2 Sheets--Sheet 1.

# J. F. MULLOWNY, J. COPE & S. R. BROOKS.

## Car-Couplings.

No. 145,228. Patented Dec. 2, 1873.

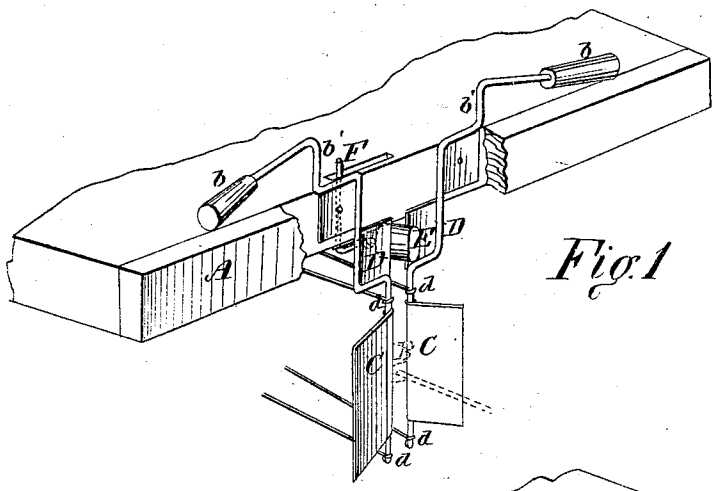


Fig. 1

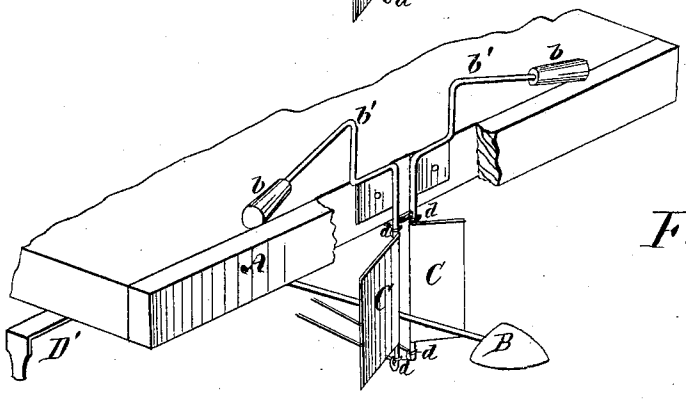


Fig. 2

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2 Sheets--Sheet 2.

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## Car-Couplings.

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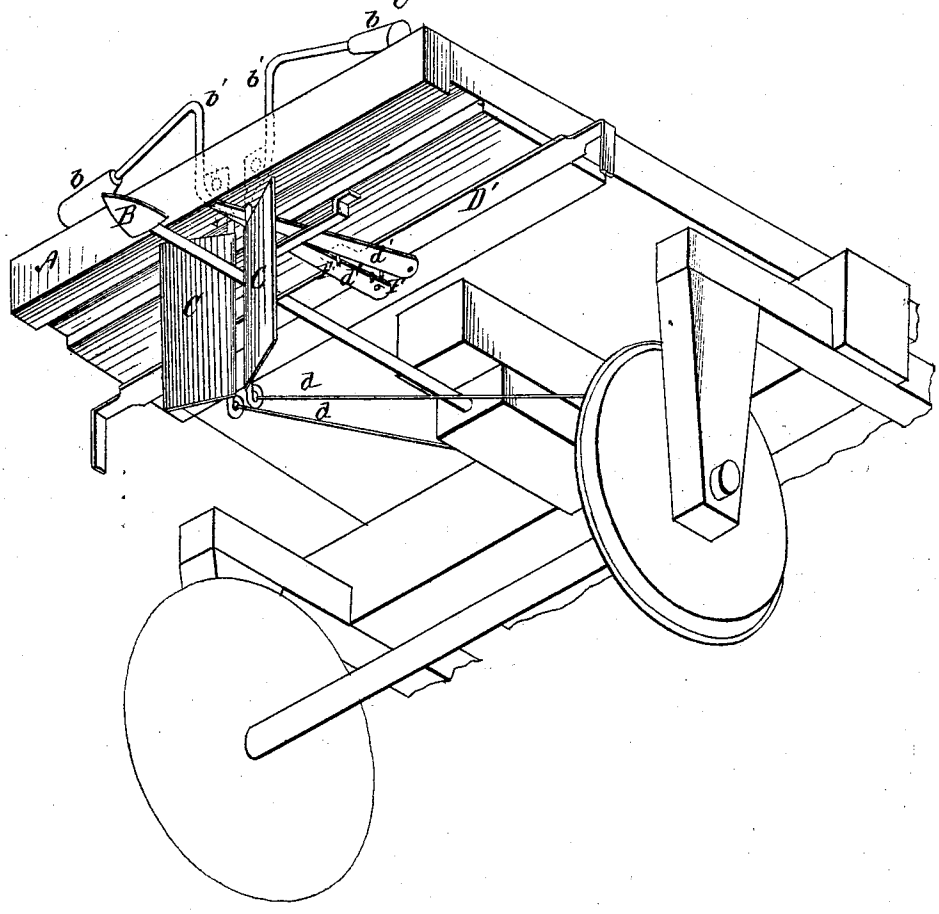
Fig. 3

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# UNITED STATES PATENT OFFICE.

JOHN F. MULLOWNY AND SIDNEY R. BROOKS, OF PITTSBURG, AND JAMES COPE, OF CONNELLSVILLE, PENNSYLVANIA.

## IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **145,228**, dated December 2, 1873; application filed May 13, 1873.

*To all whom it may concern:*

Be it known that we, JOHN F. MULLOWNY, of Pittsburg, in the county of Allegheny and State of Pennsylvania, JAMES COPE, of Connellsville, in the county of Fayette and State of Pennsylvania, and SIDNEY R. BROOKS, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplers; and we do hereby declare that the following is a full, clear, and exact description thereof, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

In the drawings, Figure 1 is a perspective view of our improvement as applied to passenger-cars. Fig. 2 is a perspective view of our improvement as applied to freight-cars. Fig. 3 is a perspective view, showing the bottom of a car with our freight-car coupling attached.

This invention has relation to automatic car-couplings; and consists in the construction and novel arrangement of devices for receiving and holding the heads of the barbed or arrow-shaped coupling-links, and of the devices for releasing the latter to effect the uncoupling of the cars, all substantially as hereinafter described.

In the accompanying drawings, which illustrate our invention as adapted to use on freight and passenger cars, A designates the body of the car, and B the barbed coupling-links. C C designate converging plates attached to rods or arms, which are hinged or pivoted to the end of the car, and braced by means of hinged brace-rods *d*, connected to the bottom parts of the car.

The inner ends of the coupling-links are secured, in any convenient manner, underneath the car, while the barbed ends project some distance beyond the end of the car, as shown, the shank passing between the plates C.

In coupling, the head of the link of one car enters the space between the two plates C of the approaching car, and separates said plates so as to pass behind them, after which the plates return to their original positions, and thereby secure the link. The plates are caused to resume and retain sufficiently their vertical positions by the weights *b* upon the upper ends of the rods *b'*, to which the plates are attached.

D designates plates attached to the rods *b'* of the passenger-car which is represented in Fig. 1. The plates D being located above the plates C enable the latter to be separated readily, through the medium of the cam E, actuated by the lever F, which extends upward through a slot in the car-platform.

The mechanism for uncoupling freight-cars is somewhat modified, so that the uncoupling may be effected from the sides of the car. The plates D are therefore dispensed with, and instead thereof the pivoted horizontal arms *d'* employed. The latter are pivoted to the under side of the car-body, and pass forward between the rods *b'* above the plates C.

A transverse bar or lever, D', is pivoted to the under side of the car near the rear ends of the arms *d'*, and is provided with studs F', which, when the bar or lever D is moved, spreads the arms *d'* apart at their forward ends, and causes them to swing apart the plates C, thus releasing the link.

It is obvious that the plates C C D D are not absolutely essential to our invention. Depending rods or bars, whether inclined or otherwise, will serve to admit the links, while the cam E will operate against the bars, and serve to make the proper change for uncoupling.

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

1. The plates C, hinged rods *b'*, and weights *b*, combined substantially as shown and described.

2. The cam E and lever F, in combination with the plates C D and hinged rods *b*, substantially as and for the purpose specified.

3. The transverse pivoted bar D', having the studs F', in combination with the arms *d'* and hinged plates C, substantially as and for the purpose specified.

In testimony that we claim the foregoing we have hereunto set our hands this 28th day of April, 1873.

JNO. F. MULLOWNY.
JAMES COPE.
SIDNEY R. BROOKS.

Witnesses:
JOSIAH KURTZ,
JOHN KURTZ.