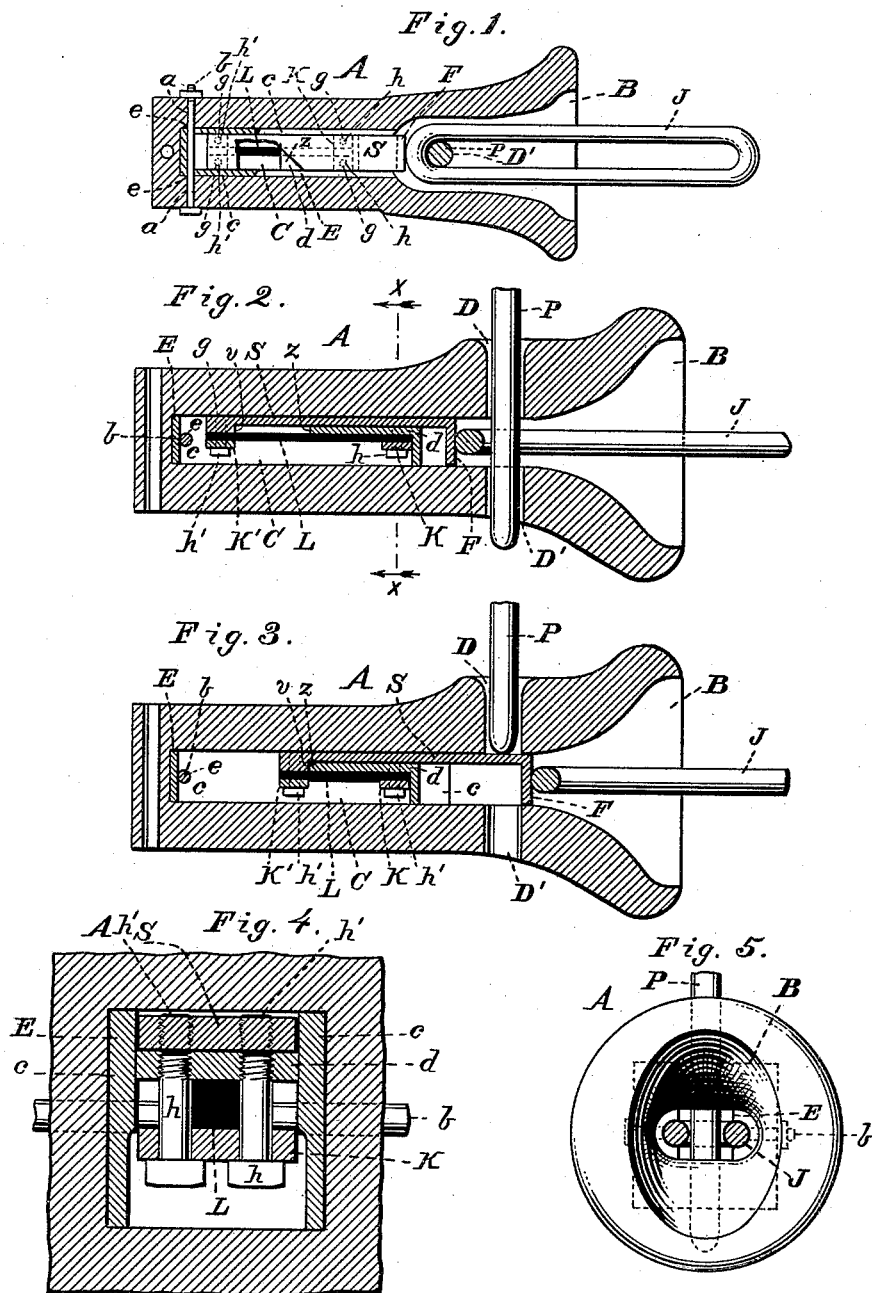


(No Model.)

J. FORTIER.
CAR COUPLING.

No. 419,933.

Patented Jan. 21, 1890.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN FORTIER, OF FRIDLEY, MINNESOTA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 419,933, dated January 21, 1890.

Application filed August 31, 1889. Serial No. 322,530. (No model.)

To all whom it may concern:

Be it known that I, JOHN FORTIER, a citizen of the United States, and a resident of Fridley, in the county of Anoka and State of Minnesota, have invented certain new and useful Improvements in Devices for Coupling Cars; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of this invention, and is a horizontal section through the draw-head. Fig. 2 is a vertical section showing the tension-slide pushed by the link beyond the coupling-pin. Fig. 3 is a vertical section showing the position of the tension-slide before coupling. Fig. 4 is a vertical section taken at *x x* on Fig. 2. Fig. 5 is a front view of the draw-head.

The object of this invention is to provide a strong and durable pin-set coupling for cars; and it consists in the novel construction and combination of parts, as hereinafter set forth, and pointed out in the appended claim.

In the accompanying drawings, the letter A designates a draw-head having a flaring mouth B terminating in the rectangular cavity C, which extends longitudinally from the back of the mouth B to the rear portion of the draw-head, and is provided with the transverse perforations *a a* for the securing-pin *b*.

D D' represent the upper and lower pin-seats, which are vertical apertures through the upper and lower walls of the draw-head, in line with each other, as shown.

E designates the spring-box, which is of elongated rectangular form, consisting, mainly, of the lateral walls or plates *c c* and the transverse bearing or connecting plate *d*, which holds said lateral plates together and in position. The rear ends of the plates *c c* are perforated, as at *e*, for the passage of the pin *b*, which fastens the boxing in place after

it has been inserted in the cavity C of the draw-head. The transverse connecting-plate *d* is provided with threaded perforations *g g*, in which the upper ends of the clamping-bolts *h h* are secured. A clamping-plate K is also provided, through which the clamping-bolts *h* pass, and L is the rubber spring, which is secured at its forward end to the plate *d* in fixed position by means of the clamping-plate K and the clamping-bolts.

S represents the tension-slide and setting-plate, which extends along the upper surface of the connecting-plate *d* and is provided in front with the engagement-flange F. In rear the slide is provided with the threaded perforations *g g*, in which the upper ends of the clamping-bolts *h' h'* are secured, these bolts passing through perforations of the rear clamping-plate K', whereby the rear end of the rubber spring is secured to the rear end of the tension-slide.

The connecting-plate *d* extends but a short distance toward the rear of the cavity C, and its rear end *z* forms a stop, which, when the slide S is drawn forward by the rubber spring, engages the rear shoulder *v* of the slide and prevents the latter from moving forward beyond a certain position, in which it projects just under and forward of the upper pin-seat D, obstructing the passage downward therefrom to the lower pin-seat D'. In this position the pin P, when set, bears by its point on the top of the slide. If, now, the link J be introduced forcibly, as in coupling two cars, the tension-slide will be pushed back by said link until the end of the latter passes back of the pin-seats, when the pin will drop through the link, effecting the coupling.

For the purpose of uncoupling the cars it is designed to provide the same with levers (not shown) whereby the pins may be raised without going between the cars.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

In a car-coupling, the draw-head having an elongated rectangular cavity, the boxing secured therein and provided with the stop

connection *d*, the securing-bolt for said boxing, and the rubber spring connected to said boxing, in combination with a tension-slide moving on a bearing of said boxing and connected to the rear end of said rubber spring, the front and rear coupling-plates and their bolts respectively securing the rubber spring to the connection *d* of the boxing and to the

shouldered rear end of the tension-slide, substantially as specified. 10

In testimony whereof I affix my signature in presence of two witnesses.

JOHN FORTIER.

Witnesses:

C. D. TUTHILL,
C. J. SWANSON.