(No Model.)

J. A. CRAIG.

CAR COUPLING.

No. 343,109. Patented June 1, 1886.

Fig. 1.

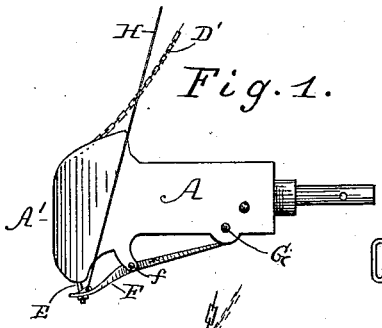


Fig. 2.

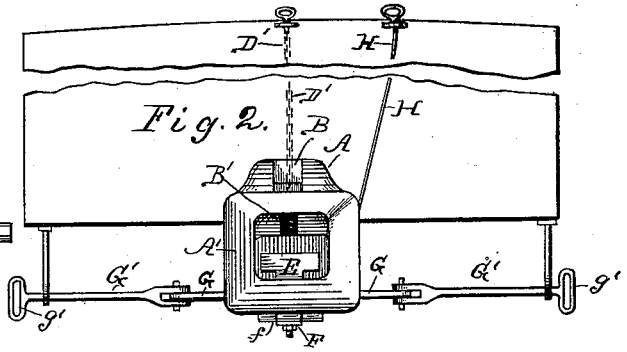


Fig. 3.

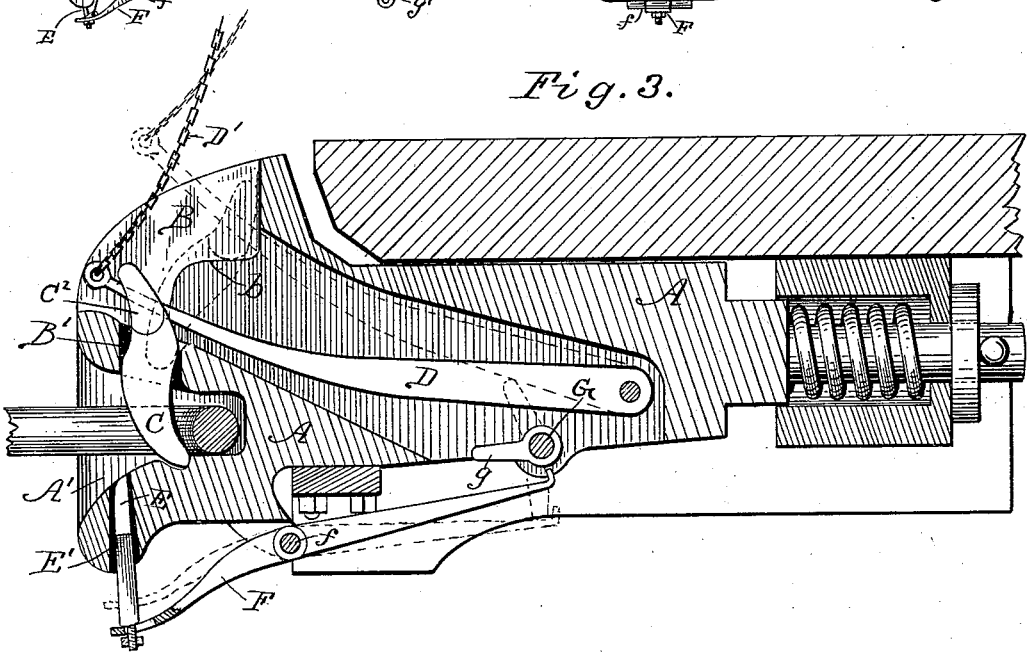


Fig. 4.

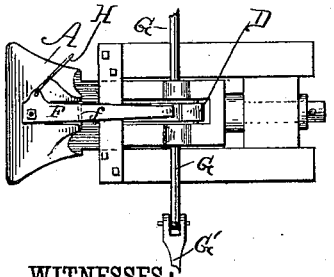
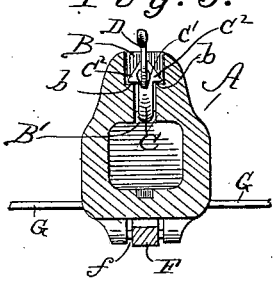


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOHN A. CRAIG, OF LAUDERDALE, MISSISSIPPI.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 343,109, dated June 1, 1886.

Application filed September 19, 1885. Serial No. 177,616. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. CRAIG, a citizen of the United States, residing at Lauderdale, in the county of Lauderdale and State of Mississippi, have invented a new and useful Improvement in Car-Couplings, of which the following is a description.

My invention is an improvement in car-couplings; and it consists in certain novel constructions and combinations of parts, as will be hereinafter first fully described, and then pointed out in the claims.

In the drawings, Figure 1 is a side view, and Fig. 2 a front view, of my coupling. Fig. 3 is a vertical section drawn centrally through the draw-head. Fig. 4 is a bottom plan view of the coupling; and Fig. 5 is a transverse section of the draw-head, cut immediately in front of the seats for the pin, the latter being shown thereon.

The draw-head A is formed with the mouth A′ flared, as shown, to readily guide the link. An inclined mortise, B, is formed in the draw-head, opening at its upper end out near the upper front side of the draw-head above the mouth A′, and at its rear end through the under side of such draw-head in rear of such mouth. A pin-hole, B′, leads from the forward end of the mortise through the top of the draw-head into the mouth, and the opposite walls of the mortise in rear of the pin-hole project upwardly, and are formed with shoulders *b b*, which form seats for the head of the pin. This pin C is movable through hole B′, and is preferably slightly bent, as shown. Its upper end is provided with a hole, C′, which fits over the lever presently described, and it is formed with lateral lugs C^2, forming a head, and adapted to rest on the seats *b*, before described, when the pin is raised. A lever, D, extends through mortise B, and has its rear end pivotally supported, and its forward end carries the coupling-pin, being usually extended through the hole C′, as shown. A chain or cord, D′, or other connection usually extends from the forward end of the lever D to the top of the car. Through the lower wall of the draw-head, near its forward end, I form a vertical slot, E′, for the link-lifter E. This lifter is connected with the forward end of a lever, F, which is pivoted between its ends at *f* below the draw-head, and has its rear end extended usually to a point slightly in advance of the pivot of the coupling-supporting lever D. A shaft, G, is journaled in suitable supports and extends between the rear ends of levers D F. On this shaft, between said levers, I fix or form a crank-arm, *g*, arranged and adapted to alternately engage such levers as the shaft is rocked, by which engagement the lever D and the coupling-pin will be raised or the rear end of lever F will be depressed and the link-lifter be elevated, as will be seen. By this construction I can by a single device properly actuate the coupling devices or adjust the link so it will couple with higher or lower draw-heads.

It will be understood that the link-adjusting devices are only necessary when the draw-heads are of different heights. To enable the operation of such devices from the top of the car, I preferably employ a rod, H, connected at one end with the forward end of the lever F, and extended thence to or above the top of the car.

Instead of extending the shaft G to the sides of the car, I prefer to provide it with handle-sections G′ G′, jointed at one end to the shaft and provided at their other ends with hand-holds *g′*, as shown.

In operation, when the link is raised and supported on its seats the contact of a meeting draw-head will jar it down into coupled position. To uncouple it is only necessary to raise the lever D, which may be effected by drawing on the connection at the top of the car or properly turning the shaft G. The link may be adjusted to any suitable angle by the shaft or by the rod which extends to the top of the car. I so avoid going between the cars for any purpose, and enable the operation of the moving parts of the coupling from either side or top of the car.

Having thus described my invention, what I claim as new is—

1. A car-coupling draw-head formed with a mouth, A′, a slot, B, located in rear of said mouth, and a pin-hole leading through the top of the draw-head into the mouth A′, and provided with seats or shoulders *b* above said pin-hole, substantially as set forth.

2. The combination, with a draw-head and

the levers D and F, of a shaft extended between said levers, and having a crank-arm arranged to alternately engage the same as the shaft is rocked, substantially as set forth.

3. The combination, with the draw-head, having seats *b*, and the lever D, of the coupling-pin supported on and movable along the forward end of said lever, substantially as set forth.

4. The combination of the draw-head, the levers D and F, the shaft G, extended between said levers, and having a crank-arm whereby to engage the same, and handle-sections jointed to said shaft, substantially as set forth.

5. The combination, with the draw-head having a mouth, an inclined mortise, B, having seats *b*, a pin-hole, B′, and a slot, E′, of the lever D, the lever F, the link-lifter E, and the shaft G, having a crank-arm, *g*, arranged to engage the levers D and F, substantially as set forth.

6. The combination of the draw-head, the pin-supporting lever, the link-lifting lever, the shaft extended between said levers, and having a crank-arm arranged to engage the same, and connections extended from the forward ends of said levers to the top of the car, substantially as set forth.

JOHN A. CRAIG.

Witnesses:
J. W. ULRICK,
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