(Model.)

S. NICHOLS.
Car Coupling.

No. 238,423. **Patented March 1, 1881.**

Fig. 1.

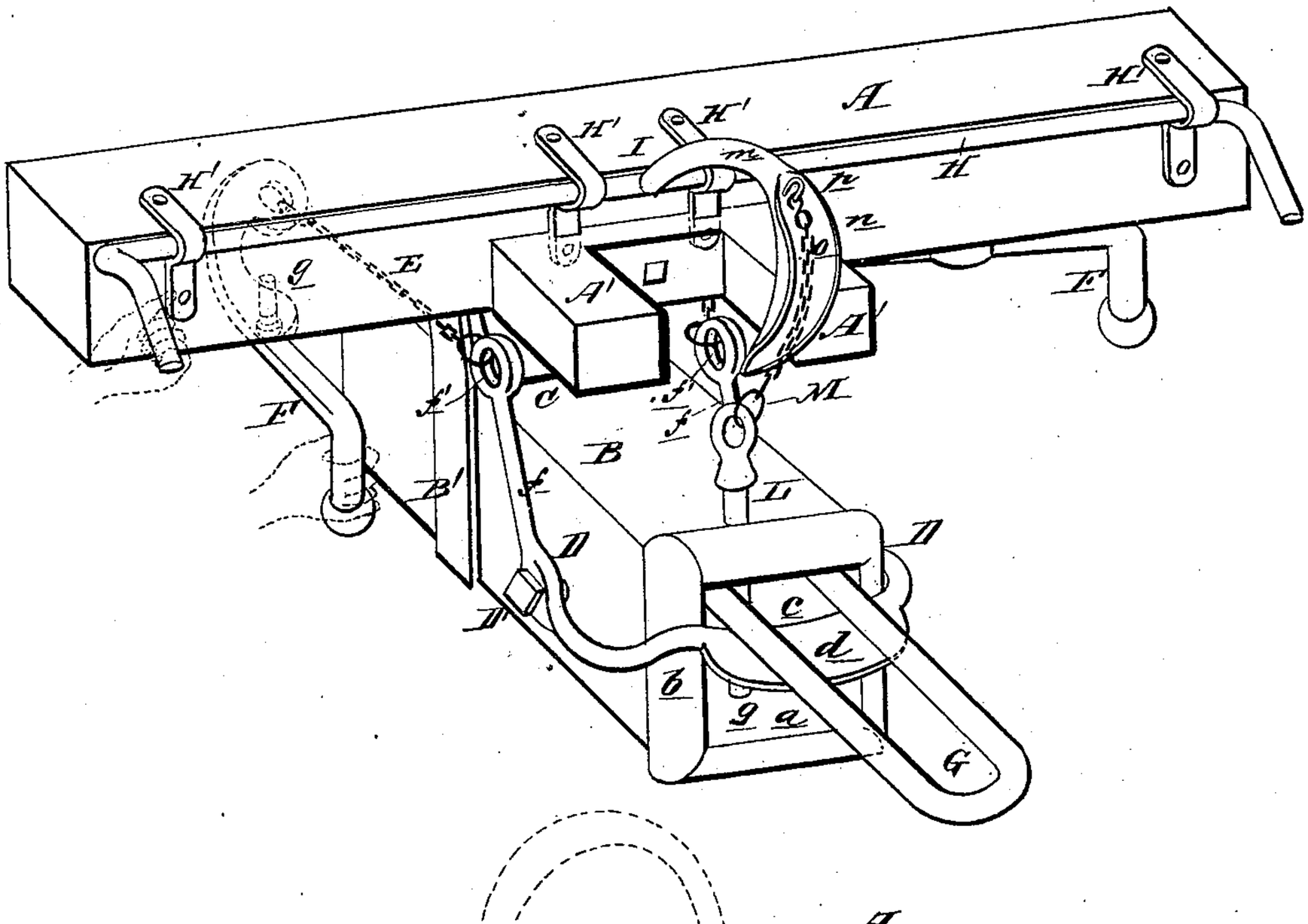
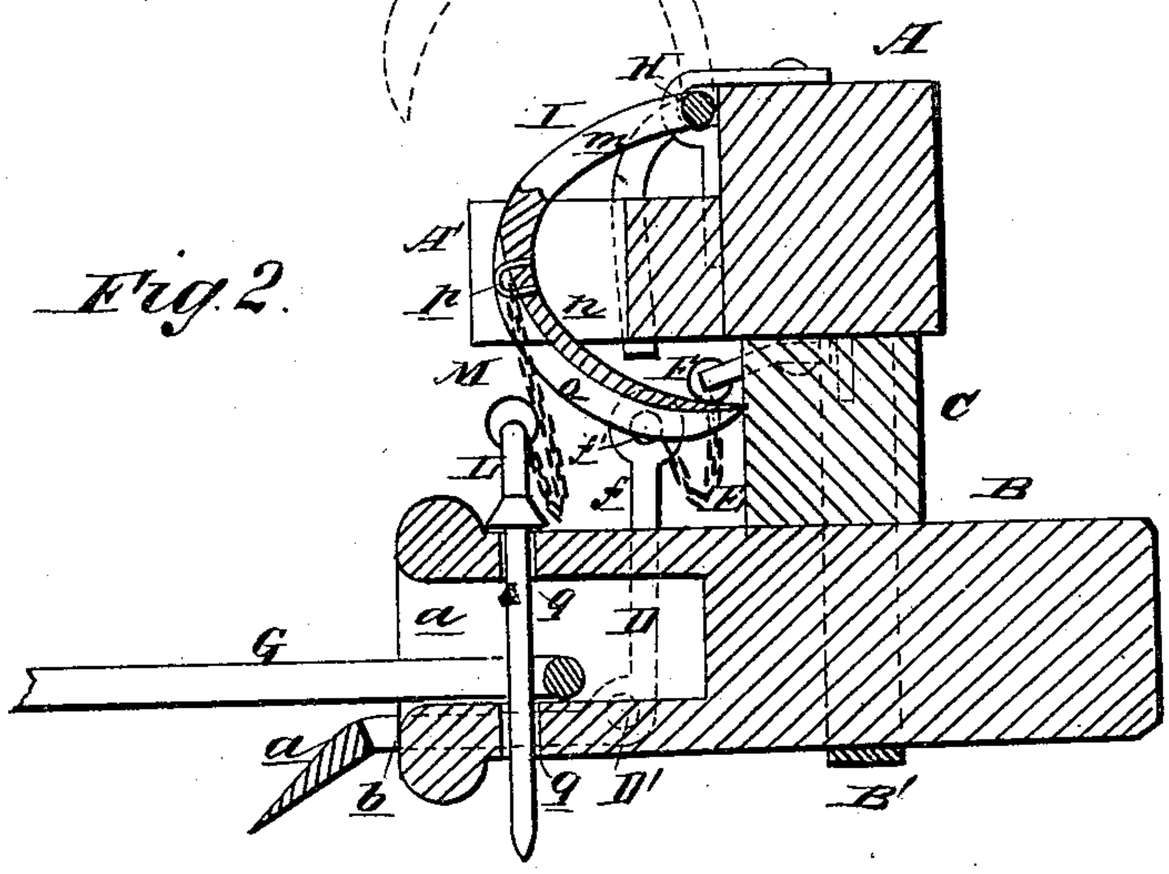


Fig. 2.



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SIMEON NICHOLS, OF LISBON, MAINE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 238,423, dated March 1, 1881.

Application filed August 14, 1880. (Model.)

To all whom it may concern:

Be it known that I, SIMEON NICHOLS, of Lisbon, in the county of Androscoggin and State of Maine, have invented a new and Improved Car-Coupler, of which the following is a specification.

The object of this invention is to provide a simple and convenient device for adjusting the elevation of the coupling-link, and for coupling and uncoupling cars without going between the cars for that purpose.

Figure 1 is a perspective view of the coupler. Fig. 2 is a transverse sectional elevation of the same.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents the front of a car-platform. A′ is a bumper, secured to the face thereof.

B is a draw-head, provided with an open mouth, *a*, and secured to the platform A by the strap B′, that embraces said draw-head B and has its points directed upward and entered into the platform A.

C is a bolster fixed between the platform A and the draw-head B, to hold the latter at a proper level.

D is a stirrup-shaped elbow-lever, pivoted through its elbows on the rod D′, that passes transversely through the draw-head B, so that the horizontal slightly-curved forearms *b b* of said lever D extend forward along the sides of said draw-head B, toward the face thereof, and the connecting cross-bar *c*, which is provided with a lip, *d*, projecting outward and downward, stretches across the front of said draw-head B. The vertical arms *f f* of said lever D extend upward on either side of the draw-head B, and are provided with eyes *f′ f′* in their extremities, in which are engaged the chains E E, that connect said lever D with the bent levers F F, that are fulcrumed on pins *g g* on the under side of the platform A, so that by moving the handles of said levers F F forward the said lever D has its lip *d* elevated.

When the lever D is in the position shown in Fig. 2 the lip *d* serves as a guide for the entering of a coupling-link, G, into a draw-head, B, when the opposite car is lower, and when it is desired to couple with a higher car the link G is elevated to a suitable position by elevating the lever D, as shown in Fig. 1. Thus it will be seen that the purpose of the lever D is to guide and adjust the coupling-link G.

Along the upper edge of the car-platform A a rocking rod, H, is held in straps H′ H′, the ends of said rod H being bent outward to serve as handles whereby to operate said rod H. From the center of said rod H a curved grooved arm, I, projects forward, said arm I consisting of a slightly-curved round section, *m*, connected directly with the rod H, and of a slightly-curved section, *n*, grooved on its upper convex face, as shown at *o*, and bent at an angle of about ninety degrees downward from the section *m*, and in the bend of said arm I is fixed a staple, *p*, from which the coupling-pin L is suspended by the chain M, that is held in the groove *o*, so that when said arm I is turned down by the action of the rod H, as shown in full lines in the drawings, the bend of the arm I is brought in a direct vertical line above the coupling-pin orifices *q q*, directing and permitting the coupling-pin L to enter said orifices *q q* and hold the link G, while, when the arm I is turned up, as shown in dotted lines, Fig. 2, the tip of the section *n* will be in a vertical line over the orifices *q q*, so that the coupling-pin L will be raised and held suspended directly over said orifices *q q*.

The levers F F and rod H may be operated from the sides of a car, or by means of simple mechanism from the top thereof, whereby the dangers to life and limb consequent on going between cars for coupling or uncoupling may be avoided.

The stirrup-shaped elbow-lever D may be reduced in size and be fixed within the draw-head for protection from injury by contact with outside objects.

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-head B, stirrup-shaped lever D, provided

with lip *d*, levers F F, rocking rod H, curved grooved arm I, chain M, and coupling-pin L, as set forth.

2. In a car-coupler, the combination, with the coupling-pin L, of the rocking rod H, curved and grooved arm I, and chain M, substantially as herein shown and described, whereby the said coupling-pin is directed and entered and withdrawn from the draw-head, as set forth.

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