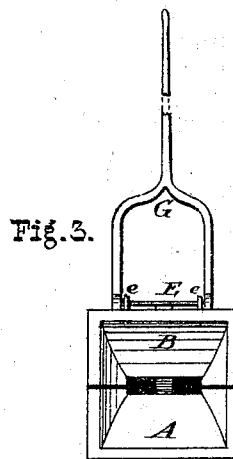
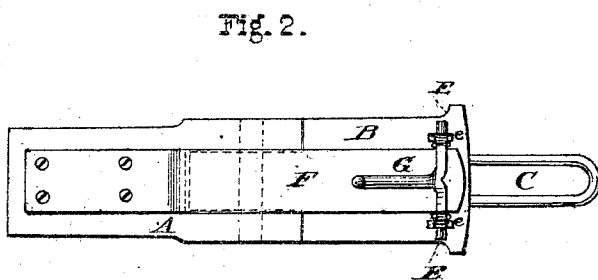
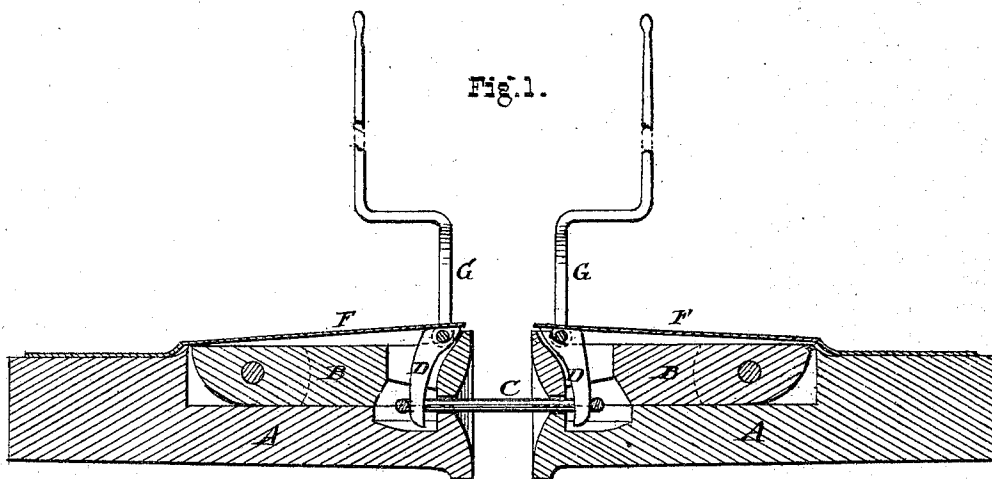


Henry C. Gilliland.

Car Coupling.

116431

PATENTED JUN 27 1871



Witnesses.

John R. Young
Atty.

Inventor.

Henry C. Gilliland, by
Prindle and Byer,

Atty.

UNITED STATES PATENT OFFICE.

HENRY C. GILLILAND, OF WELLSVILLE, MISSOURI.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 116,431, dated June 27, 1871.

To all whom it may concern:

Be it known that I, HENRY C. GILLILAND, of Wellsville, in the county of Montgomery and in the State of Missouri, have invented new and useful Improvements in Car-Couplings; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a vertical central section of my improved coupling. Fig. 2 is a plan view of the upper side of one of the draw-bars with the link in place; and Fig. 3 is a front elevation of the same with said link removed.

Letters of like name and kind refer to like parts in each of the figures.

The object of my invention is to render more safe and easy the usually difficult and dangerous operation of coupling and uncoupling cars; and it consists in the combination of the draw-bar, the pivoted jaw, the coupling-pin, and the spring, substantially as and for the purpose hereinafter shown and described.

In the annexed drawing, A represents an ordinary bell-mouthed draw-bar, having its front end divided horizontally and longitudinally, and the upper section B pivoted at its rear end to or within the contiguous portion of said bar so as to permit the front end of said section to be raised like a jaw and enlarge vertically the opening for the reception of the link C. The coupling-pin D, constructed in the form shown in Fig. 1, is pivoted upon a rod, E, which rests upon and across the upper side of the jaw B, where it is held in position by means of two ears, e, secured to and projecting upward from said jaw. A flat spring, F, secured upon the upper side of the draw-bar, and from thence extending forward with its front end resting upon the upper end of the coupling-pin, holds said pin and the jaw in position, except when intentionally changed, for which purpose is provided a rod, G, forked at its lower end and piv-

oted to or upon the rod E, from whence it extends upward above the bumper-beam or platform, from thence rearward to or near the end of the car, and again upward, within convenient reach of the brakeman.

As thus constructed the operation of the device is as follows: When it is desired to couple two cars the link is placed within one of the draw-bars, where it is held in a horizontal position by the pressure of the jaw, so that when said cars are moved together said link will enter the opening within the opposite draw-bar and press the lower end of the coupling-pin rearward until it passes the same, when said pin will be returned to its vertical position by the action of the spring upon its horizontal upper end. To release the link it is only necessary that the jaw and pin should be raised by means of the rod E. Should a car be overturned the twisting of the link would open the jaw and instantly release said link from engagement with the coupling-pin, so as thereby to prevent the dragging of other cars from the track.

It will be seen that, as the coupling-pin moves with the jaw and the latter upon the pivotal bearing at its rear end, but little power is required to raise said pin and release it from engagement with the link, so that the uncoupling of cars is rendered comparatively easy under the most unfavorable circumstances.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

In combination, the draw-bar A, the pivoted jaw B, the coupling-pin D, and the spring F, substantially as and for the purpose shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of April, 1871.

HENRY C. GILLILAND.

Witnesses:

ALLISON J. DAY,
JOHN W. PACE.