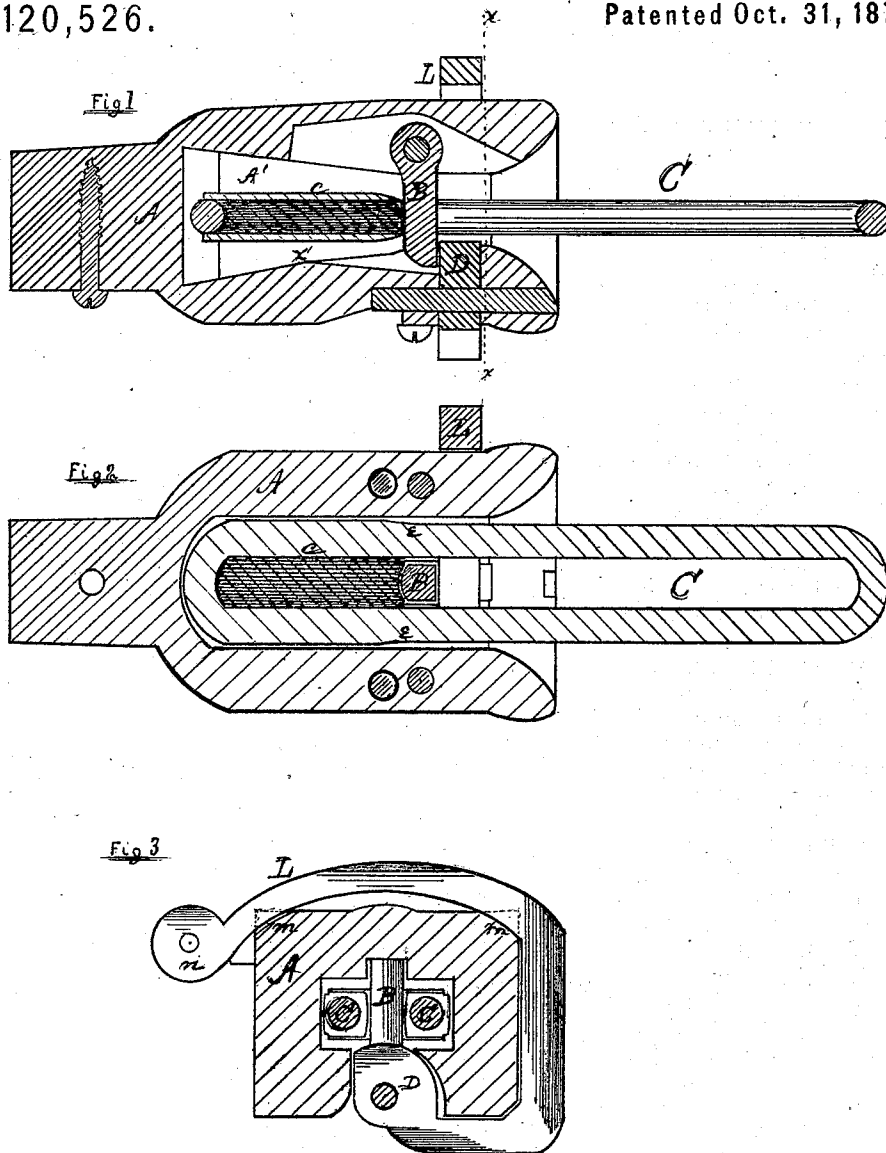


Geo. W. McEuen and C. Eves.

Car Coupling

No. 120,526.

Patented Oct. 31, 1871.



Witnesses

A. C. Rawlings
Deathan K. Smith

Inventor

Geo. W. McEuen
C. Eves
By Hill & Ellsworth
attys

UNITED STATES PATENT OFFICE.

GEORGE W. McEUEEN AND CHANDLER EVES, OF MILLVILLE, PENN.

IMPROVEMENT IN RAILWAY-CAR COUPLINGS.

Specification forming part of Letters Patent No. 120,526, dated October 31, 1871.

To all whom it may concern:

Be it known that we, GEORGE W. McEUEEN and CHANDLER EVES, both of Millville, county of Columbia and State of Pennsylvania, have invented an Improved Car-Coupling; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a longitudinal vertical section. Fig. 2. is a horizontal section. Fig. 3 is a cross-section in line *x x* of Fig. 1.

Similar letters of reference in the accompanying drawing indicate corresponding parts.

The object of this invention is to provide for public use an improved car-coupling; and to this end the invention consists: First, in a novel construction of the link and draw-head for the purpose of keeping the link horizontal, so that it will readily enter the opposite draw-head; and, secondly, in an improved construction of coupling-pin, eccentric stop, and lever for operating the stop for the purpose of more conveniently and securely fastening and releasing the link.

In the drawing, A represents the draw-head, of the usual form, except that the floor of the interior chamber A' declines from the points *x* to the rear end, or is made lower between said points than in the vicinity of the coupling-pin, said chamber being open only at its front end, and terminating at its rear end in a wall composed of the solid metal of the draw-head, as shown. B is the coupling-pin, articulated to the upper part of the draw-head, and capable of swinging forward or backward to admit or release the link. C is the link, of the usual form, but provided with a counter-balance attachment, *c*, the link being wrought-iron, and the solid part *c* cast with a groove, into which fits the link, so that when the latter is compressed a little at the sides, as shown at *e e*, the casting cannot work loose or become detached; and D is the eccentric stop, arranged in a groove transverse to the draw-head, so that, when the handle of the lever L is in the position shown in Fig. 3, the stop will project up across the path of the suspended pin and prevent it from swinging

forward, while if the handle L is thrown back the stop will no longer project up in the way of the pin; but the latter will be perfectly free to swing back and forth. The lower end of the pin, it will be observed, projects down into a longitudinal groove in the floor of the chamber A, whereby it is held steadily, and its pivot protected from lateral strain. The eccentric disk D is also firmly supported, so that all strain is taken off of its pivot by being made to fit closely in the transverse groove in the draw-head. The lever L is bent around under the draw-head, up one side and over across to the opposite corner, and its extremity is weighted, as shown at *n*, so as to retain its proper position by its gravity alone, whether locking or unlocking the coupling. The corners of the draw-head at *m m m* are notched or grooved transversely to receive the lever, when in the position shown in Fig. 3, and hold it steadily, preventing all strain upon its pivot. Lugs may be used for the purpose instead of the notches, if preferred.

The operation of this improved draw-head is briefly as follows: The counterbalanced link is always presented horizontally to the approaching draw-head, and is sure to enter properly, a result due to the weight *c* and the recess at the rear of chamber A, which allows the end of the link to drop to the proper position. The lever L is so shaped that, by throwing the weighted end *n* back and forth transversely to the draw-head, it unlocks or locks the coupling. The cars in coupling are designed to present the light end of the link C, the weighted end being held in the draw-head. In uncoupling, the light end of the link should be liberated, the weighted end remaining, to a certain extent, permanently attached to its draw-head. In introducing and fastening the weighted end of the link it will be necessary to first draw forward the pin B, so that the weight *c* can pass in under it. When the weight has passed the pin is dropped and the stop adjusted to hold it in place.

The link does not couple to the draw-head automatically if presented weighted end first; but when the light end is presented it is self-coupling.

Having thus described our invention, what we claim as new therein, and desire to secure by Letters Patent, is—

The pendent pin B, supported from the roof of the chamber, and the lever L, constructed so as to extend across under the draw-head to the side, thence up to the top through the notches or grooves *m m* and over beyond the opposite

edge, where it is weighted, as shown at *w*, for the purpose herein specified.

GEORGE W. McEUEEN.
CHANDLER EVES.

Witnesses:

ELIJAH M. RISNER,
JOSEPH E. EVES.

(122)