(No Model.)

J. H. SWINDELL.

CAR COUPLING.

No. 499,947. Patented June 20, 1893.

Fig. 1.

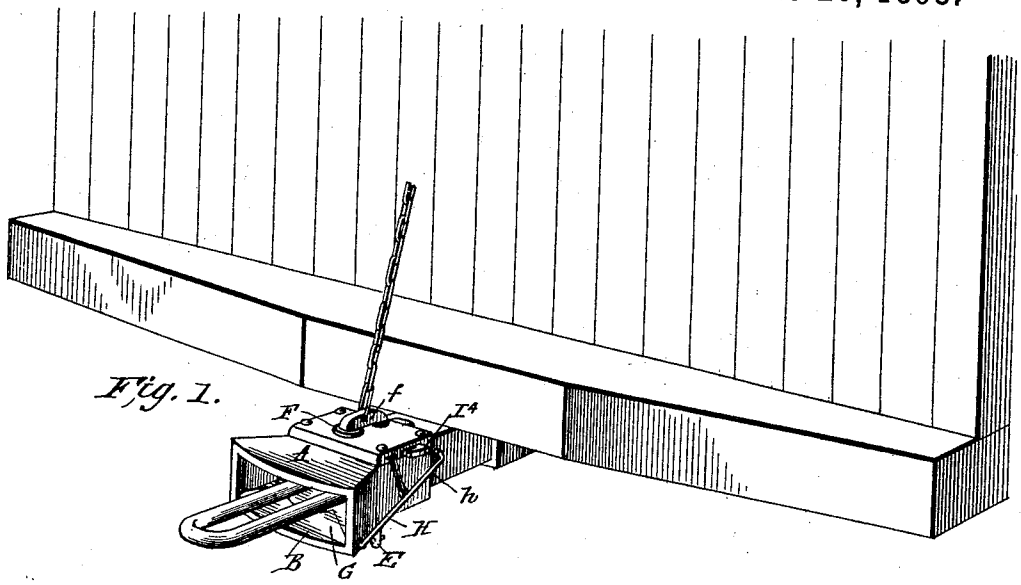


Fig. 2.

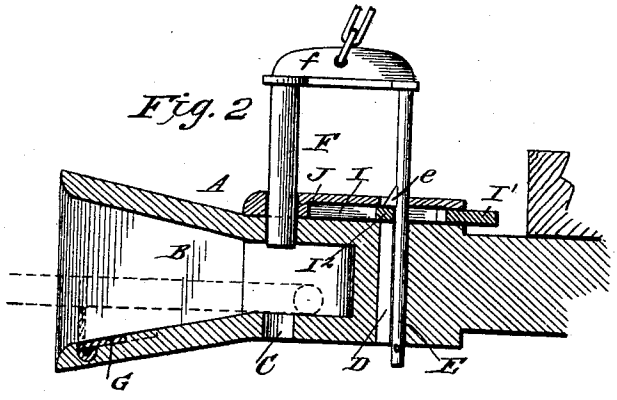


Fig. 3.

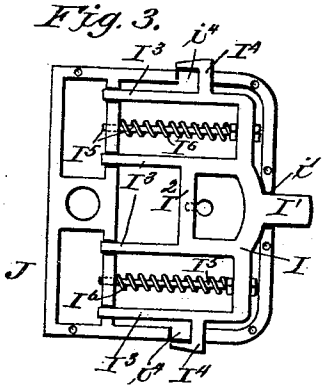


Fig. 4.

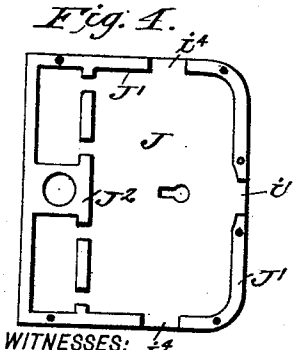
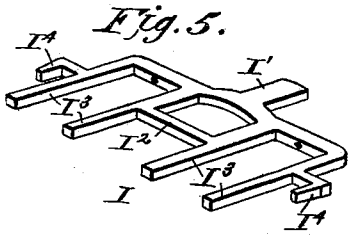


Fig. 5.



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JAMES HENRY SWINDELL, OF REIDSVILLE, GEORGIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 499,947, dated June 20, 1893.

Application filed February 17, 1893. Serial No. 462,735. (No model.)

To all whom it may concern:

Be it known that I, JAMES HENRY SWINDELL, of Reidsville, in the county of Tattnall and State of Georgia, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification.

My invention is an improvement in car couplings and seeks to provide simple, durable and easily applied constructions whereby the longitudinal movement of the draw heads in coming together or bumping will serve to operate the devices for supporting the pin and the link holder.

The invention consists in the construction and combination of parts hereinafter described and pointed out in the claims.

In the drawings—Figure 1 is a perspective view of my improved coupling. Fig. 2 is a vertical longitudinal section thereof. Fig. 3 is a detail top plan view the cover plate being removed and Figs. 4 and 5 are detail views.

The draw head A is formed with the link mortise B, pin hole C and guide opening D for the guide arm E of the coupling pin F and is provided with the link lifter G having the crank like arm or arms H which latter have preferably the hook ends for engagement by the supporting device presently described.

By my improvement I seek to provide a latch operated by the longitudinal movement of the draw head and having portions arranged and adapted to support the coupling pin and link holder in elevated position.

The invention also seeks to provide a coupling in which the latch for supporting the pin and link holder will be guided in its cover plate.

The coupling pin F has a head *f* and a guide arm E the latter having a shoulder *e* for engagement by the latch. In the construction shown the latch I has a rearwardly projected stem I′, a cross bar or portion I^2 to engage the shoulder *e* of the pin arm E, forwardly projecting guide arms I^3, and the laterally extended lugs I^4, the latter forming supports for the arms of the link holder. The latch also has rods I^5 supporting its actuating springs I^6. The rods I^5 are usually of wrought iron secured to the body of the latch by nuts as shown, the other portions of the latch being preferably cast integral. This latch is fitted in or to a cover J which has openings for the main and guide arms of the coupling pin and is provided with an edge flange J′ provided at *i*′ and *i*⁴ with openings for the parts I′ and I^4 of the latch. This cover also has a depending rib or flange J^2 which is provided with guide openings for the rods I^3 and I^5 of the latch. The springs I^6 bear between the latch and the rib J^2 and operate to normally press or actuate the latch back with its portion I^2 in engagement with the shoulder of the guide pin and with its stem protruding from the top or cover which serves as a case to inclose the latch and its actuating spring.

In use the cover with the latch in place is fitted on a draw head with the pin openings of the said cover coinciding with those of the draw head and the cover is firmly bolted in such position on the draw head as shown.

In operation the pin may be raised by a shaft journaled to the car and having a crank arm connected with the pin or by other suitable means desired. When so raised it will be held by the portion I^2 engaging the shoulder *e*. Now if two draw heads meet the draw head will be forced back, the stem I′ will strike the car sill or other abutment and the pin will be released and fall to complete the coupling. If the link is held in the draw head and it is desired to lift the link to enter a higher draw head it is only necessary to lift the link holder arms to engagement with the lugs I^4 and when the draw heads meet the movement of the latch will release the arms and permit the lifter to adjust by gravity to its usual position.

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

1. The improvement in car couplings comprising the longitudinally movable draw head, the coupling pin, the link holder having a crank like arm, and a latch having portions arranged and adapted to support the pin and link holder in the elevated position and adapted for operation by the longitudinal movement of the draw head substantially as set forth.

2. The combination with a longitudinally

movable draw head of a latch provided with devices arranged to engage and hold the pin and the link holder elevated and to release the same when the draw head is pushed rearwardly substantially as set forth.

3. In a car coupling a latch provided at its sides with projecting lugs to support the arms of the link holder and between its sides with a bearing by which to engage and support the pin elevated substantially as set forth.

4. In a car coupling the combination of a cover plate having a depending flange provided with openings i' i^4 and the latch fitted to said cover and having portions I' I^4 protruding through the said openings i' i^4 substantially as set forth.

5. In a car coupling the combination of the cover having a depending rib provided with guide openings, the latch having rods I^3 and I^5 held and movable in said openings and the actuating spring or springs substantially as set forth.

6. In a car coupling the combination with a longitudinally movable draw head and the coupling pin and link holder of the latch having at its side a projecting portion to support the link holder and provided between its sides with a portion to support the pin and a spring by which to actuate the latch substantially as set forth.

7. In a car coupling the combination of the cover having a rib J^2 provided with guide openings the latch having its spring rods movable in said openings and the springs on said rods substantially as set forth.

8. The combination of the cover having rib J provided with openings i' i^4 and the rib J^2 provided with guide openings, of the latch provided with a stem I', side lugs I^4, intermediate cross bar I^2, the guide rods I^3 and spring rods I^5 and the actuating springs all substantially as set forth.

9. The combination substantially as described of the draw head, the link holder having crank like arms provided with hooked ends, the coupling pin provided with a shouldered guide arm, the cover plate having ribs or flanges J' J^2 the latch having cross bar I^2, lateral lugs I^4, stem I' and spring rods I^5 and the actuating springs substantially as set forth.

JAMES HENRY SWINDELL.

Witnesses:
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