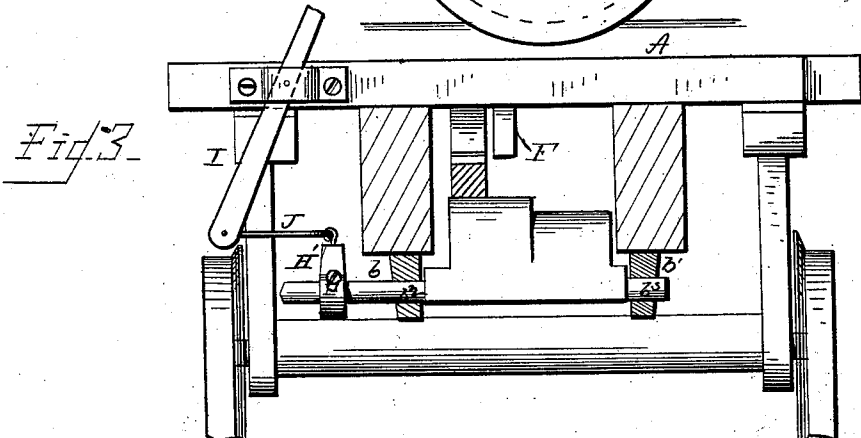
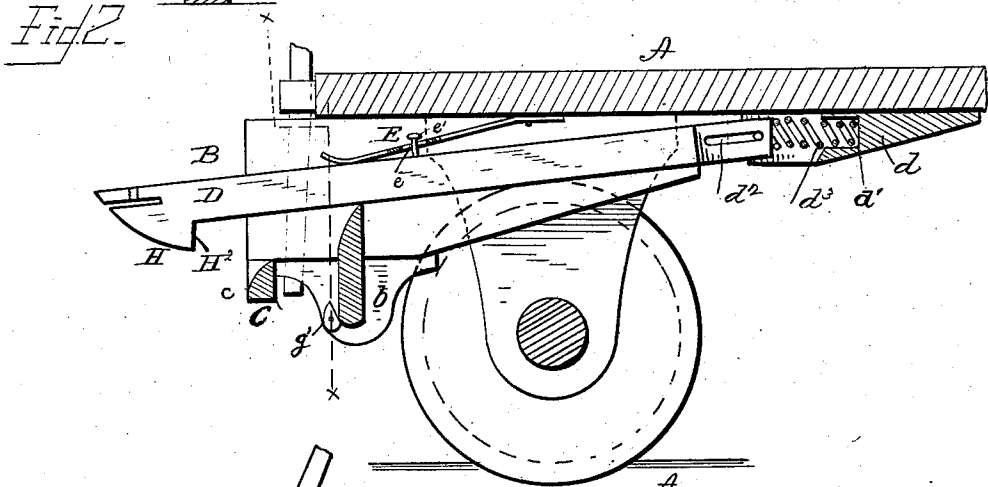
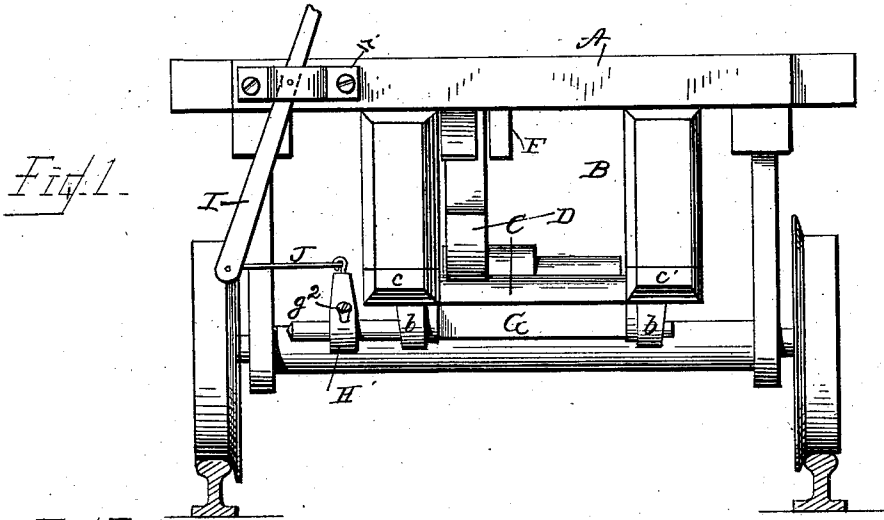


(No Model.)

H. L. SHIREMAN.
CAR COUPLING.

No. 290,276.

Patented Dec. 18, 1883.



WITNESSES
F. L. Ouraud
E. G. Siggers.

INVENTOR
H. L. Shireman
by *C. Snow & Co.*

Attorneys

UNITED STATES PATENT OFFICE.

HENRY L. SHIREMAN, OF NAZARETH, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 290,276, dated December 18, 1883.

Application filed September 27, 1883. (No model.)

To all whom it may concern:

Be it known that I, HENRY L. SHIREMAN, a citizen of the United States, residing at Nazareth, in the county of Northampton and State of Pennsylvania, have invented a new and useful Car-Coupling, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to car-couplings, the object being to provide improved devices for automatically coupling the cars which shall be cheap, simple, and durable in their construction, and which shall thoroughly effect the automatic coupling of the cars.

The invention consists in the improved construction of coupler hereinafter fully described, and pointed out in the claims.

In the drawings, Figure 1 is a front elevation of my improved coupling devices applied to a car. Fig. 2 is a longitudinal vertical section of the same, and Fig. 3 is a transverse vertical section on the line *xx* of Fig. 2.

A represents a car, to the under side of which is secured a buffer or bumper, B, which consists of two parallel beams.

C represents a bar beveled on its front face, as shown, and which is adapted to receive a coupling-hook of an adjacent car, its ends being provided with blocks *cc'*, which are formed integral therewith and secured to the under sides of the beams forming the bumper at their front ends.

D represents the draw-bar, which is provided with a longitudinal perforation or slot near its rear end, and pivotally secured in a recess, *d'*, formed in the front end of the block *d*, by means of a rod or pin passing through the slot *d''* in the end of the draw-bar, which fastening allows of the longitudinal movement of the said draw-bar D. The block *d* is provided with an interior longitudinal recess for the reception of a coil-spring, *d''*, against which bears the rear end of the draw-bar D.

E represents a spring pivotally secured to the under side of the car, directly above the draw-bar, and engaging therewith to prevent the bar from being lifted by the motion of the cars. This spring is formed with a slot, *e*, to engage a pin, *e'*, extending upwardly from the draw-bar, and for the purpose of shifting the spring with the draw-bar in turning curves, &c.

F represents a block secured to the under side of the car, to limit the lateral movement of the draw-bar D. The front end of the draw-bar D is beveled, and provided with a coupling-hook, H². The said coupling-hook H² is also slotted to receive a coupling-link, and provided with a vertical perforation to receive a coupling-pin.

On the under side of the bumper B are secured depending blocks or boxes *b b*, forming bearings for trunnions *b² b³*, formed upon the ends of a plate or latch, G, for raising the draw-bar when it is desired to uncouple the cars. This latch is beveled on its front face, to facilitate its operation and to prevent it from catching on the draw-bar when the said draw-bar is to be released from engagement with the adjacent car.

On the inner sides of the depending blocks *b b* are secured cam-shaped blocks *g' g'*, which limit the forward movement of the plate or latch G. One of the trunnions *b²* of the latch G extends laterally beyond the buffer B, and has mounted thereon a collar, H, adjustable said trunnion by means of a set-screw, *g²*.

I represents a lever pivoted in a recessed block, *i'*, secured to the end of the car, and connected to the collar H by means of a rod, J. This lever I is used for the purpose of uncoupling the cars by means of the rod-connection J with the collar H, which is rigidly mounted on the trunnion of the plate or latch G.

The operation is as follows: When the cars are to be coupled, they are brought in contact, the draw-bars of each car striking against the beveled bar secured to the under side of the bumper of the opposite car, and their hooked ends engage said bars, the spring E preventing the draw-bar from becoming disengaged. When the cars are to be uncoupled, the lever I is pushed toward the opposite side of the car, and in so doing raises the latch G from a horizontal to vertical position, as shown in Fig. 2. The latch bears against the under side of the bar, and raises the same from engagement with the next adjacent car.

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

1. In a car-coupling, the combination of the buffer, comprising two parallel beams, a be-

5 eled bar connecting the under front ends of
 the buffer-beams, a draw-bar having a coup-
 ling-hook at its front end and a longitudinal slot
 near its rear end, a block secured to the under
 10 side of the car, and having a longitudinal re-
 cess and a slot in its under side, a coil-spring
 seated in said block, and a transverse pin
 hinging the draw-bar in the said recessed
 block, substantially as set forth.

10 2. In a car-coupling, the combination of the
 buffer, comprising two parallel beams, a bev-
 eled bar connecting the under front ends of
 the buffer-beams, boxes secured to the under
 15 sides of the buffer-beams, a latch, G, having
 trunnions bearing in said boxes, cam-shaped
 lugs secured to the inner sides of said boxes, a

draw-bar having a coupling-hook at its front
 end and a longitudinal slot near its rear end,
 a block secured to the under side of the car,
 and having a longitudinal recess and a slot 20
 in its under side, a coil-spring seated in said
 block, and a transverse pin hinging the draw-
 bar in the said recessed block, substantially
 as set forth.

In testimony that I claim the foregoing as 25
 my own I have hereto affixed my signature in
 presence of two witnesses.

HENRY L. SHIREMAN.

Witnesses:

JOHN H. KREIDLER,
W. E. RICHTER.