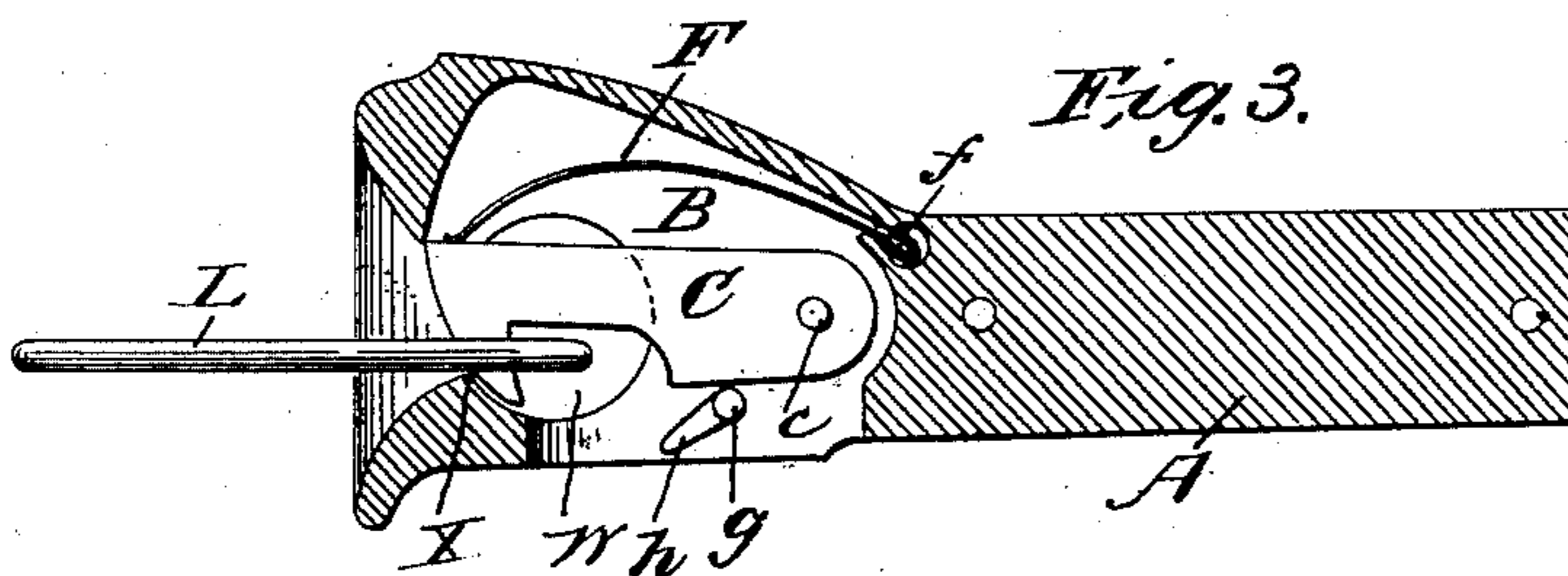
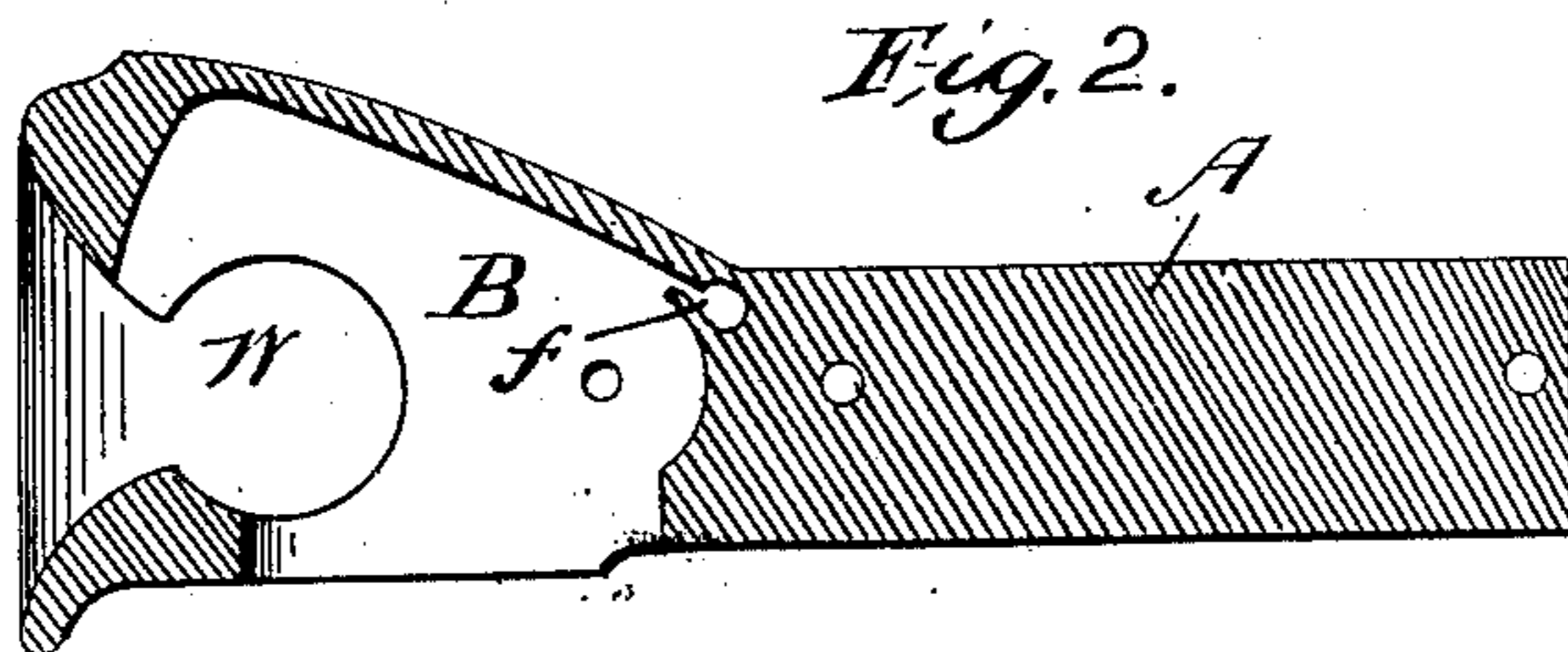
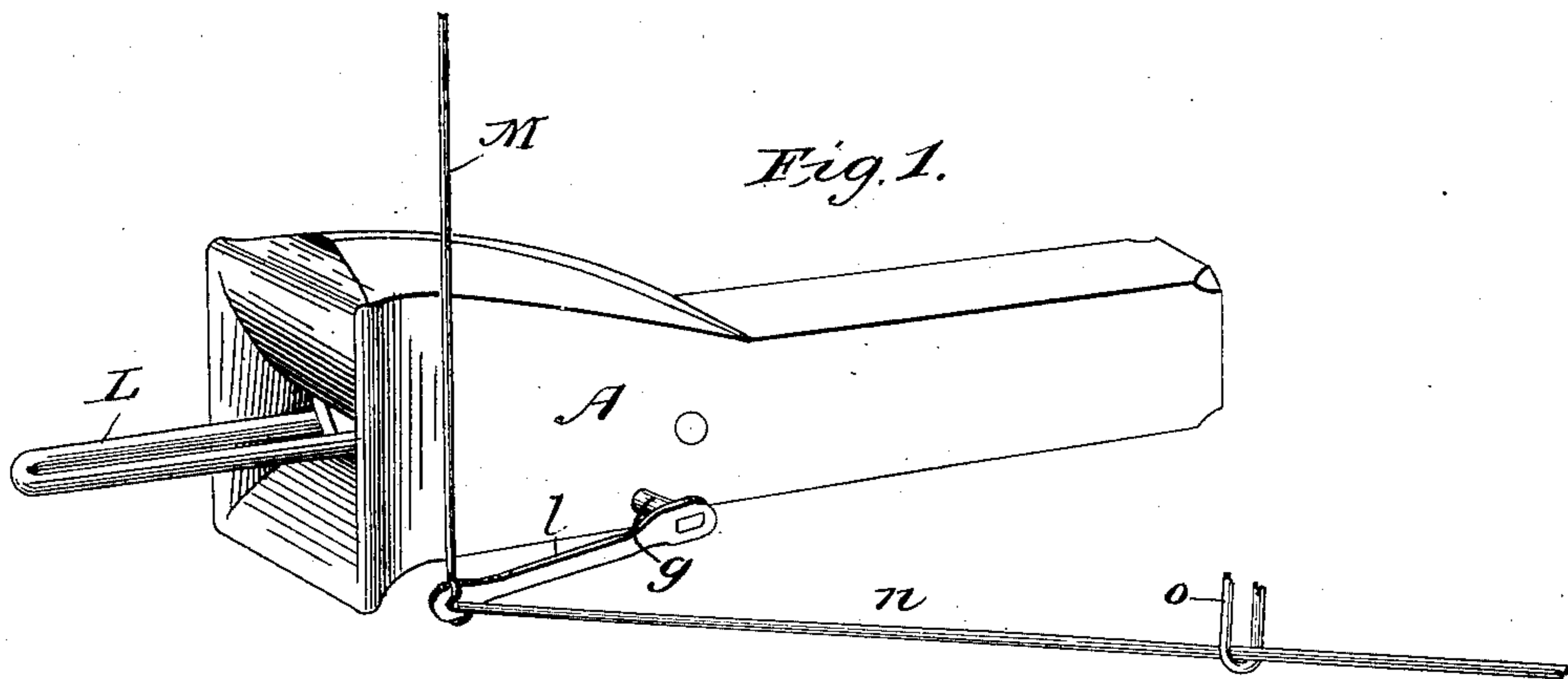


R. A. COWELL.
CAR COUPLING.

No. 62,613.

Patented Mar. 5, 1867.



Witnesses.
Geo. H. Tibbitts
Alfred Edwell

Inventor.
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United States Patent Office.

RENSSELAER A. COWELL, OF CLEVELAND, OHIO.

Letters Patent No. 62,613, dated March 5, 1867.

IMPROVED CAR-COUPLING.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, RENSSELAER A. COWELL, of Cleveland, county of Cuyahoga, in the State of Ohio, have invented a new and improved Self-Acting Life-Preserving Railway Car-Coupling; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 is a perspective view.

Figure 2 is a longitudinal section, showing the chambers in which the hook and link play.

Figure 3 is a similar section with hook and link in place, also showing the spring and cam.

The nature of this invention consists in providing a coupling to railway cars by which the cars may be coupled and uncoupled without the necessity of the operator passing between them, the coupling being so constructed that it is self-acting, the cars coupling themselves, and the uncoupling being performed by the operator outside or on the top of the cars, thus obviating the dangers attending this branch of the railway employee's duties.

In order that others skilled in the art to which my invention appertains may be enabled fully to understand and use the same, I will proceed to describe its construction and operation.

In the accompanying drawings, A represents a draw-head or coupling made of either cast or wrought iron, and has a tapering mouth, and is attached to cars in a similar manner to those now in use; but in order to make it self-acting and operated, as before stated, I have provided a chamber, B, in which a hook, *c*, is allowed to play in the operation of coupling and uncoupling. The hook *c* is secured by a pin, *e*, which is also the fulcrum on which it acts. I have also provided a spring, F, one end of which is secured in the groove *f*, and serves to prevent the hook *c* from jumping up and down when the cars are in motion, and thereby rendering their uncoupling liable. I have also provided a rod or pin, *g*, on which there is a cam, *h*. This is for the purpose of raising the hook *c* when desired, to uncouple the cars. To this cam-rod is attached a lever, *l*, for operating the same. There may be a hand-rod, *m*, passing to the top of the car by which the cam-lever may be operated. There may be also a hand-rod, *n*, passing to the side of the cars through a staple or bearing, *o*, which can be operated by bearing down on the outer end, the staple *o* acting as a fulcrum. This device for operating on the hook *c* may be attached to the pin or fulcrum *e* and serve the same purpose. There is a chamber, *w*, in each side of the chamber B, which admits the end of the link L to play, and it also secures the end of the link when it is forced in by the close contact of the cars. The hook is thus relieved of that action. The link is balanced or rests on the bearing *z*. The point of the hook *c* is supported on the surface *y* of the chamber *w*.

A railway car-coupling constructed in the manner herein described possesses superior advantages over the old, and may be employed to great profit, the operation of coupling being a self-acting one, and the uncoupling rendered safe and easy of performance. The dangers usually attending the same are entirely overcome.

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

In the draw-head A, formed with an enlarged chamber in the upper part, the hook *c*, in connection with the ordinary link, and the cam *h*, operated by a crank and rods, all constructed and arranged to operate as shown and described.

R. A. COWELL.

Witnesses:

GEO. H. TIBBITTS,

ALFRED ELWELL.