

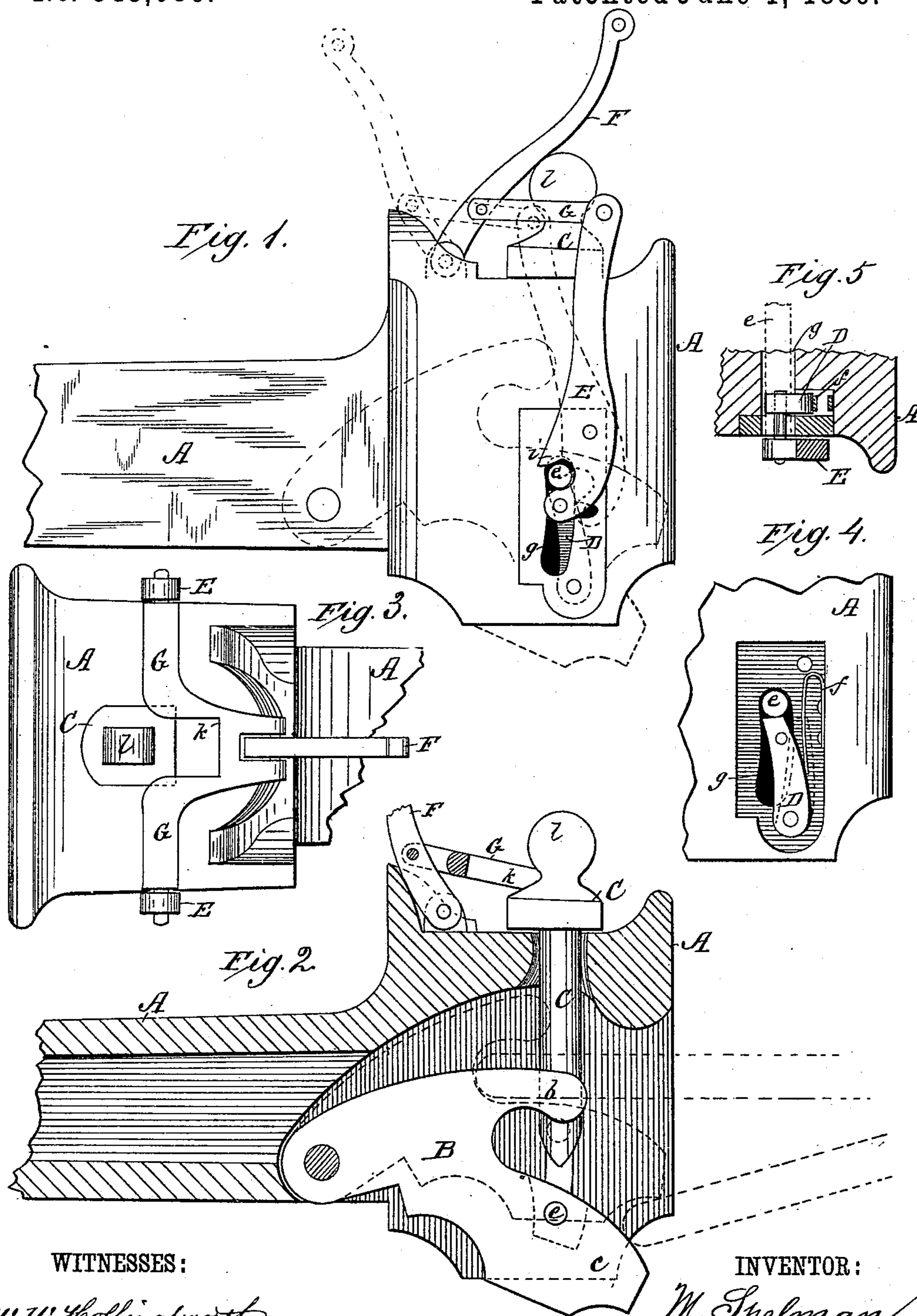
(No Model.)

M. SPELMAN.

CAR COUPLING.

No. 343,086.

Patented June 1, 1886.



WITNESSES:

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UNITED STATES PATENT OFFICE.

MICHAEL SPELMAN, OF SHREVEPORT, LOUISIANA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 343,086, dated June 1, 1886.

Application filed January 7, 1886. Serial No. 187,932. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL SPELMAN, of Shreveport, in the parish of Caddo and State of Louisiana, have invented a new and useful Improvement in Car-Couplings, of which the following is a description.

My present invention is an improvement upon the automatic coupling for which Letters Patent No. 330,166 were granted to me November 10, 1885.

The novel features constituting the improvement are hereinafter fully described, and specifically indicated in the claims.

In the accompanying drawings, Figure 1 is a side view of my improved coupling. Fig. 2 is a central longitudinal section. Fig. 3 is a plan view. Fig. 4 is a detail side view, an inserted piece being removed. Fig. 5 is a detail horizontal section.

I construct the draw-head A, as in my previous invention, with a cavity that is open at the bottom, and pivot within it a link-guiding and link-supporting device, B. In this case the upper side of said cavity and the upper or contiguous surface of device B are made of corresponding shape, so that when the latter is thrown upward and backward by the link, as shown in dotted lines, Fig. 2, in the act of coupling, the two opposite surfaces will meet throughout their length, thus obviating any danger of breaking the upper jaw, *b*, of the device by the shock incident to the more or less forcible thrust of the link. The device B has lateral arms that project through and work in slots in the sides of the draw-head. The pin C is arranged, as before, to enter a socket in the lower jaw, *c*, of link-holder B, but its lower end is beveled, as shown in Fig. 2, to facilitate engagement with the link.

In the former invention shouldered springs were arranged on the sides of the draw-head, and allow it to tilt downward when required. Such springs are now dispensed with, and in their place I employ the parts I will proceed to describe.

Within cavities or recesses in the sides of the draw-head are pivoted bars or oblong blocks D, their free ends being uppermost and pressed backward by springs *f*, so that they normally stand across the slots *g* and in sides of draw-head, thus serving as rests or sup-

ports for the arms *e* of link-reservoir B to hold the link coupled with pin C. Levers E are pivoted to the sides of the draw-head at points above the slots *g*, and stand normally vertical. Their lower ends are jointed to pins *h*, projecting laterally from the blocks or rests D, so that by tilting said levers backward, as shown in dotted lines, Fig. 1, the bars D are moved forward out of the slots, thus leaving the device B unsupported and free to descend to its lowest position. As an aid in starting the device B downward in case of an accidental "stick" from any cause, I provide said levers with rearwardly-projecting portions *i*, which serve as cams to act on the pins *e* and push downward at the same time the rests D are tilted forward.

To operate the levers E, and also lock them in the vertical position, I employ the lever F and a cross bar or yoke, G. The former, F, is pivoted at its lower end to the top of the draw-head in rear of the head of the pin C, and the yoke G extends across the draw-head and is jointed to the three levers E E and F. The front middle portion of the yoke G is provided with a notch, *k*, adapted to receive the flat-sided head *l* of pin C, for the purpose of preventing the latter from turning, so that the beveled side of its point will always be toward the front—*i. e.*, toward the link—on entering. The yoke G also subserves another purpose, to wit: It holds the pin C down, so that it cannot become displaced or disengaged from the link when the car to which the draw-head is attached is jolted heavily.

It will be seen that when the parts are in the position shown in full lines, Fig. 1, the coupling is complete, the rests D then supporting device B and the side and top levers, E E F, being thrown forward.

To uncouple, (see Fig. 1,) the hand-lever F is thrown backward, which draws the side levers, E, also rearward and the rests D forward, leaving the device B free to tilt downward, and thereby releasing the link from engagement with the pin.

What I claim as new is—

1. The combination, with the laterally-slotted draw-head and the movable link-receiver B, having lateral projections, of pivoted blocks or bars, which serve as rests or sup-

ports for said link-receiver, substantially as shown and described.

2. The combination of the blocks or bars D, pivoted at their lower ends, and springs arranged in rear thereof with the laterally-slotted draw-head and the pivoted device B, having lateral arms *ee*, that may rest on said blocks to support it, as shown and described.

3. The combination, with the draw-head, and link-receiver, and movable supports therefor, of side levers connected to the latter and adapted to operate, as specified, for releasing said link-receiver and allowing it to drop for uncoupling, as specified.

4. The combination, with the draw-head and link-receiver having lateral projections, of pivoted side levers having cam-like portions adapted to act on said projections for the purpose of forcing the link-receiver downward, as specified.

5. The combination, with the draw-head and pivoted link-receiver having lateral projections and pivoted supports therefor, of side levers pivoted to the latter and a hand-lever and device for connecting it with said side levers, as shown and described.

6. The combination of the pivoted hand-lever, the pivoted side levers, and connecting-yoke, the tilting device B, having lateral projections, and the pivoted supports, all as shown and described, to operate as specified.

7. The combination of the yoke having a square notch, a lever for shifting it forward and back, the coupling-pin having its point beveled on the front side and constructed with a collar and a flat-sided head adapted to fit in said notch, all as shown and described, to operate as specified.

8. The combination, with the draw-head, of the transverse yoke having a notch, as specified, and pivoted bars for attaching it to the sides of the draw-head, the coupling-pin C, having a head and collar, as specified, and a lever pivoted to both the yoke and draw-head, and arranged to project over said pin for the purpose of holding the yoke in position to prevent the pin from rising, as set forth.

MICHAEL SPELMAN.

Witnesses:

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