

G. D. CROSTHWAIT.
Car-Couplings.

No. 136,039.

Patented Feb. 18, 1873.

Fig. 1.

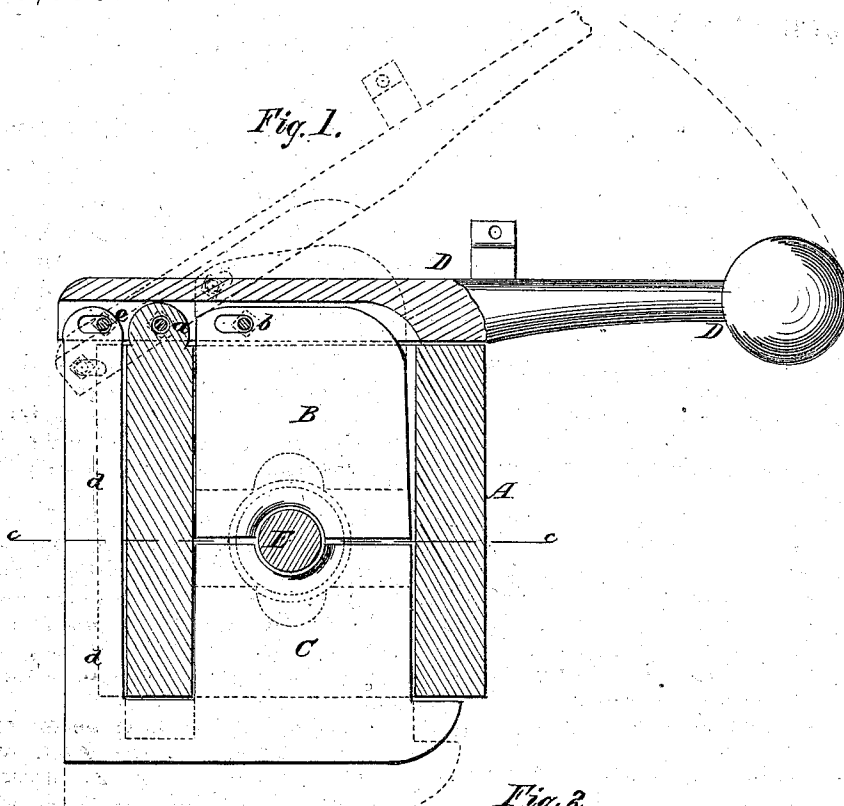
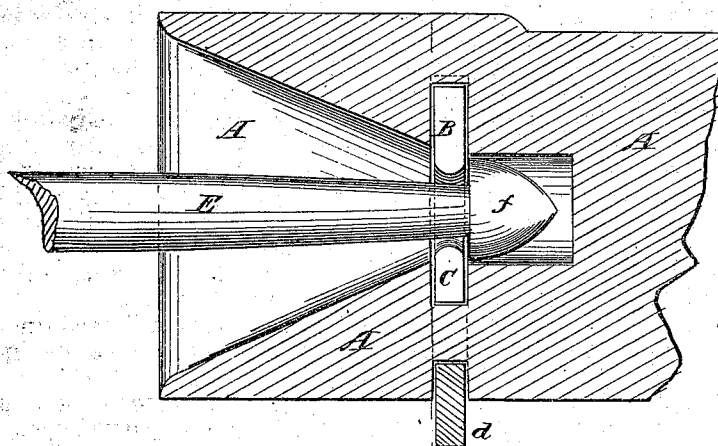


Fig. 2.



Witnesses:

P. C. Dietrich
C. H. Quirk

Inventor:

G. D. Crosthwait

PER

Munn & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

GEORGE D. CROSTHWAIT, OF MURFREESBOROUGH, TENNESSEE.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **136,039**, dated February 18, 1873.

To all whom it may concern:

Be it known that I, GEORGE D. CROSTHWAIT, of Murfreesborough, in the county of Rutherford and State of Tennessee, have invented a new and Improved Car-Coupling, of which the following is a specification:

Figure 1 is a vertical transverse section of my improved car-coupling. Fig. 2 is a horizontal longitudinal section thereof on the line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to a new car-coupling, which is provided with two self-acting jaws for locking the coupling-pin. The invention consists, principally, in combining these two jaws, which work from opposite sides of the draw-head, with a weighted lever, which serves to hold them automatically closed, and insures their simultaneous motion apart or toward each other for uncoupling and coupling.

A in the drawing represents the draw-head and buffer of a railroad car. The same is applied in suitable manner, and can be made of any desired size to be of proper strength. This buffer is slotted transversely for the reception of two jaws or plates, B and C, which enter such slots from opposite sides, as is clearly shown in Fig. 1. D is a lever pivoted at *a* to the top of the buffer. By a pin, *b*, this lever is directly connected with the upper jaw B. The lower jaw C has an arm or shank, *d*, which extends up, and is, by a pin, *e*, pivoted to the lever D, all as clearly shown in Fig. 1. From the same figure it will appear that the pivot *a* of the lever is about equidistant from and between the jaw-pivots *b* and *e*, so that when the lever is swung up both jaws will be simultaneously drawn apart. When, however, the lever, by its own weight, rests upon the buffer, it holds the two jaws together closed over the head *f* of the coupling-pin E. The head of the pin E is conical, so that it will, when forced against the closed jaws, wedge between and open the same, they being recessed to admit the head of the pin, and thus automatically couple the car, the jaws closing in front of the head *f* as quick as the same has passed them.

The mouth of the buffer is made flaring outwardly, so that when two cars of different heights should meet they will be properly coupled as long as the coupling-pin of one comes in line with any part of the buffer of the other car.

The lever D is or may be connected with suitable handles or devices for moving it to uncouple the car, and may, instead of resting horizontally on top of the buffer, be suspended vertically with substantially the same effect.

On freight-cars the lever D is to be connected to a rod, which is to be attached at the point indicated by the little rudiment in the drawing. This rod runs to the top of the car, and after the cars are coupled the rod is to be securely fastened, the fastening to be under the eye of the brakeman or other proper person.

In the complete machine no extra weight will be necessary on the lever, and from the point at which the rod is connected, the remainder of the lever is dispensed with, the rod furnishing all the weight necessary.

Upon a passenger-car it will be necessary to extend the lever so as to reach to the pillar of the railing of the platform, and there attach the perpendicular rod.

This rod is as much a part of the machine as any other, as it not only locks the coupling, but is the only means of uncoupling.

In case it should be desired to have the lever work perpendicularly, it will be necessary to have a spring to keep it in working order when not in actual use, but the fastening of the rod and not the spring will be the reliance to secure the coupling.

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

The lever D pivoted at *a*, provided with slotted jaw B and slotted lever *d*, having jaw C, in combination with buffer A, when all are constructed, arranged, and operated as shown and described.

GEO. D. CROSTHWAIT.

Witnesses:

E. D. HANCOCK,
B. F. ALEXANDER.