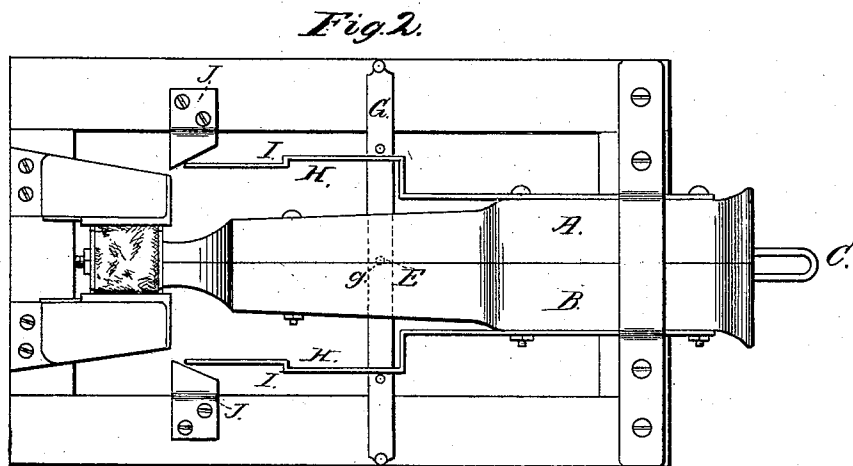
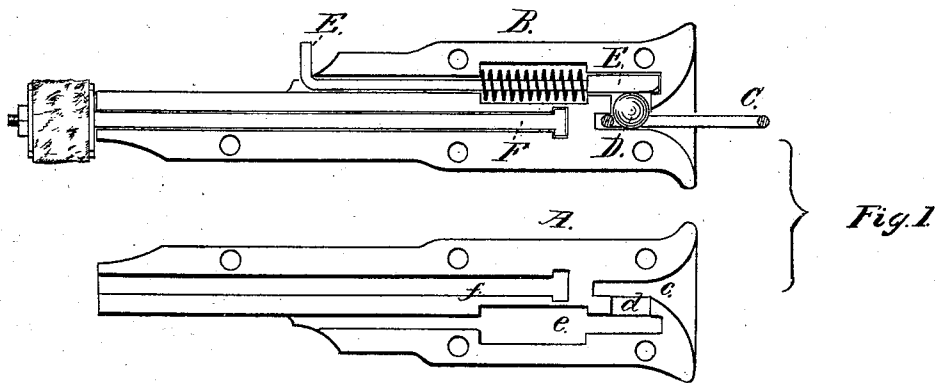


N. B. ECCLESTON.

Car-Couplings.

No. 149,208.

Patented March 31, 1874.



Witnesses.

C. H. Eccleston
R. S. Brown.

Inventor.

Noyes B. Eccleston

UNITED STATES PATENT OFFICE.

NOYES B. ECCLESTON, OF OXFORD, NEW YORK.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **149,208**, dated March 31, 1874; application filed May 8, 1873.

To all whom it may concern:

Be it known that I, NOYES B. ECCLESTON, of Oxford, in the county of Chenango and State of New York, have invented an Improvement in Car-Couplings, of which the following is a specification:

The nature of this invention relates to an improvement in that class of car-couplings which will automatically couple two cars on their coming together, thereby obviating the great danger to life and limb attendant upon the usual practice of going between the cars for that purpose. The invention consists in a draw-bar having a longitudinal vertical division into two halves, secured together by bolts or bands, each half being recessed to receive a draft-bolt, a spring-latch, and a ball, which serves as a coupling-pin for an entering link, and in combination therewith, a pair of spring-levers and two incline planes, secured to the car-sills for operating the spring-latch, as more fully hereinafter set forth.

Figure 1 is an elevation of the two halves of the draw-head opened out. Fig. 2 is a bottom plan.

In the drawing, A B represent the two halves of the draw-head, each having a recess, *f*, (seen, the lower part of Fig. 1,) to receive a T-headed draft-iron, F, whose rear end is secured to and through a buffer-spring. *e* is a recess in the front end of each half, the two recesses forming a bell-mouth to receive and guide the entering link C. *e* is a longitudinal recess in the upper part of each half, to receive a latch, E, whose rear end extends through the shoulder of the draw-head, and is bent up, seen in Fig. 1. The recess *e* is enlarged back of the shoulder of the latch-bar, around which is coiled a spiral spring to shoot it forward over an opening, *a*, which forms a connection between the fore part of the recess *e* and the back part of the opening *c*. In the opening *a* is placed a metallic ball, D, which is raised therein by an entering link passing under it, the latch E being drawn back to permit the ball to lift, the ball dropping into the link and retaining it in the draw-head instead of the

usual coupling-pin. The internal working parts being in place, the sections of the draw-bar may be secured together by bolts or otherwise. G is a bar or lever lying on the draw-head engaging with the latch-bar at *g*, Fig. 2. This bar extends from one side of the car to the other, so that said latch may be operated thereby by a person standing at either side of the car. H H are two bent and slotted bars, one being attached to each side of the draw-head and extending backward, the bar G playing through their slots. In each bar H, which should be of an elastic nature, is a catch or offset, I. Two inclined plates, J, are secured to the car-sills in the path of the rear ends of the spring-bars H, from each of which is a pendent stud, seen in Fig. 2.

To operate the device, the lever G is drawn back at either side until the stud of that side engages with the offset I, carrying back the latch-bolt from over the top of the opening *a*. Upon the coming together of two cars, the entering link raises the ball, which drops into said link, and the draw-heads come forcibly together, the rear ends of the spring-bars H being closed toward each other, releasing the lever G, when the spring around the latch-bar throws it forward, closing the top of the opening *a* against the ball, and thus retaining the link in the draw-head.

I do not claim, broadly, the invention of a draw-head in two halves or sections; but

What I do claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a draw-head, of a ball to engage with an entering link and a latch-bar to prevent its disengagement, substantially as shown and set forth.

2. The sectional draw-head A B, provided with the recesses *a c e f*, in combination with the ball D, latch E, draft-bolt F, lever G, spring-bars H, and inclines J J, substantially as and for the purpose set forth.

NOYES B. ECCLESTON.

Witnesses:

C. H. ECCLESTON,
B. G. GREENE.