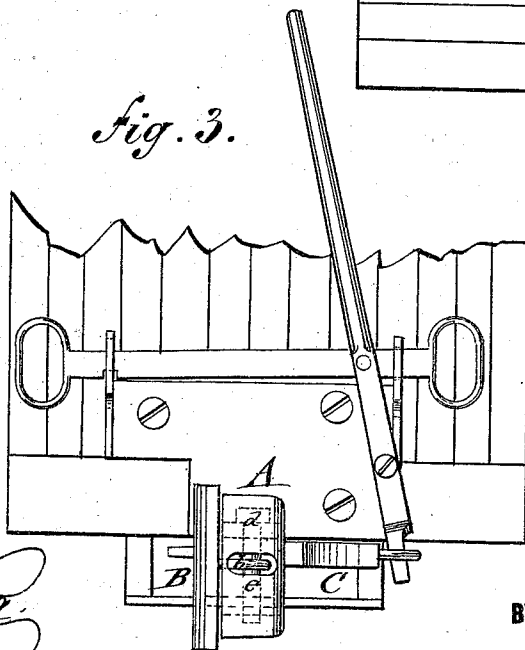
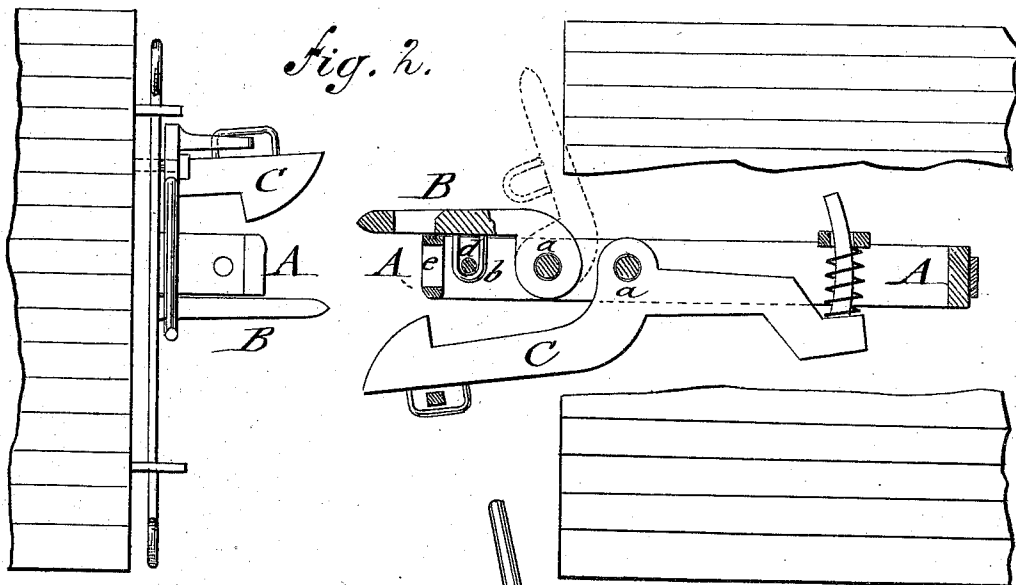
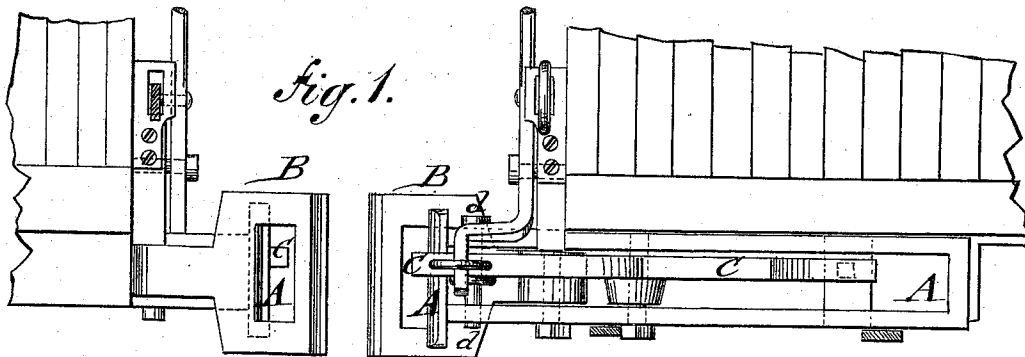


W. H. HOPPER.
Car-Couplings.

No. 150,759.

Patented May 12, 1874.



WITNESSES.

Chas. N. K. A.
Chas. N. K. A.

INVENTOR.

W. H. Hopper
BY *Wm. H. Hopper*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM H. HOPPER, OF SAGINAW CITY, MICHIGAN.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **150,759**, dated May 12, 1874; application filed April 15, 1874.

To all whom it may concern:

Be it known that I, WILLIAM H. HOPPER, of Saginaw City, in the county of Saginaw and State of Michigan, have invented a new and Improved Car-Coupling, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation of my improved self-acting car-coupling; Fig. 2, a sectional top view of the same, with car-frame cut off to show parts below; and Fig. 3, an end view of the coupling.

Similar letters of reference indicate corresponding parts.

The object of my invention is to produce a strong double or single automatic car-coupling which couples with cars of different heights, and also with cars having the common pin-and-link coupling. It dispenses entirely with the use of links when not coupling with the ordinary draw-heads, and is very durable and effective in use. My invention consists of a bumper-head, to which is pivoted at one side a strong spring-dog; at the other side a vertical loop or clevis, with wedge-shaped or pointed front edge, which enters between the rounded-off side of the bumper-head and the spring-dog of the adjoining car, so as to be firmly locked between them. For the purpose of coupling with the common draw-head and link, the bumper-head is provided with a horizontal slot for admitting the link, while the pivoted clevis is detached and thrown back in sideward position, and its pin fastening made available for coupling the entering link.

In the drawing, A represents the bumper-head of my improved car-coupling, which is applied to the under side of the car frame and platform in the most approved manner. The bumper-head A is recessed horizontally, for pivoting between the top and bottom parts the vertical clevis B and the spring hook or dog C. Both are constructed of suitable strength, and act on the side of the bumper-head A, being either pivoted to separate bolts *a*, as indicated in the drawing, or preferably both to one bolt, *a*, for reducing the cost of the coupling. The upright clevis B is firmly fastened to the bumper-head by means of a horizontal central staple, *b*, of the body of the clevis and a pin, *d*, passing vertically through perforations of

the top and bottom parts of the bumper-head. Clevis B projects beyond the front of the bumper-head A, and has a pointed or wedge-shaped edge, by which it enters more easily between the corresponding rounded-off part of the bumper-head and dog of the adjoining car. A horizontal slot, *e*, of the face part of the bumper-head admits the entering of the common coupling-link when the bumper-head has to couple with cars of the ordinary draw-head in use. The pivoted clevis or loop B is in that case detached and thrown sidewise out of the way by withdrawing the pin *d*, and using it for coupling the link in the usual manner. The dog C is provided at its rear end with a strong spiral or other spring, so that its hook-shaped front end is firmly forced toward the draw-head, forming a strong and reliable connection with the clevis of the interlocking coupling. The spring-dog C is carried sidewise for uncoupling by suitable hand-lever or other mechanism applied to the platform, top, or side of the car.

The coupling may be made of cast or wrought iron, or other suitable material, and be used as single or double coupling. In the former the bumper-head at one end of the car is only provided with the clevis, and at the other end with a spring-hook, while the double coupling, with clevis and dog at both ends, forms a very intimate, strong, and substantial interlocking of the parts.

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

1. The self-closing car-coupling composed of recessed bumper-head A, with pivoted clevis B and spring-dog C applied to its sides, for coupling with corresponding parts of the adjoining car end, all combined to operate as and for the purpose set forth.

2. The bumper-head A, having face-slot *e*, in combination with fastening-pin *d* and staple *b* of the clevis B, for attaching and detaching the same, so as to be used as automatic coupling, or with the common coupling-link, substantially as described.

WILLIAM H. HOPPER.

Witnesses:

GEO. A. BAKER,

WILLIAM DONOVAN.