B. S. KEARNEY.

Car-Coupling.

No. 163,931. Patented June 1, 1875.

Fig: 1.

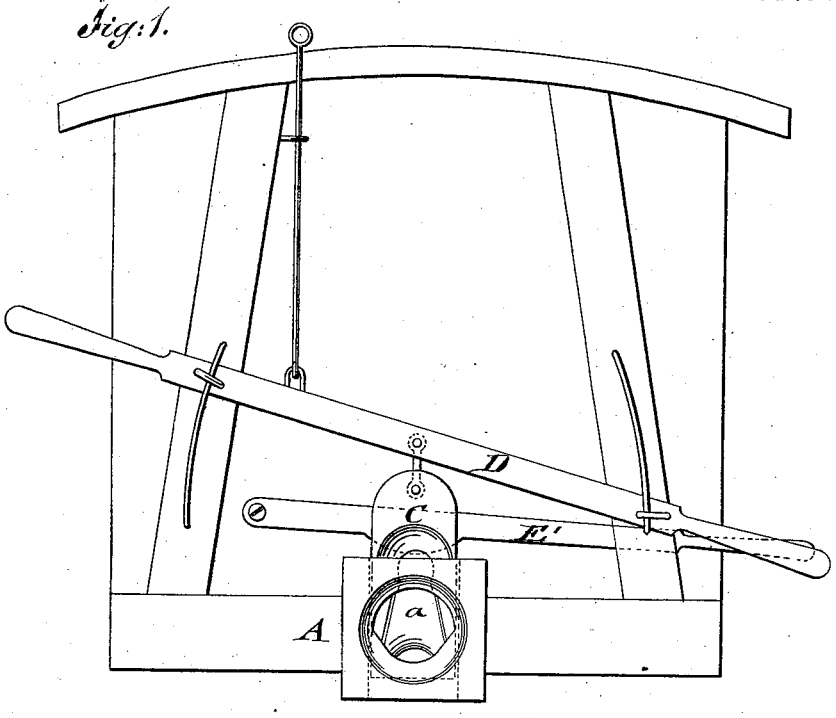


Fig: 2.

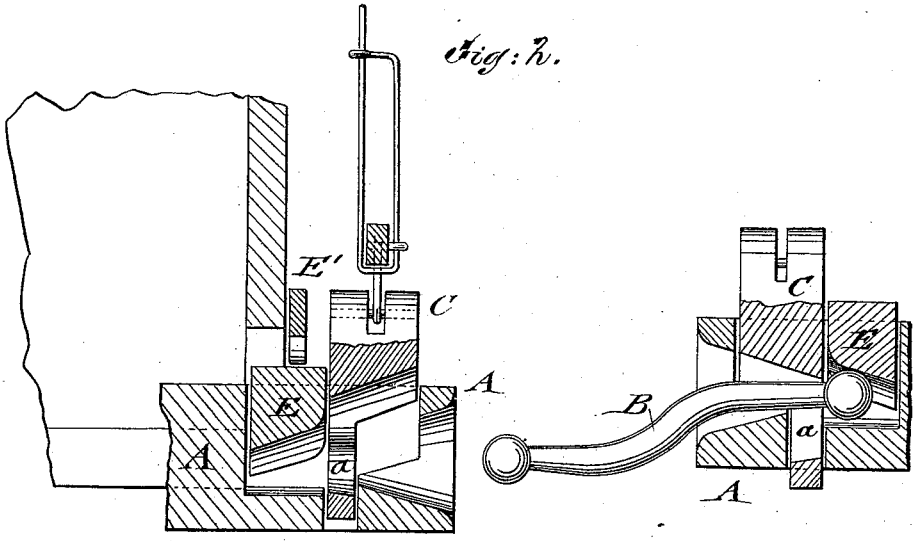


Fig: 3.

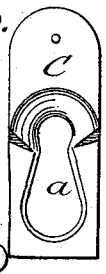
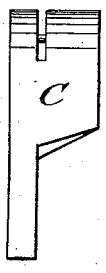


Fig: 4.



WITNESSES:

Chas. Nigh.

A. F. Perry

INVENTOR:

B. S. Kearney

BY Munn & Co

ATTORNEYS.

THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

UNITED STATES PATENT OFFICE.

BENJAMIN S. KEARNEY, OF FRANKLINTON, NORTH CAROLINA.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **163,931**, dated June 1, 1875; application filed April 3, 1875.

To all whom it may concern:

Be it known that I, BENJAMIN S. KEARNEY, of Franklinton, in the county of Franklin and State of North Carolina, have invented a new and Improved Car-Coupling, of which the following is a specification:

In the accompanying drawing, Figure 1 represents an end view of my improved automatic car-coupling; Fig. 2, a vertical longitudinal section of the same, one draw-head being shown in uncoupled, the other in coupled, position; and Figs. 3 and 4 represent, respectively, front and side views of the sliding socket-gate.

Similar letters of reference indicate corresponding parts.

My invention relates to an improved automatic car-coupling, that may be readily used for cars of different heights; and it consists of a draw-head with tapering mouth, vertically-sliding front socket or gate, and governing rear piece, that couple and control, by suitable levers, the link with ball-shaped heads.

In the drawing, A represents a draw-head with curved and tapering mouth, for the ready entering of the approaching coupling-link B, that is made straight, or of curved flat shape, and provided with ball-shaped heads. A socket-gate, C, slides vertically in a corresponding lateral guide-recess of the draw-head, the upper forward-extending part of the socket-gate C being curved and tapered in such a manner that it forms a section or part of the mouth of the draw-head.

The head of the coupling-link strikes, by the entering into the draw-head, against the sliding socket-gate, and raises the same, so that the lower and wider part of its central slot or aperture *a* is carried upward far enough to admit the link-head. The dropping of the weighted gate on the link in front of the head locks the same firmly to the draw-head.

A lever, D, is pivoted to the top of the sliding gate C, and operated for uncoupling the link, either from the side or top of the car. A governing piece or block, E, slides in a recess of the draw-head back of the gate C, and is also slightly raised by the head of the entering-link, so as to bear, by its curved and tapering lower part, that forms an extension of the curved and tapered part of the gate, on the link when coupled, bearing on the link and preventing its accidental escape from the socket-gate by the vibration of the cars.

The main object of the governing-block E, however, is to set and retain the link in any suitable inclined position, by pressing a lever, E′, pivoted to the car-frame on the top of the block, so that it may couple with cars having platforms of different heights.

The sliding gate and block are, in this manner, fully controlled for coupling and uncoupling from the side or top of the car, and avoid, thereby, the danger and accidents of the common pin-and-link coupling.

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

1. In an automatic car-coupling, the combination of a top-recessed draw-head, A, sliding socket gate, C, governing rear block E, and straight or curved coupling-link having ball-shaped head, all substantially as and for the purpose set forth.

2. The combination of the coupling-link having ball-shaped head, with a curved and tapering governing-block, and top lever bearing thereon, for retaining the link at any required inclination for coupling, substantially as set forth.

BENJAMIN S. KEARNEY.

Witnesses:
J. D. H. YOUNG,
HENRY L. HARRIS.