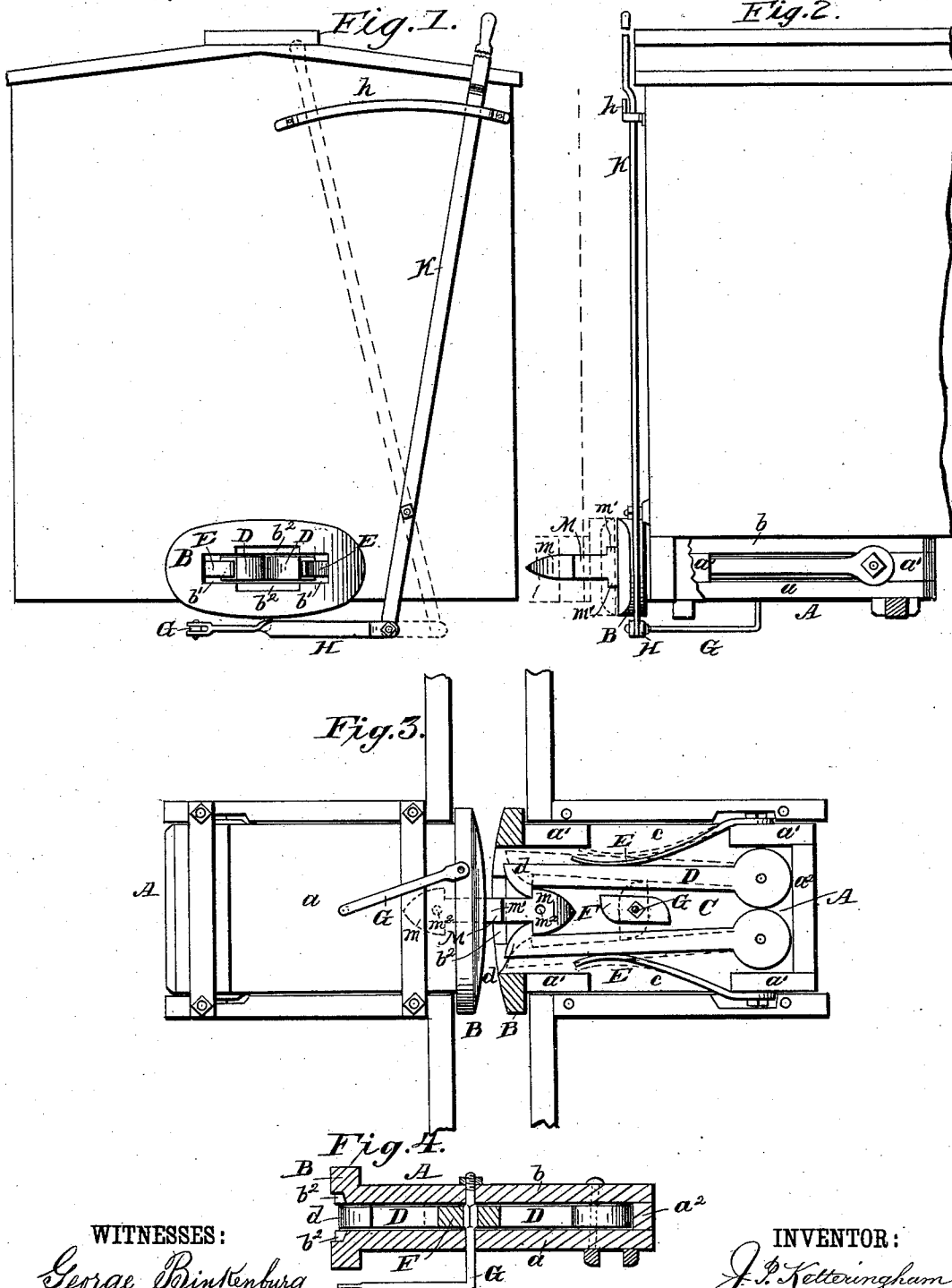


(No Model.)

J. P. KETTERINGHAM.  
CAR COUPLING.

No. 351,516.

Patented Oct. 26, 1886.



WITNESSES:  
*George Brintenburgh*  
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INVENTOR:  
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# UNITED STATES PATENT OFFICE.

JOHN P. KETTERINGHAM, OF NATCHEZ, MISSISSIPPI, ASSIGNOR TO HIMSELF  
AND LOUIS BOTTO, OF SAME PLACE.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 351,516, dated October 26, 1886.

Application filed September 2, 1886. Serial No. 212,541. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN P. KETTERINGHAM, of Natchez, in the county of Adams and State of Mississippi, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

My invention relates to car-couplers, and has for its object to produce a simple, durable, and effective coupler, to be operated from the top, end, or side of a car.

The invention consists in the construction and combination of the several parts, as will be hereinafter fully described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of my coupler applied to a car. Fig. 2 is a side view of the same, partly broken away, an opposing coupler being shown in dotted lines. Fig. 3 is a bottom view of my coupler, with the bottom plate removed, united with an opposing coupler of same pattern; and Fig. 4 is a central longitudinal section through the same.

The draw-head A, cast in one piece or constructed in two parts, the one piece consisting of the bottom *a*, sides *a'*, rear *a''*, and face B, and the other of the top plate, *b*, is attached to the under portion of a car in a suitable manner, the face of the draw-head projecting beyond the sill. The face B of the draw-head, preferably oval in form, is provided with the usual link-opening, *b'*, having upper and lower recesses *b''* cut at a central point therein, the interior of the draw-head between the four walls thereof constituting a chamber, C. Within the chamber C are pivoted parallel coupling-bars D, provided with enlarged circular rear or pivotal ends and inwardly-projecting outer hooked ends, *d*, the said hooked ends being adapted to rest immediately within the face B of the draw-head.

The sides of the draw-head are cut away centrally to form spaces *c*, through which spaces springs E are entered to bear against the outer sides of the coupling-bars D at one end, the other end of said springs being securely fast-

ened to the rear portion of the divided side walls, *a'*.

The spring-controlled coupling-bars D are operated by means of a cam, F, secured upon the vertical arm of a bent lever, G, which extends upward through the center of the draw-head A between the said coupling-bars D.

When the cam F is situated longitudinally of the draw-head, the springs E press the hooked ends of the coupling-bars D in contact, and the position of the horizontal arm of the lever G will be at an angle across the bottom of the draw-head in direction of the front. To the extended horizontal end of the said lever G a straight lever, K, is pivotally connected by means of a connecting-rod, H. The straight lever K is pivoted to the sill of the passenger-coach or open car, to extend upward a convenient distance from the brake wheel, so that the brakeman or other person standing at the brake may conveniently reach over and uncouple the cars. The lever K is made to extend to the top of box-cars to be operated therefrom, a suitable guard, *h*, being provided to limit the swing of said lever. The coupling may also be operated from the side of the car by means of additional levers connected to the straight lever K.

The form of link used with the coupler consists of a bar of any suitable width, provided with arrow-heads *m* and central upper and lower projections, *m'*, in the same plane and integral with said bar. The link is also provided with pin-holes *m''* in each arrow-head, to accommodate the coupler to an opposing pin-coupling.

When cars are to be coupled carrying my coupler, the arrow-headed pin, coming in contact with the outer inclined face of the coupling-bars, forces them apart, and, passing through the link-opening into the chamber C, is retained therein by the hooks *d* of said coupling-bars engaging the sides of the said arrow-head. The top and bottom projections *m'* enter the recesses *b' b''*, and prevent the pin from entering or being forced into either draw-head too great a distance, also preventing the face plates from coming in contact.

In uncoupling, as the lever G is drawn for-

ward, the cam F forces the coupling-bars apart, thereby releasing the link. Thus I produce a simple, strong, and effective coupler which can be operated conveniently without danger to  
5 the operator.

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

1. A draw-head constructed with a link-  
10 opening,  $b'$ , having upper and lower recesses  $b^2$ , and an interior chamber, C, having side recesses,  $c$ , and provided with pivoted coupling-bars D, having integral coupling-hooks  $d$ , the  
15 springs E, cam F, and an angular lever, G, adapted to operate said pivoted coupling-bars, substantially as shown and described, and for the purpose herein set forth.

2. The combination, with a draw head constructed with a link-opening,  $b'$ , having re-

cesses  $b^2$ , and interior chamber, C, provided 20 with side recesses,  $c$ , and coupling-bars D, pivoted in said chamber, the springs E, cam F, and angular lever G, together with means for operating said coupling-bars, of the link M, provided with arrow-heads  $m$ , having pin-holes 25  $m^2$  therein, and central projections,  $m'$ , substantially as shown and described, and for the purposes herein set forth.

3. The link M, constructed with a square body having central projections,  $m'$ , upon two 30 sides thereof in the same plane, together with arrow-headed ends  $m$ , having pin-holes  $m^2$  therein, substantially as shown and described, and for the purposes herein set forth.

JOHN P. KETTERINGHAM.

Witnesses:

ALLISON H. FOSTER,  
WALTER MCCREA.