupling in an elevated position during the period that the coupler is disconnected from

another mating coupler.

The present improvement is applicable to the car-coupling described in my application for United States Letters Patent, filed March 31, 1902, Serial No. 100,661.

My invention consists in features of nov-20 elty hereinafter fully described, and pointed

out in the claims.

Figure I is a perspective view of a coupling equipped with my improvement. Fig. II is a horizontal section taken on line II II, Fig. I. Fig. III is a vertical longitudinal section taken on line III III, Fig. II. Fig. IV is a vertical cross-section taken on line IV IV, Fig. II. Fig. V is a rear view of the coupling-knuckle. Fig. VI is a perspective view showing the lower end of the coupling-locking pin and the lever that operates in conjunction with said locking-pin and the supporting-dog by which the pin is held in elevated position.

1 designates the draw-head of the coupling, in which the knuckle 2 is pivotally held by the pin 3. The tail 4 of the knuckle is provided with an inclined lower surface 5. (See

Fig. V.)

o 6 designates the knuckle-locking pin, the lower portion of which is narrowed from a shoulder 7 to the lower extremity, where it is

provided with a lug 8.

9 designates a lever pivoted to a pin 10 45 within the draw-head 1 and extending across the narrowed lower portion of the lockingpin 6 and having its free end positioned beneath the inclined surface 5 of the tail of the knuckle 2. The lever 9 is recessed at 11 and 50 is adapted to receive the impingement of the

lug 8 at the lower end of the locking-pin when said locking-pin is raised.

12 is a cam carried by the lever 9 and onto which the lug 8 is adapted to pass to move the lever 9 quickly as the lug traverses that 55 part of the lever.

No invention is herein claimed for the parts thus far described *per se*, my present improvement relating to the feature that will

now be described.

13 is a dog pivotally mounted on the pin 10, that carries the lever 9, the dog being arranged to extend upwardly beside the locking-pin 6 and being provided with a finger 14. This dog is adapted to seat beneath the shoulder 7 of the locking-pin 6 when said pin is raised, where it serves to hold the pin elevated after the parts of the coupler have been operated to open the coupling-knuckle.

In the practical use of my coupling the 70 parts are operated in the following manner: The locking-pin 6 is raised, and the lug 8, carried thereby, is caused to impinge against the lower side of the lever 9, thereby moving said lever upwardly and causing its free end 75 to impinge against the inclined surface 5 of the tail of the knuckle 2. The lever acting upon said inclined surface swings the tail of the knuckle outwardly, thereby moving the knuckle into open position. On the lifting 80 of the locking-pin 6 the dog 13 falls into the position indicated by dotted lines, Fig. IV, beneath the shoulder of the locking-pin, where it serves to maintain the pin in elevated position, when the pin is released until 85 the knuckle is swung outwardly, in which action the knuckle-tail throws the dog away from the locking-pin and permits said pin to fall onto the knuckle-tail. The finger 14 of the dog 13 serves to limit the movement of 90 the dog as it falls into position beneath the shoulder 7. The locking-pin is adapted to be raised by any suitable means, such as the rocking operating-rod 15, provided with an arm 16, that has connection to the locking-pin. 95

I claim as my invention—

1. In a car-coupling, the combination of a draw-head, a knuckle pivotally mounted in said draw-head and having a tail provided with an inclined surface, a locking-pin pro- 100

vided with a shoulder, a lever pivotally mounted in said draw-head having its free end positioned beneath the tail of said knuckle and adapted to be engaged by said locking-pin, and a dog pivotally mounted in said draw-head and adapted to seat beneath the shoulder of said locking-pin, substantially as described.

2. In a car-coupling, the combination of a draw-head, a knuckle pivotally mounted in said draw-head and having a tail provided with an inclined surface, a locking-pin provided with a shoulder, a lever pivotally

mounted in said draw-head having its free end positioned beneath the tail of said 15 knuckle and adapted to be engaged by said locking-pin, a dog pivotally mounted in said draw-head and to seat beneath the shoulder of said locking-pin and a stop-finger carried by said dog adapted to rest against said lock- 20 ing-pin when the dog is moved thereto substantially as described.

PHILIP T. HANDIGES.

In presence of— E. S. KNIGHT, M. P. SMITH.