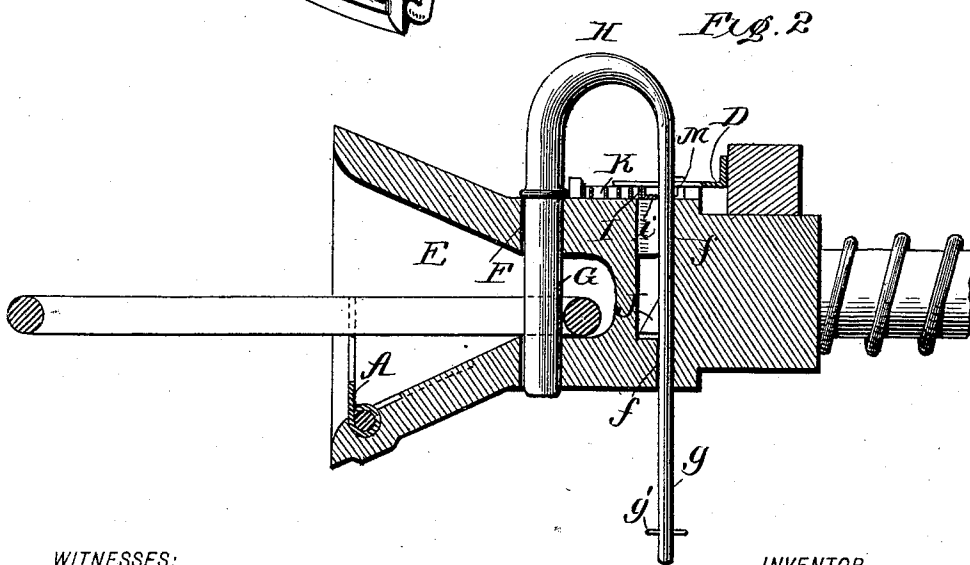
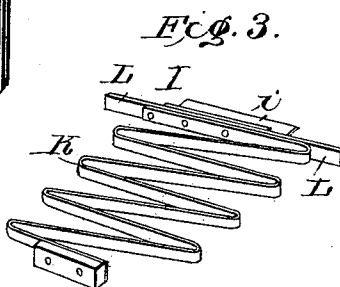
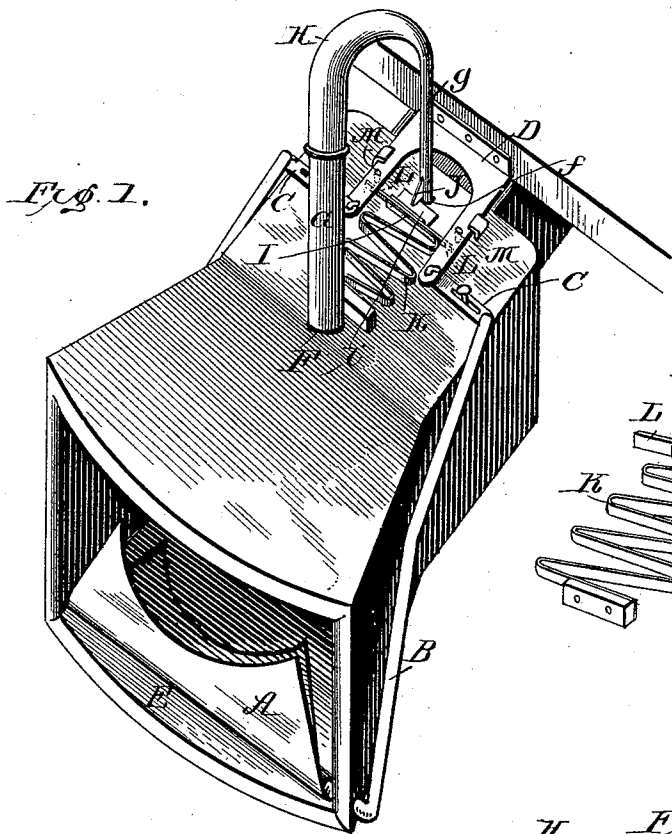


(No Model.)

J. H. SWINDELL.
CAR COUPLING.

No. 497,613.

Patented May 16, 1893.



WITNESSES:

WITNESSES:
Fred G. Dieterich
P.B. Turpin

INVENTOR

J. H. Swindell.
BY *Munn & Co*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES HENRY SWINDELL, OF REIDSVILLE, GEORGIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 497,613, dated May 16, 1893.

Application filed November 14, 1892. Serial No. 451,972. (No model.)

To all whom it may concern:

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

This invention is an improvement in car couplings and especially in the devices by which to enable the automatic coupling of the cars and the invention consists in the special constructions and combinations of parts as will be hereinafter more fully described and pointed out in the claims.

In the drawings—Figure 1 is a perspective view of my improved coupler. Fig. 2 is a vertical longitudinal section thereof and Fig. 3 is a detail perspective view illustrating the devices for releasing the coupling pin.

It may be said that the link lifter A with crank arms B, the slide plate C for supporting and releasing said crank arms and the plate D for operating said arms, as also a U-shaped coupling pin are not—in themselves, claimed in this application but form a part of the subject matter of a separate application filed by me on or about September 21, 1892.

Certain improved features in some of the said constructions are claimed in this application and will be more fully described hereinafter.

The drawhead E has the usual link mortise into which opens the vertical hole F for the main arm G of the coupling pin H, the hole f for the guide arm g of said pin being arranged preferably in rear of the link mortise as shown. The arm g is provided near its lower end, below the drawhead, with a pin g' or other suitable stop to limit its upward movement and such stop g' is preferably so arranged as to stop the upward movement of the coupling pin at such point as to permit the extremity of the main portion G to rest just above the link mortise. To hold the pin elevated I provide a spring actuated latch I arranged preferably to engage a shoulder J on the portion g of the coupling pin as shown. The latch I is shown as formed with a plate i to engage the shoulder of the pin and with the actuating spring K such spring being shown as a compound bow spring secured at one end to the drawhead and at its opposite

or free end to the plate or bearing portion i and arranged to actuate said portion into engagement with the pin. The spring when used with a U-shaped coupling pin is usually arranged between the arms thereof as shown. I also provide the latch with bearings L for engagement by fixed operating abutments M, the bearings L being conveniently provided by lateral extensions at or near the free ends of the spring latch and the abutment may consist of pins dropped from the plate C fixed to the car frame. This spring K is much preferred because it serves to independently and positively operate the latch into engagement with the coupling pin, but manifestly in some instances it may be practicable to connect the latch directly to the slide plate or otherwise connect it with the car frame so that the movement of the drawhead longitudinally may operate to actuate the latch into as well as out of engagement with the coupling pin, but I much prefer the construction as shown and described.

In operation it will be seen that if the pin be raised by hand or in any other way desired the link will be released and if the pin be raised to the full extent it will be held in such position by the latch which is normally in position to hold the pin elevated. Now if the link of a meeting drawhead enters such drawhead the impact of the drawheads will force them back and the one carrying the elevated pin will operate by the connections and constructions described to adjust the latch to release the pin.

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

1. An improved car coupling comprising the drawhead, the double armed coupling pin having its guide arm provided with a shoulder, the spring latch arranged to engage the shoulder of the guide arm and automatically operating devices whereby to release said latch substantially as set forth.

2. An improved car coupling comprising the drawhead, the coupling pin, the spring actuated latch arranged to engage said pin and the slide plate arranged for operation by the car frame and provided with projections arranged to engage the latch and retract the

same when the drawhead is pushed back substantially as set forth.

3. An improved car coupling consisting of the longitudinally movable drawhead, the pin, the spring actuated latch having lateral extensions, and the plate fixed to the car frame and provided with projections arranged for engagement by the lateral projections of the latch whereby to retract the same when the drawhead is pushed back substantially as set forth.

4. The combination of the drawhead having a link mortise, a pin opening leading into said mortise and a guide pin opening in rear of the said mortise, the double armed pin having its arms operating in said openings, the spring actuated latch arranged to engage and

hold the pin elevated and automatically operating devices by which to release said latch substantially as set forth.

5. The combination of the longitudinally movable drawhead, the link lifter arms, the coupling pin, the spring actuated latch by which to secure the pin elevated, a plate secured to the car frame and arranged to retract said latch and plates connected with said plate and arranged to support and release the link lifter arms substantially as set forth.

JAMES HENRY SWINDELL.

Witnesses:

T. J. WILLIAMS,
C. D. THAGARD.