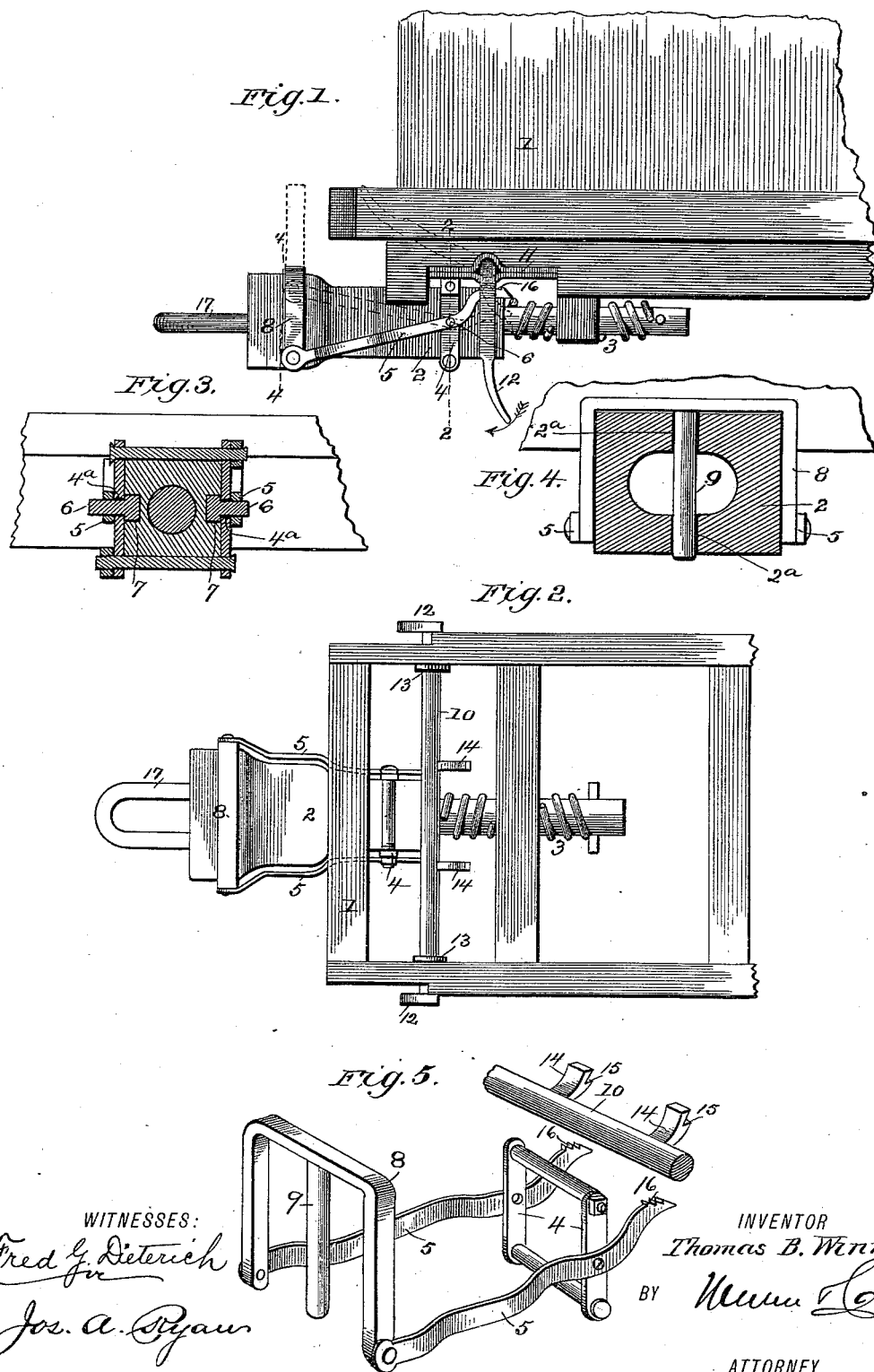


(No Model.)

T. B. WINN.
CAR COUPLING.

No. 420,258.

Patented Jan. 28, 1890.



WITNESSES:
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THOMAS B. WINN, OF DARIEN, GEORGIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 420,258, dated January 28, 1890.

Application filed July 15, 1889. Serial No. 317,507. (No model.)

To all whom it may concern:

Be it known that I, THOMAS B. WINN, of Darien, in the county of McIntosh and State of Georgia, have invented a new and useful
5 Improvement in Car-Couplings, of which the following is a specification.

My invention relates to car-couplings; and it consists in a new and improved device by the use of which the common link-and-pin
10 coupling now in general use is rendered automatic, avoiding all necessity for going between the cars to couple or uncouple them; and my invention will be hereinafter fully described and claimed.

15 Referring to the accompanying drawings, Figure 1 is a side elevation of my improved car-coupler. Fig. 2 is a top plan view of the same. Fig. 3 is a cross-section on the line 3
3, Fig. 1. Fig. 4 is a similar section on the
20 line 4 4, Fig. 1; and Fig. 5 is a detail perspective view hereinafter referred to.

The same numerals of reference indicate corresponding parts in all the figures.

Referring to the several parts by their numerals, 1 indicates the end of a car having
25 the usual draw-head 2 and spring-buffer 3 at the rear of the movable draw-bar.

The above-described parts are old, and I make no claim for them.

30 On the rear part of the draw-head is clamped a metal frame 4, the side pieces of which are formed with the central apertures 4^a.

5 5 indicate the side levers, which are pivoted near their rear ends to the clamping-
35 frame 4 by bolts 6, the projecting heads of which on the inner sides of the side pieces of frame 4, fit into recesses 7, which are formed in the draw-head, thus preventing the device
40 from moving or working backward or forward on the draw-head. The outer ends of the levers 5 are pivoted to the lower ends of a U-shaped metal strap or frame 8, to the center of which is secured by its upper end
45 the coupling-pin 9. The center of frame 8 can be formed with a hole and the pin brazed or otherwise secured therein, so that the common coupling-pins already in use can be utilized. The coupling-pin 9 fits down through
50 the usual top and bottom holes 2^a of the draw-head.

10 indicates a rock-shaft, which is secured in bearings 11 beneath the end of the car,

being provided at each end with a handle 12, and having a collar 13 at the inner side of each bearing 11 to hold the shaft from lateral
55 movement. The rock-shaft has two curved cams 14, formed each near their free ends with a shoulder 15. The inner short ends of the pivoted side levers 5 are formed with notches 16, with which the shouldered free
60 ends of the cams 14 engage.

To couple two approaching cars together, the rock-shaft is turned by raising one of its end handles 12 in the direction indicated by the arrow, when the curved cams 14, pressing
65 against the rear ends of the pivoted levers 5, raise the front end of the said levers until the shoulders 15 of the cams engage with the notches 16 of the inner ends of the levers. When the front ends of the levers 5 are thus
70 raised, they raise with them the frame 8 and coupling-pin 9, so that the link of the approaching car can enter the draw-head. When the cars meet, the end of the link 17 enters the draw-head, and the bumping to-
75 gether of the cars jolts the shouldered ends of the shaft-cams out of the end notches 16 of the inner ends of the levers, when the weight of the front ends of the levers 5, frame 8, and pin 9 causes them to fall, the pin passing
80 down through the link and apertures 2^a of the draw-head. To uncouple cars, the pin is raised by raising one of the end handles of the rock-shaft, as above described, thus freeing the link.
85

It will be seen that my new and improved device is exceedingly simple, compact, strong, and cheap in construction, and that it can be attached in a very short time and at a very
90 small cost to any of the old common link-and-pin couplings and will render them perfectly automatic, and avoiding all necessity for going between the cars in coupling and uncoupling. The handles, collars, and cams of the rock-shaft can be made removable, in
95 order to permit of their being removed, and the shaft run through bearing-holes in the sills of the car when desired.

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

1. In a car-coupling, the combination, with a draw-head, of the side levers pivoted near their rear ends on the draw-head and having

the notched rear ends, the frame 8, and the coupling-pin secured at its upper end in the said frame, and the rock-shaft having the curved shouldered cams 14 and the end handles, substantially as set forth.

5 2. In a car-coupling, the combination, with a draw-head, of a clamping-frame 4, the side levers formed with the notched rear ends and pivoted near their rear ends to the clamping-frame, the frame 8, and the coupling-pin
10 secured at its upper end in the said frame, and the rock-shaft having the curved shouldered cams 14 and the end handles, substantially as set forth.

15 3. In a car-coupling, the combination, with

a draw-head formed with the side recesses 7, of the clamping-frame 4, the bolts 6, having their extended heads fitting in the recesses 7, the side levers formed with the notched rear ends and pivoted on the bolts 6, the frame 8, and the coupling-pin secured at its upper end in the said frame, and the rock-shaft having the curved shouldered cams 14 and the end handles, substantially as set forth.

THOMAS B. WINN.

Witnesses:

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