

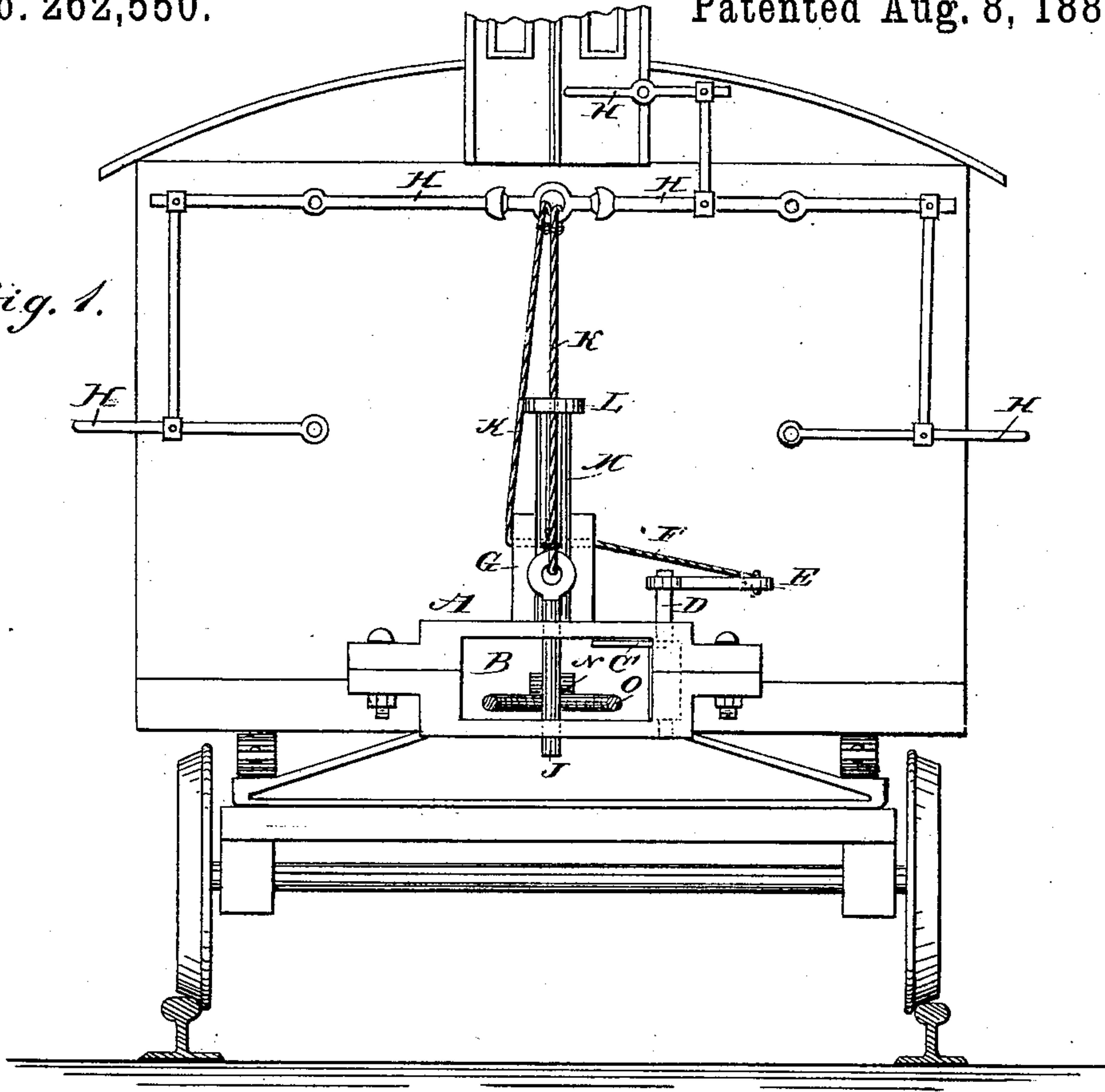
(No Model.)

P. ZEHNER.  
CAR COUPLING.

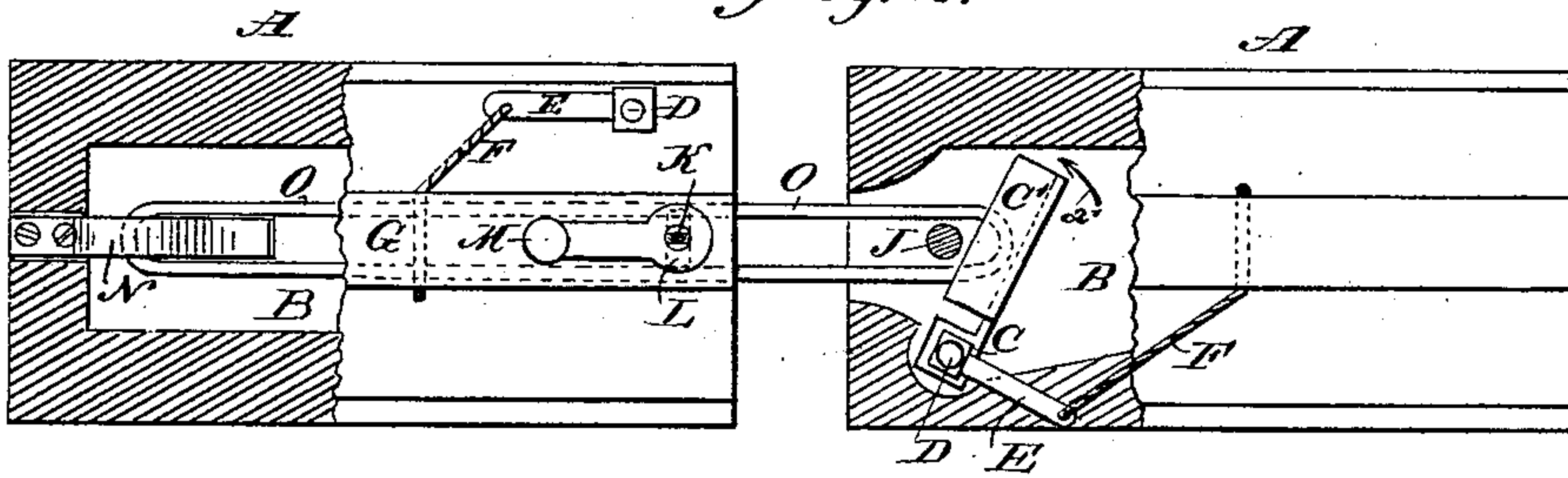
No. 262,550.

Patented Aug. 8, 1882.

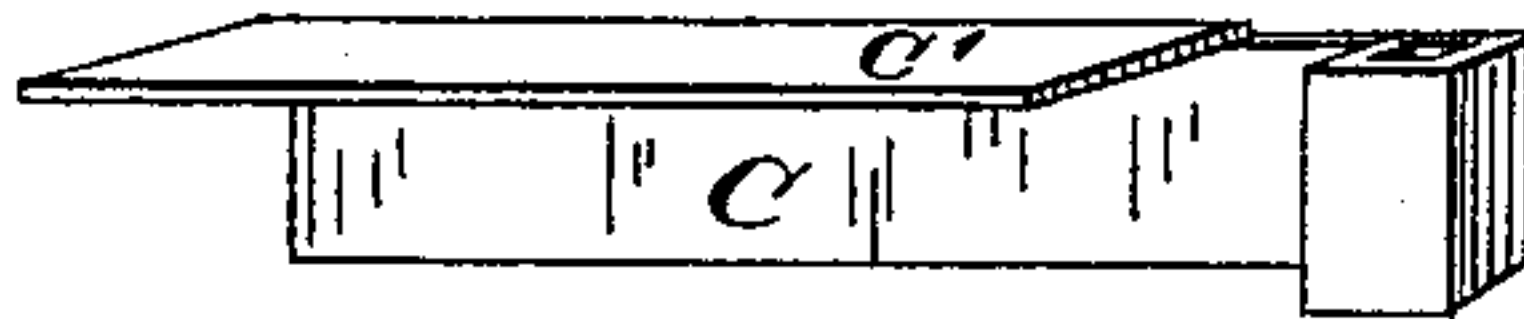
*fig. 1.*



*fig. 2.*



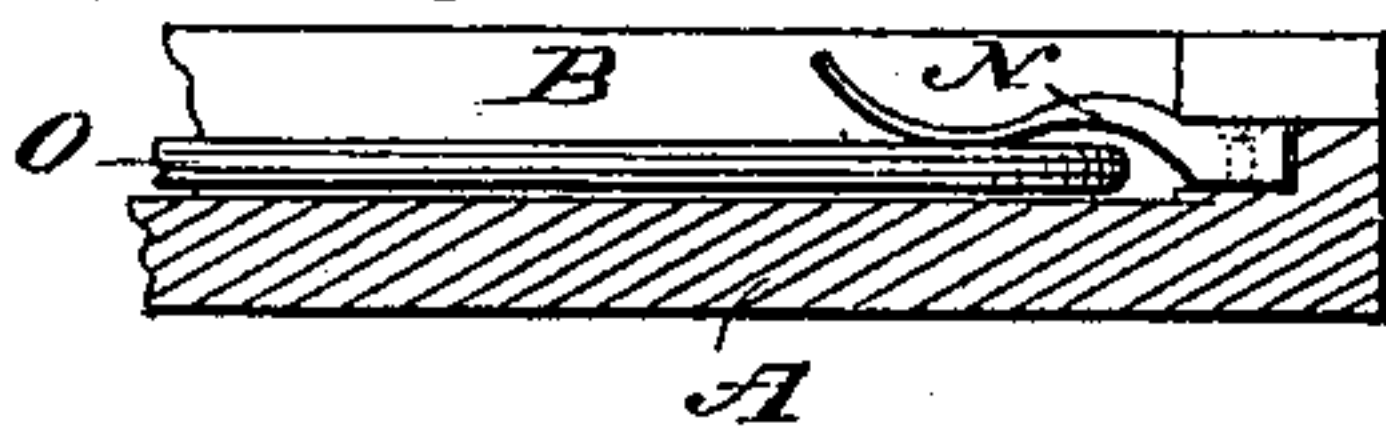
*fig. 3.*



WITNESSES:

*Chas. Beyer*  
*C. Sedgwick*

*fig. 4.*



INVENTOR:

*P. Zehner*  
BY *Munn & Co.*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

PETER ZEHNER, OF MIFFLIN, OHIO.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 262,550, dated August 8, 1882.

Application filed June 2, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, PETER ZEHNER, of Mifflin, in the county of Ashland and State of Ohio, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

The invention consists in a draw-head containing a swinging flanged plate attached to a vertical shaft journaled in the draw-head, and provided with an arm to which a rope or chain is attached, which passes through an aperture in a block on the draw-head, and is secured to a lever on the end of the car, to which lever another rope or chain is secured, which passes through an aperture in an arm of a standard on the draw-head, to the lower end of which chain or rope the coupling-pin is attached, whereby when the lever is operated the pin will be withdrawn and the flanged plate will be swung under the pin-aperture in the top of the draw-head, and will hold the pin in place for automatically coupling, all as will be fully described hereinafter.

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

Figure 1 is an end elevation of a car provided with my improved car-coupling. Fig. 2 is a plan view of two of the draw-heads, parts being broken out and in section. Fig. 3 is a perspective view of the swinging pin-holding plate in the draw-head. Fig. 4 is a longitudinal sectional elevation of the rear part of the draw-head.

The draw-head A is provided with a recess, B, containing a plate, C, placed edgewise, and provided at its upper longitudinal edge with a flange, C', which projects toward the outer end of the draw-head when this plate is transversely in the draw-head. One end of this plate is secured to a vertical rod or shaft, D, on one side of the recess B, which shaft is provided at its upper end with an arm, E, at right angles to the plate C and projecting in the inverse direction of the flange C'.

A rope or chain, F, is attached to the free end of the arm E, and passes through a hori-

zontal transverse opening in a block, G, on the draw-head, and is attached to a lever, H, or series of levers which can be operated from the top or either side of the car. The construction and arrangement of these levers may be modified and varied as circumstances may require.

The coupling-pin J is attached to the lower end of a rope or chain, K, passing through an opening in arm L of a standard, M, on the draw-head, and the upper end of this rope or chain K is united with the upper end of the rope or chain F or the lever.

A curved flat spring, N, is secured in the rear end of the draw-head, near the bottom, and serves to hold the coupling-link O in place in the draw-head, as shown in Figs. 1, 2, and 4.

The operation is as follows: If the cars are coupled and are to be uncoupled, the ropes or chains F and K are pulled upward by means of the levers H or other devices, whereby the pin J will be raised so that the link O can be withdrawn, and at the same time the plate C swings in the direction of the arrow  $a'$ , under the pin-opening in the top of the draw-head, so that when the ropes or chains F K are released the lower end of the pin J will rest on the flange C' and cannot pass through the draw-head. If the cars are to be coupled and come together, the end of the link O strikes against the plate C and pushes the same in the inverse direction of the arrow  $a'$ , thus permitting the pin J to drop, and as the end of the link is below the lower end of the pin J the pin drops through the link and the cars will be coupled. The spring N holds the link in place in the draw-head, so that the link can pass directly into the opposite draw-head.

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

1. In a car-coupling, the combination, with the draw-head A, of the swinging flanged plate C, attached to a vertical shaft, D, provided with an arm, E, the rope or chain F, attached to this arm, the coupling-pin J, the rope or chain K, the apertured block G, and the standard M, provided with an apertured



arm, L, substantially as herein shown and described, and for the purpose set forth.

2. In a car-coupling, the combination, with the draw-head A, of the swinging flanged plate C, the shaft D, provided with an arm, E, the coupling-pin J, the apertured block G, the standard M, provided with an apertured arm, L, the ropes or chains F K, and levers for op-

erating the above devices, to which levers both ropes or chains F K are attached, substantially as herein shown and described, and for the purpose set forth. 10

PETER ZEHNER.

Witnesses:

C. F. ENGLE,  
J. W. LEMON.