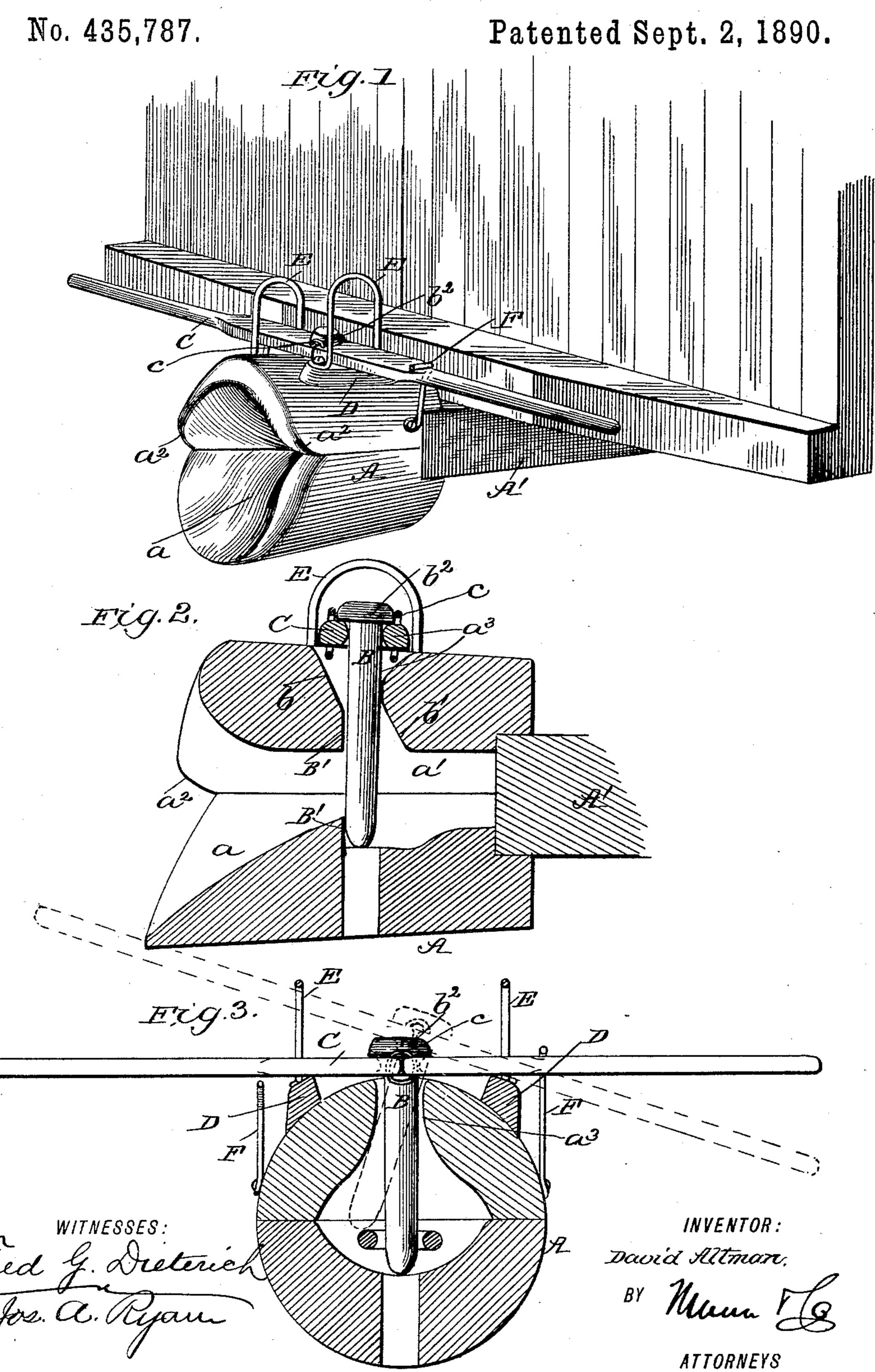
D. ALTMAN. CAR COUPLING.



## United States Patent Office.

## DAVID ALTMAN, OF MACON, GEORGIA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 435,787, dated September 2, 1890.

Application filed June 26, 1890. Serial No. 356,898. (No model.)

To all whom it may concern:

Be it known that I, DAVID ALTMAN, of Macon, in the county of Bibb and State of Georgia, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification.

My invention relates to an improved construction whereby an automatic coupling is effected, and also an improved mechanism for

To releasing the link.

The object of my invention is to provide a coupler of the above description that shall consist of very few parts, all of simple and durable construction, which can be quickly and easily assembled to form a thoroughly-efficient automatic coupler.

With this object in view my invention consists in certain details of construction and combination of parts, such as shown in the drawings, and more fully explained herein-

after.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of my improved coupler as applied to a car. Fig. 2 is a central longitudinal view of the same. Fig. 3 is a transverse section showing in full lines the position of the parts when the coupling is made and in dotted lines the position of the parts when the link is released

30 leased. In the embodiment of my invention I employ a draw-head A, which may be made in one or two pieces, as desired, and it may also be made either integral with or separate from 35 the draw-bar A'. The draw-head is provided with a flaring mouth, the lower portion flaring more than the upper part, and at its center is curved slightly inward, as at a, and by the above-described construction the link is lifted 40 and guided into the longitudinal or central opening a'. The upper portion of the mouth is formed at its lower ends with the shoulders a<sup>2</sup>, whereby when two draw-heads contact the said shoulders will prevent one riding over 45 the other, as is now so common with couplers of this class. A vertical bore a is made through! both sections of the draw-head, said bore being adapted to receive the coupling-pin B. The forward side of the aperture in the up-

is beveled rearwardly near its lower end, as at b', and the rear side of the aperture in the lower section is also beveled rearwardly near its upper end, but in a diagonally-oppo- 55 site direction to the upper bore. Shoulders B' are formed upon the inner faces of the draw-head sections directly in front of the bore  $a^3$ , the pin bearing against the said shoulders when the coupling is made. The 60 pin is provided with a head or cap  $b^2$ , which prevents it descending too far. The lower end of the pin rests just within the lower bore and is capable of a backward movement, which permits the link to be inserted and slid 65 beneath the pin without elevating the same. The shoulders B' within the draw-head prevent the pin being bent or broken, and the shoulders a<sup>2</sup> prevent one draw-head riding upon the other, which tends to bend or break 70

the coupling-pin.

The coupler as thus far described is an automatic or self coupler, and to uncouple the same I employ a lever C, said lever resting on the top of the draw-head and having a cen- 75 tral aperture through which the coupling-pin passes before entering the bore  $a^3$ . The ends of the lever project to the side of the car within easy reach of the operator, and upon the upper face of the draw-head, on each side 80 of the vertical bore  $a^3$ , are arranged the shoulders D, which serve as fulcrums for the operating-lever C. To uncouple the coupling, one end of the lever is depressed, it turning on the adjacent shoulder D and lifts the pin 85 B clear of the link, which may be withdrawn. Arched guiding-brackets E are secured to the shoulders over the ends of the lever C, which prevents the said lever being displaced. Hooks F are pivoted to the sides of the draw- 90 head and adapted to be turned over the ends of the lever and lock the same in place. It will of course be understood that the bore  $a^3$ in the upper section is somewhat flaring near its upper end to permit the movement of the 95 pin within the same when operated by the lever, and it will also be observed that any kind of pin can be used, and that the coupler can be used with any style of link-couplers.

The forward side of the aperture in the upper draw-head section is beveled forwardly near its upper end, as at b, and the rear side of the aperture in the upin practice I prefer to construct the lever too per draw-head section is beveled forwardly tions being connected by means of the links c.

Having thus described my invention, what I claim is—

1. A car-coupler draw-head having a flaring mouth, the upper portion having forwardly-projecting shoulders at its lower ends, sub-

stantially as shown and described.

2. A car-coupler draw-head consisting of the upper and lower portions and having a vertical bore passing through said sections, 10 and the shoulders within the central opening in advance of said bore, the bore in the upper portion being beveled, substantially as described, whereby the pin may be pressed rearwardly and effect an automatic coupling, 15 as set forth.

3. In a car-coupler, the combination, with a draw-head, of a pin passing through the same and a lever arranged upon the top of the draw-head, the pin passing centrally through the lever, said lever being adapted to be rocked upon the draw-head and elevate the pin, substantially as shown and described.

4. In a car-coupler, the combination, with a draw-head, of the lever having a central aperture, the coupling-pin adapted to be passed through the lever and enter the draw-head, and the shoulders upon the sides of the draw-head upon which the lever is rocked, substantially as shown and described.

5. In a car-coupler, the combination, with a draw-head, of the lever having a central

aperture, the pin passing through the lever and entering the draw-head, the shoulders upon the sides of the draw-head upon which the lever is rocked, and the guiding-brackets 35 secured to the shoulders, substantially as shown and described.

6. In a car-coupler, the combination, with a draw-head, of a lever having a central aperture, a pin passing through the lever and entering the draw-head, the shoulders on the sides of the draw-head and the guiding-brackets secured to the shoulders and over the ends of the lever, and the hooks pivoted to each side of the draw-head and adapted to be 45 turned over the end of the lever to lock the same in place, substantially as shown and described.

7. In a car-coupler, the combination of the upper and lower portions, the upper portion 50 having the forwardly-projecting shoulders  $a^2$ , the aperture  $a^3$ , the forward side of which is beveled, as at b, and also the rear side, as at b', and the shoulders B', arranged upon the opposing faces of the upper and lower portions, substantially as and for the purpose described.

DAVID ALTMAN.

Witnesses:

CHAS. T. HOLMES, D. E. ADAMS.