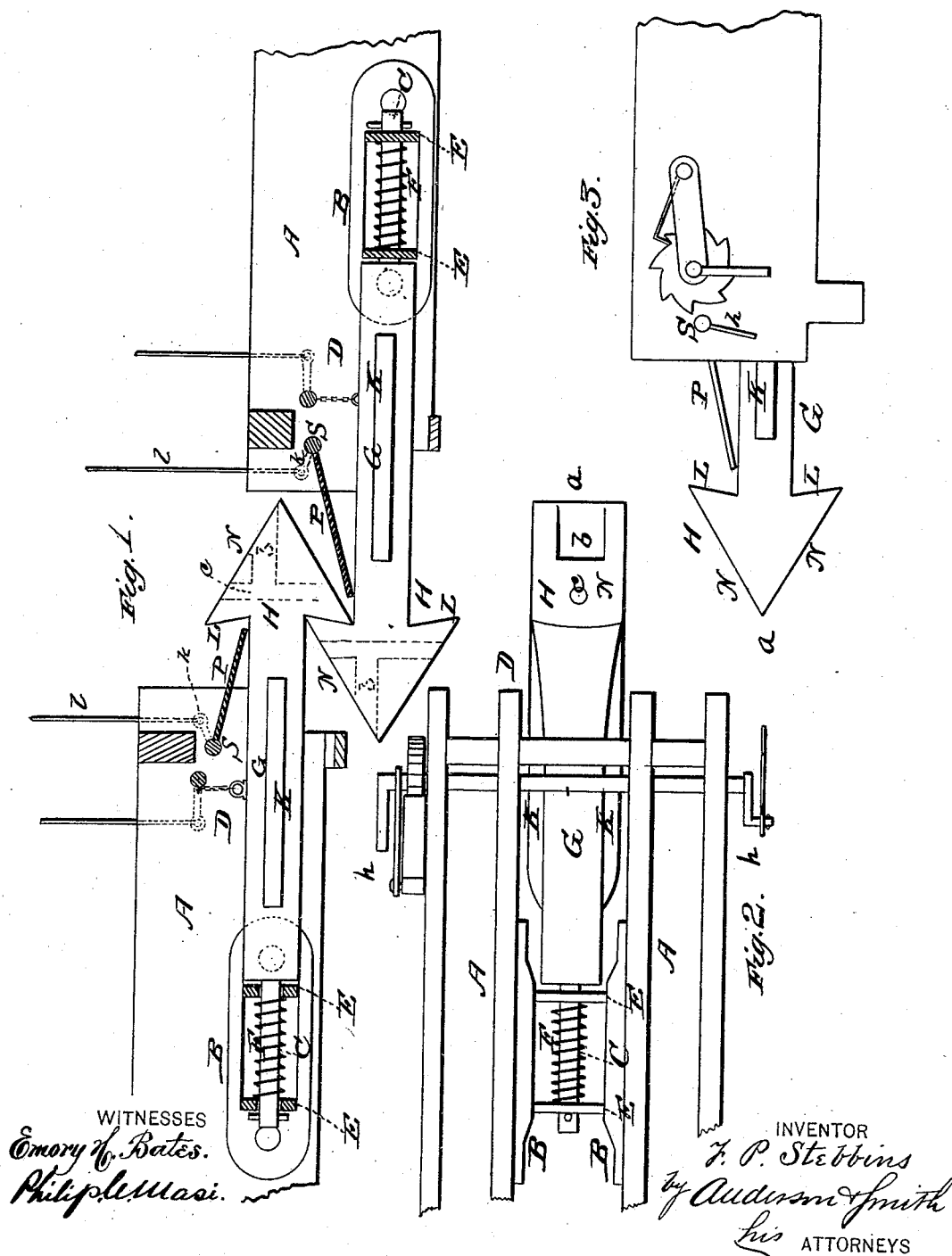


F. P. STEBBINS.

No. 264,784.

Patented Sept. 19, 1882.



# UNITED STATES PATENT OFFICE.

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## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 264,784, dated September 19, 1882.

Application filed May 13, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK P. STEBBINS, a citizen of the United States, and a resident of Collins, in the county of Ionia and State of Michigan, have invented a new and valuable Improvement in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation 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 representation of a vertical sectional view of my coupler. Fig. 2 is a top view, and Fig. 3 is a side view.

This invention has relation to car-couplings; and it consists in the novel construction and arrangement of the parts thereof, as will be hereinafter fully described, and particularly pointed out in the claim.

In the accompanying drawings, the letter A designates the parallel longitudinal timbers of the car-frame, to which the draw-bar is connected.

B B indicate guide-plates secured to the inside faces of said timbers opposite to each other, so that their guide recesses will face toward each other.

C represents the stem of the draw-bar D, which is provided with follower-plates E, which extend transversely and engage the guide-recesses of the plates B B. Between these followers on the stem C is the spring F.

G represents the shank and H the head of the draw-bar D. The shank is flattened above and below, and on each side of the shank is a longitudinal horizontal flange, K, of sufficient width to make the full breadth of the shank equal to that of the head. By means of these flanges it is designed to guide and hold the head of the draw-bar in proper position, so that it will not strike the bumpers of the car-frame in its movements without making the draw-bar of unnecessary weight. The head H of the draw-bar is made wider than the shank, and of the arrow-head form, having its catch-shoulders L above and below. These catch-

shoulders are slightly convex from side to side, being so formed in order to avoid a corner engagement and sidewise pull on bends or curves of the track. The front inclines or faces, N, of the head extend from a broad horizontal front edge, a, back to the catch-shoulders, and in the upper face or incline is made a link-cavity, b, and vertical holes c communicating therewith for the passage of a coupling-pin, which is used when it is desired to connect with the ordinary link-coupling. When not in use the pin should be removed from its bearings in the head.

A transverse shaft, S, is arranged horizontally in bearings on the car-frame and extends over the rear portion of the draw-bar. To this shaft is secured a broad plate-tongue, P, the front end of which rests on the top of the shank of the draw-bar, just in rear of the catch-shoulder. The transverse shaft is provided with handles h at its ends, and, when used in connection with freight-cars, with an arm, k, which is connected to an upright slide-rod, l, extending through bearings to the top of the car. For passenger-cars a similar slide-rod is designed to be employed, being, however, shorter and extending only to the top of the rail on the platform.

This car-coupling is designed to connect automatically as the cars come together. In uncoupling the transverse shaft is operated, elevating the lifting-tongue P of the under draw-bar, and thereby raising the upper draw-bar sufficiently high for disconnection.

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

In a car-coupling, the arrow-head draw-bar D, having the laterally-convex catch-shoulder L and the lateral horizontal guide-flanges K, substantially as specified.

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

FRANK PIERCE STEBBINS.

Witnesses:

A. B. MORSE,  
CHAS. L. WILSON.