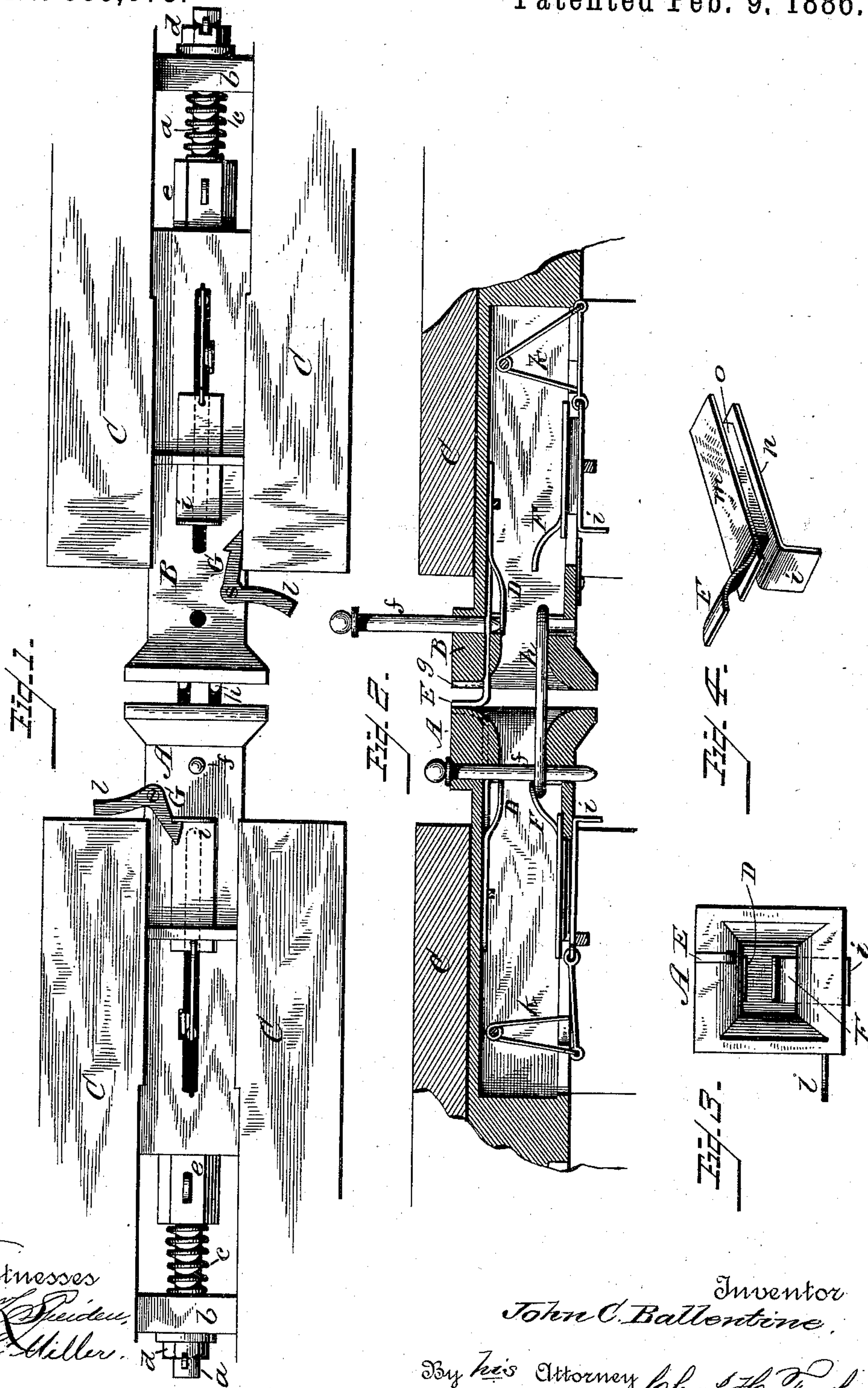


(No Model.)

J. C. BALLENTINE.
CAR COUPLING.

No. 335,875.

Patented Feb. 9, 1886.



Witnesses
 J. H. Spiden,
 L. L. Miller.

Inventor
John C. Ballentine.
By his Attorney Cha. H. Fowler

UNITED STATES PATENT OFFICE.

JOHN C. BALLENTINE, OF THORNTON, TEXAS, ASSIGNOR OF ONE-HALF TO
JAMES R. MILLS, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 335,875, dated February 9, 1886.

Application filed November 27, 1885. Serial No. 184,118. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. BALLENTINE, a citizen of the United States, residing at Thornton, in the county of Limestone and State of Texas, 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 same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a top plan view of my invention; Fig. 2, a longitudinal section thereof; Fig. 3, a front elevation of one of the draw-heads, and Fig. 4 a detail view of the sliding supporting-plate.

The present invention has relation to certain new and useful improvements in automatic car-couplings; and it has for its object to provide means whereby the safe, easy, and complete coupling of cars is secured, which will prevent all buffer accidents, as will be hereinafter described and claimed.

In the accompanying drawings, A B represent the two opposing draw-heads, which are secured between suitable longitudinal guides, C, upon the under side of the car. The two draw-heads with their several connections and operating mechanism are the same in every respect; and therefore, in further description, I shall refer to one only of the draw-heads, which has at its rear end a shank, *a*, loosely extending through a transverse guide-block, *b*, having on the shank a spiral spring, *c*, and a nut, *d*, to act as a stop. The shank *a* is preferably swiveled to the extension *e* of the draw-head, so that it will not bind when the draw-head is being pushed in.

In order to hold the coupling-pin *f* in an elevated position previous to coupling the draw-heads, I provide a supporting-plate, D, adapted to slide in the draw-head, and when brought forward is directly under the pin-hole and the pin *f* resting thereon, as shown in draw-head B of Fig. 2. This plate D has connected to it a trip, E, so that when the plate is in position to hold up the pin *f* the trip will be extended some distance beyond the face of the draw-head.

When the opposing draw-head comes

against the trip E, it forces it into a mortised seat, *g*, in the face of the draw-head, and also carries with it the plate D from under the pin, which will allow the pin to drop down in place to couple the link *h*. The shank of the trip E is of considerable length, and the plate D is attached thereto, the shank being held in a sliding position in the draw-head by suitable guides.

When the trip E is seated in the mortise *g*, it is flush with the surface of the draw-head, and consequently is removed from danger of being injured by the pressure of the draw-head opposite.

A second supporting-plate, F, is provided adapted to slide longitudinally in the draw-head at the bottom thereof, and has a catch, *i*, for drawing it forward. The plate F is curved upwardly, as shown, and when brought forward is held stationary in such position by a latch, G, engaging with the catch *i*, as shown, in draw-head A, Fig. 1. The rear end of the plate F or its connections has connected to it a spring, *k*, of any suitable form and construction, so as to draw the plate back to its normal position when released by the latch G, said latch having a trip-arm, *l*, by which it is automatically released by the arm striking against the end of one of the guides C.

In constructing the supporting-plate F and catch *i*, I prefer each should constitute the projecting end of flat rectangular plates *m n*, respectively, as shown in Fig. 4, and an intervening block, *o*, the whole being formed in one piece or separately, as preferred.

The plate F, as should be understood, is for the purpose of holding the link *h* up at an angle, so that it will enter the opposing draw-head, and when the draw-head carrying the link comes in contact with the tripping device E it is forced in and with it the plate D, thus removing the support from the pin *f* and allowing it to drop down in place through the link. As this is being done the draw-head, carrying the link as it is forced inward by contact with the opposing draw-head, releases the latch G by its arm *l* striking against the end of one of the guides C, and the spring *k* drawing the plate F back to its normal position, thereby allowing the link to assume a natural or horizontal position.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a car-coupling, an upper sliding supporting-plate for the pin provided with a tripping device, in combination with a lower sliding supporting-plate for the link, said plate being connected to a spring, and a latch for holding the plate in operative position, substantially as and for the purpose specified.

2. In a car-coupling, the combination of two sliding draw-heads, each provided with a shank having coiled around it a spring and a nut secured thereto, an upper sliding support-

ing-plate for the pin, having a tripping device, a lower sliding supporting-plate for the link, having a catch, a latch with a trip-arm for holding and releasing said plate, and a spring for drawing it back to its normal position, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN C. BALLENTINE.

Witnesses:

GEO. P. TURNER,
F. M. SELLERS.