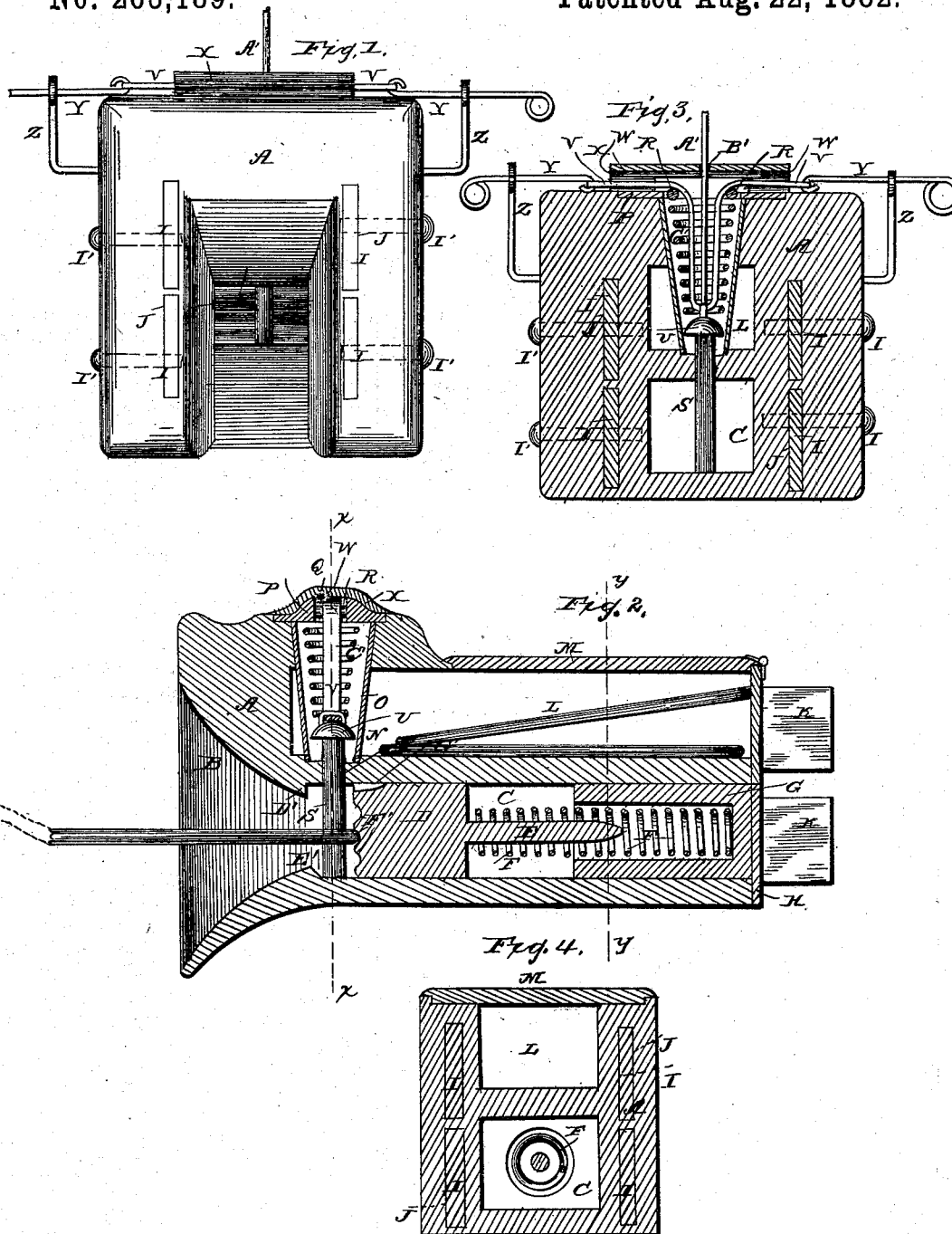


(No Model.)

O. D. D. MARTIN.
CAR COUPLING.

No. 263,189.

Patented Aug. 22, 1882.



WITNESSES:

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ORIN D. D. MARTIN, OF AUGUSTA, GEORGIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 263,189, dated August 22, 1882.

Application filed June 30, 1882. (No model.)

To all whom it may concern:

Be it known that I, ORIN D. D. MARTIN, of Augusta, in the county of Richmond and State of Georgia, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to automatic car-couplings, and has for its object to provide a simple, durable, inexpensive, and efficient coupling.

To this end it consists in certain improvements in the construction and operation of the same.

In the drawings, Figure 1 is a front view of a draw-head having my improvements; Fig. 2, a vertical longitudinal sectional view thereof; Fig. 3, a cross-section on the line *xx*, Fig. 2; and Fig. 4, a like view on the line *yy*.

Referring by letter to the drawings, A designates the draw-head, having a mouth, B, continued into a longitudinal chamber, C, in which works a slide, D, having a shank, E, passing through a coiled spring, F, in a box, G, fixed in the rear end of chamber C. The box G may be integral, but is preferably removable, and has a head, H, extending over the rear end of the draw-head.

I designates the draw-bars, which extend entirely through openings J in the draw-head at each side, and are secured therein by bolts I', said openings being longitudinal and open at each end. This construction imparts greater strength, and the rear projecting ends, K, of the draw-bar may be secured to the beams of the car in any desired manner.

L is a recess or chamber formed in the top of the draw-head, and provided with a hinged cover, M, the links being accommodated in this box or chamber when not in use.

N is a vertical chamber, formed above the mouth of the draw-head, in which is set an inverted conical or funnel-shaped tube or box, O, and above this is fitted a plate, P, having a central opening, Q, at the ends of which are journaled transverse rollers R R.

S is the coupling-pin, which works in a perforation, T, in the bottom of chamber N, and

is formed with an enlarged head, U, to which are secured straps V V, extending up over rollers R R and out at each side through openings W W in the ends of a cap-piece, X.

To the projecting ends of straps V V are secured operating-rods Y Y, which pass through brackets or guides Z Z on the sides of the draw-head to the sides of the car.

A' is a vertical operating-rod, secured to the head of the pin S, and extending up between rollers R R through a perforation, B', in cap X to the top of the car. Thus the coupling-pin may be operated to uncouple from either the top or sides of the cars without going between them and endangering life.

To force the coupling-pin downwardly, a conical coiled spring, C', is arranged around straps V V and rod A', its lower end bearing on the head of the coupling-pin and its top against the under side of the plate P.

The front edge or face of the slide D normally abuts against a transverse shoulder, D', at the top of the mouth of the draw-head, and a transverse ridge, E', is formed or arranged at the bottom of the mouth. The edge of the slide is provided with transverse grooves or corrugations F', in which the end of the link is adjusted so that it will rest on ridge E' and project upwardly, downwardly, or straight forward, as desired, and to couple cars of different heights. For the latter purpose a crooked link may be used.

When coupled the end of the link is held securely in the groove or corrugation in which it is adjusted by the coupling-pin, as the slide D by tension of its spring F always presses forward. The link is thus prevented from sliding up and down on the pin and all liability of its becoming uncoupled obviated.

At its top edge, G', the slide D is notched and beveled to facilitate engagement with the end of the coupling-pin.

The operation and advantages of my invention will be readily understood. By operating any of the rods Y Y and A' the pin is raised and supported by slide D. Then, when the link of the opposite car enters the draw-head, the slide is forced back, and the pin falls by reason of its spring to complete the coupling.

I claim and desire to secure by Letters Patent—

1. The combination, with a draw-head hav-

ing longitudinal openings or perforations formed at each side, of draw-bars extending entirely through the same from the front and projecting at the rear, substantially as set forth.

5 2. A car-coupling formed with a recess or chamber in its top, having a hinged cover, and adapted to receive the links when not in use, substantially as specified.

10 3. The combination, with the draw-head having a vertical chamber over the mouth and a perforation in the bottom of the chamber, of the plate having the transverse rollers, the coupling-pin provided with an enlarged head, 15 the coiled spring, the straps, and the operating-rods, substantially as set forth.

20 4. The combination, with the draw-head having a vertical chamber over the mouth, having a perforation in its bottom, of the funnel-shaped box, the plate carrying the transverse rollers,

the coupling-pin, the coiled spring, the straps, operating-rods, and brackets or guides, and the cap-piece having open ends, substantially as set forth.

5 5. The combination, with the draw-head 25 having the transverse ridge, forwardly-moving slide having a transversely grooved or corrugated face, and the vertical chamber, of the coupling-pin, spring, straps, operating-rods, plate provided with transverse rollers, and 30 cap-piece having open ends, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ORIN D. D. MARTIN.

Witnesses:

JAMES P. VERDERY,
THADDEUS OAKMAN.