

(No Model.)

P. J. DOCKRAY.

CAR COUPLING.

No. 550,341.

Patented Nov. 26, 1895.

Fig. 1.

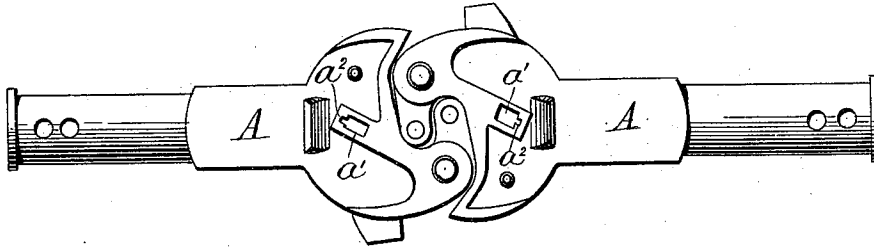


Fig. 2.

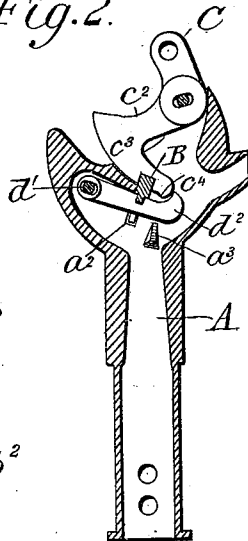


Fig. 3.

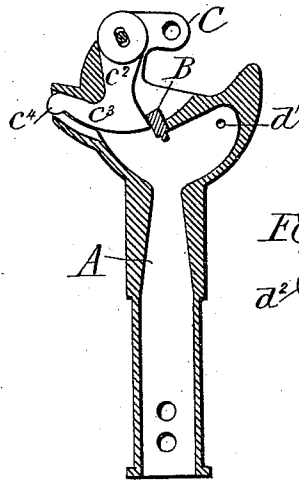


Fig. 4.

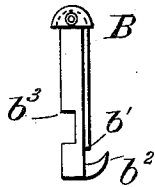
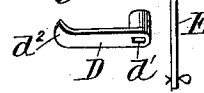


Fig. 5. Fig. 6.



Witnesses:

Lancelot Dockray.

William Halliwell.

Inventor.

Peter J. Dockray.

UNITED STATES PATENT OFFICE.

PETER J. DOCKRAY, OF KEARNY, NEW JERSEY.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 550,341, dated November 26, 1895.

Application filed February 27, 1895. Serial No. 539,871. (No model.)

To all whom it may concern:

Be it known that I, PETER J. DOCKRAY, a citizen of the United States, residing at Kearny, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in the Master Car-Builders' Type of Couplers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and the letters of reference marked thereon, which form a part of this specification.

The object of the invention is to enable the coupler to be uncoupled from the top as well as either side of the car; to couple again by impact without any assistance whatever from the trainmen to release the lock-pin; also, to have the parts inside the draw-head and not exposed to ice and snow, as in my Patents Nos. 433,522, dated August 5, 1890, and 515,487, dated February 27, 1894. This I accomplish by placing a rib and shoulder b' and hook-cam b^2 on the lock-pin B, in combination with a latch D, as shown in the drawings. Figure 1 of the drawings is a plan view of two draw-heads coupled together; Figs. 2 and 3, horizontal sections of a draw-head; Figs. 4, 5, and 6, detail views, respectively, of the lock-pin, the latch, and the latch pivot-pin.

In the drawings, A represents the draw-head provided with the vertical lock-pin hole a' and groove a^2 , in which passes the lock-pin B, the rib and shoulder b' , and the hook-cam b^2 . As shown in Fig. 2, the groove a^2 is deeper in the bottom of the draw-head, to allow the hook-cam b^2 to enter inside the draw-head to move the latch D under the shoulder b' of the lock-pin B. On the inside of the draw-head A is formed an incline cam a^3 to engage the latch D and lock it under the shoulder b' of the lock-pin B.

D is the latch provided with a hub and oblong pivot-hole d' and cam d^2 , operated by cam c^4 on the arc arm of the clutch C to move the

latch away from under the shoulder b' of the lock-pin B.

It will be observed that when the lock-pin B is pulled up the hook-cam b^2 engages the latch D and moves it directly under the shoulder b' , and when released will rest on the latch D by the shoulder b' . The end of the latch will rest against the bottom of incline cam a^3 . This unlocks the clutch C and allows it to swing out. Just before it is opened wide the cam c^4 , on the arc arm of the clutch C, engages the cam d^2 of the latch D, forces it up the incline cam a^3 and from under the shoulder b' , and the lock-pin will drop and rest on the arc arm of the clutch by the shoulder or open slot b^3 . When the clutch C is closed, the lock-pin B will ride on the arc arm c^3 by the shoulder b^3 until it reaches the end thereof, when it will drop off and lock the clutch. This enables the cars to be uncoupled while in motion and a flying switch to be made with safety.

What I claim as new, and desire to protect by Letters Patent, is—

1. The combination with the drawhead A, having the vertical lock-pin hole a' , with the groove a^2 , the lock-pin B, with the rib and shoulder b' and hook-cam b^2 , and the latch D, substantially as described and for the purpose set forth.

2. The combination with the lock-pin B, and shoulder b' , the latch D, having the hub and oblong pivot-hole d' , and the incline-cam a^3 in the drawhead; to hold up the lock-pin B, substantially as described and for the purpose set forth.

3. The combination with the latch D, having the cam d^2 , operated by the cam c^4 , on the arc-arm of clutch C; to drop the lock-pin B, substantially as described, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

PETER J. DOCKRAY.

Witnesses:

HENRY W. THURSTON,
SAMUEL E. GRADY.