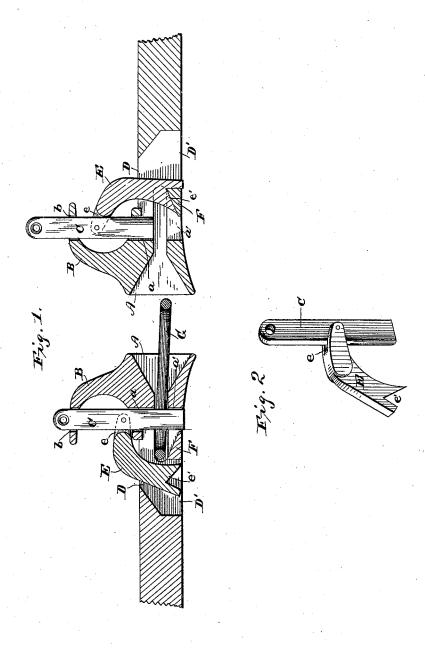
## O. C. HARRIS.

CAR COUPLING.

No. 345,504.

Patented July 13, 1886.



Witnesses Chas R. Buss. James M. Zmant. Inventor.
Orin C. Harris
by Franck D. Johns
his Attorney.

# United States Patent Office.

## ORRIN C. HARRIS, OF NEWPORT, NEW YORK.

### CAR-COUPLING.

### SPECIFICATION forming part of Letters Patent No. 345,504, dated July 13, 1886.

Application filed May 5, 1886. Serial No. 201,195. (No model.)

To all whom it may concern:

Be it known that I, ORRIN C. HARRIS, a citizen of the United States, residing at Newport, in the county of Herkimer and State of New York, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to to which it appertains to make and use the same.

My invention relates to improvements in automatic car-couplings; and it consists in certain novelty of construction and arrangement of the various parts, all of which I will now proceed to point out and describe, reference being had to the accompanying drawings, in which—

Figure 1 is a longitudinal section of a carcoupling embodying my invention, one of
the draw-heads being shown with the coupling pin down and holding the link in place,
the other draw-head being shown with the
pin raised in position to couple. Fig. 2 is a
test detail showing the coupling pin and its supporting-latch.

Referring to said drawings, A represents a draw-head having the usual flaring mouth. a a' are pin-holes in the top and bottom of

30 the draw-head.

B is an upwardly and rearwardly projecting arm on top of the draw-head and extend-

ing back over the pin-holes a a.

b is a bearing in the upper end of the arm 35 B, and directly over and in a vertical line with the pin-holes a a'.

C is a coupling-pin mounted in the bear-

ing b.

D D' are slots or openings in the top and 40 bottom of the draw-head just back of the pinholes a a'.

E is a weighted gravitating pin-supporting latch, having its upper portion extending toward the mouth of the draw-head, and provided with a bifurcated end, e, which is pivoted to the coupling-pin, the lower portion of said latch extending through the slot D, and having the notched end e', which engages with a shoulder, F, just back of the pin-50 hole a', and holds the pin C up and in posi-

G is the coupling-link of the ordinary con-

When the link enters the draw-head, it

strikes the latch E and forces it off the shoul- 55 der F. The lower portion of the latch then falls in the slot D', and the coupling-pin drops and engages with the link, thus effecting the coupling.

The pin C may be connected by a chain, 60 rod, or other suitable means, with the platform, top, or sides of the car, by means of which chain or rod it can be raised to uncouple without going between the cars. When the pin C is raised, the weight of the latch 65 E causes its lower end to move toward the mouth of the draw-head until the notch E' engages with the shoulder F, and the pin is then held up by said latch in position to couple.

My invention combines the advantages of strength and simplicity possessed by the old form of link-and-pin couplings, with the desirable features of an absolutely certain automatic coupling.

A further and great advantage of my coupling is that it can be used in connection with cars which are provided with the ordinary link and pin coupling.

Having thus fully described my invention, 80 what I claim as new, and desire to secure by Letters Patent, is—

1. In a car-coupling, a draw-head, A, provided with the pin-holes a a', the slot D, and upwardly and rearwardly projecting arm B, 85 having the bearing b, in combination with the coupling-pin C, mounted in the bearing b, and the pin-supporting latch E, pivoted to the pin C and passing through the slot D, all arranged and operating substantially as 90

shown and described.

2. In a car-coupling the

2. In a car-coupling, the draw-head A, provided with the pin-holes a a', the slots D D', shoulder F, and upwardly and rearwardly projecting arm B, having the bearing b, in 95 combination with the coupling-pin C, mounted in the bearing b, and the pin-supporting latch E, pivoted to the pin C, passing through the slot D, and provided with the notched end e', adapted to engage with the shoulder for F, all arranged and operating substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

ORRIN C. HARRIS.

Witnesses:

J. T. WOOSTER, DANIEL P. WOOSTER.