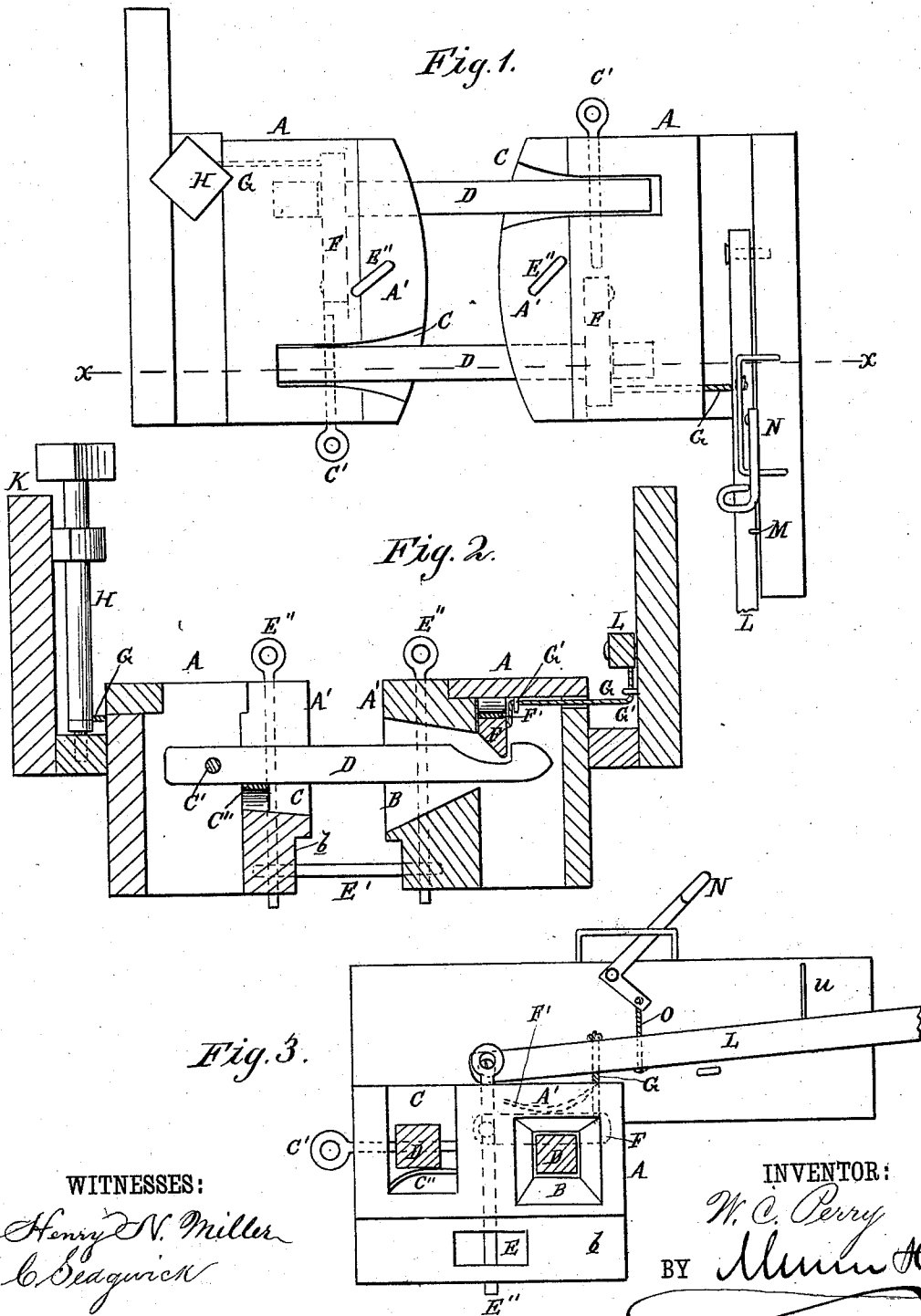


(No Model.)

W. C. PERRY.
Car Coupling.

No. 231,845.

Patented Aug. 31, 1880.



WITNESSES:

Henry N. Miller
C. Seagrave

INVENTOR:

W. C. Perry

BY

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM C. PERRY, OF BRATTLEBOROUGH, VERMONT.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 231,845, dated August 31, 1880.

Application filed June 11, 1880. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. PERRY, of Brattleborough, in the county of Windham and State of Vermont, have invented a new and improved Car-Coupler, of which the following is a specification.

This invention relates to that class of couplers that are self-couplers; and it consists of two hooked coupling-bars pivoted in suitable recesses in each draw-head and resting on springs, of spring-actuated catches for holding the hooked heads of the coupling-bars, and of recesses within said draw-heads to admit of coupling with the old-style of link and pin; and, further, of novel devices for uncoupling from the platform, top, or sides of the car.

Figure 1 is a plan of the device, showing it attached to a passenger and a freight car. Fig. 2 is a sectional side elevation of the same on line *x x*, Fig. 1. Fig. 3 is a front elevation of the device as attached to a freight-car.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents a draw-head with a cast-iron face, A', preferably about four inches thick, in order to permit sufficient flare to the coupling-bar entering orifice B to admit of the ready coupling of cars of different heights. C is the slot in which one end of the coupling-bar D is held by the transverse pin C', said slot C being opened through the top of the draw-head A to admit of the coupling-bar D being thrown upward in a vertical position whenever it may be desired to couple the cars by means of the old-style link and pin. The lower portion of the draw-head face A' is recessed, as shown at *b*, so that when coupling in the old style the faces of the draw-heads may come together without endangering the hand of the operator who holds the link. E is the link-opening for the old style of link E', and E'' is the coupling-pin passed vertically down through the draw-head A to hold said link E' in place.

On the inside of the face A' of the draw-head A is pivoted a catch, F, so that its beveled lower edge shall rest transversely across the upper part of the orifice B, and said catch F is held down in position by a spring, F'. A rope or chain, G, connects the free end of this catch F with the brake-shaft A, said rope or chain

G passing through or over eyes or pulleys G', that guide it and prevent friction.

A spring, C'', is placed within the draw-head A transversely across the lower part of the slot C, in order to hold the coupling-bar D in proper horizontal position for coupling.

When ready for coupling the coupling-bars D are in the position shown in Fig. 2. Then when the cars come together the forked end of the coupling-bar D enters the opposite orifice, B, and striking the catch F throws said catch up and passes beyond it. The spring F' then operates to throw said catch F down to engage in the hook of said coupling-bar D and hold it coupled. The coupling-bars D of each draw-head are thus simultaneously engaged.

The operator, standing on the platform K of the passenger-car, can uncouple the car by turning the brake-shaft H about two-thirds of the way round, thereby lifting the catch F from its engagement with the coupling-bar D.

The uncoupling mechanism for a freight-car differs from that of a passenger-car, inasmuch as the rope or chain G is secured to a lever, L, that is pivoted on the front end of the freight-car, and has its free end extended to the side thereof within reach of the operator standing at the side of the car. Upon raising this lever L the catch F is disengaged from the coupling-bar D, and if it be desired to hold the catch F disengaged the handle or free end of said lever L is made to rest on the top of the supporting-rod M, which is secured on the front of the car.

For convenience of uncoupling from the top of a car an elbow-lever, N, is pivoted on the face of the car near the top thereof with the handle within reach of the operator, and the rope or chain O is made fast to the other end of said lever N and connected with the free end of the lever L, or the rope or chain G may be directly connected with the lever N.

The advantages of this device are that the cars will shackle or couple themselves when one car is five or six inches higher or lower than the opposite car, and by raising or pressing down the coupling-bar D a greater variation in height can be overcome. The cars can be uncoupled from the platform of a passenger-car by turning the wheel of the brake-shaft H two-thirds of a circle or by moving an

upright lever, while freight-cars can be uncoupled from sides or top without risk to life or limb by going between the cars; and this device can also be used in connection with the old coupling link and pin, and with less danger to the operator, because of the recess *b* in the lower portion of the face of the draw-head A.

I am aware that some of these devices have been before used in coupling cars; but I am not aware that they have been used in combinations so effective as herein presented.

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

1. A car-coupler, constructed substantially as herein shown and described, consisting of draw-heads A A, provided with coupling-bar orifices B B, slots C C, link-openings E E, and

recessed faces *b b*, coupling-bars D D, springs C'' C'', and spring-catches F F, as set forth. 20

2. In a car-coupler, the draw-head A, provided with coupling-bar orifice B, coupling-bar slot C, having spring C'', link-opening E, recessed face *b*, and spring-actuated beveled catch F, substantially as herein shown and described. 25

3. As a means for uncoupling cars, the combination, with the spring-catch F, of the rope or chain G and levers L N, substantially as herein shown and described, whereby said cars may be uncoupled from the side or top of a car, as set forth. 30

WILLIAM C. PERRY.

Witnesses:

ASAPH P. CHILDS,
KITREDGE HASKINS.