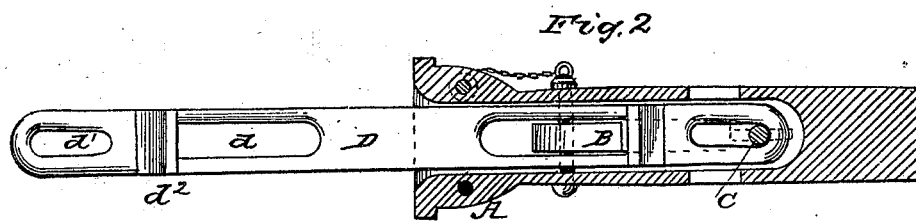
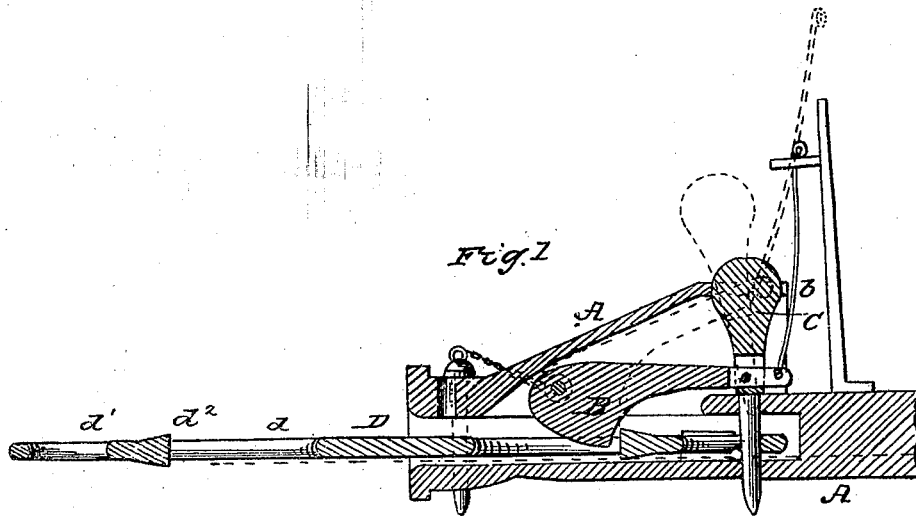


S. H. & G. A. REED.

Car Coupling.

No. 111,972.

Patented Feb. 21, 1871.



Witnesses
A. Rufford
[Signature]

Inventors
S. H. & G. A. Reed
per *[Signature]*
Attys

United States Patent Office.

SAMUEL H. REED AND GEORGE A. REED, OF FREDERICKTOWN, OHIO.

Letters Patent No. 111,972, dated February 21, 1871.

IMPROVEMENT IN CAR-COUPPLINGS.

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

To all whom it may concern:

Be it known that we, SAMUEL H. REED and GEORGE A. REED, of Fredericktown, in the county of Knox and State of Ohio, have invented a new and improved Automatic Car-Coupling; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing.

Drawing.

Figure 1 is a longitudinal central section of our car-coupling.

Figure 2 is a transverse section taken on line $x x$ of fig. 1.

Like letters of reference are used in the designation of identical parts in both of the figures.

This invention relates to car-coupling; and

It consists in inclosing within a draw-head or bumper a double fastening for the link, so constructed that when the link is introduced into the draw-head it will raise the first fastening or pin, which in turn will raise the second fastening, and in such a manner that when the link has become fully or sufficiently introduced into the draw-head the two fastenings will fall simultaneously into slots or apertures in the link, the construction of which link forms a portion of our invention, and consists in constructing the same with two openings or slots at each end, with the link enlarged at a point between them, all of which will be more fully described and explained in that part of this specification which follows.

To enable those skilled in the art to which our invention relates to make and apply the same, we will proceed to describe its construction and operation.

In the annexed drawing forming a part of this specification—

A represents the draw-head or bumper, which is constructed substantially in the usual form, except that the top is sloped up, as seen in fig. 1.

B is a jaw or eccentric bar, which is pivoted to the draw-head eccentrically, so that as any object is pushed against it from the outside it will throw it up

and also the arm which extends inward, and which is secured to a pin, C. The length of the arm upon part B is such as to throw the pin C into the position shown by dotted lines in fig. 1 when the jaw B is raised.

b is a rod attached to the rear end of the arm of jaw B, and may be of such length as to reach the top of the car when desired, and which, when lifted, puts the parts B and C into the position shown by dotted lines in fig. 1, so that the link can be withdrawn.

D is a link, having two slots or apertures, $d d'$, at each end, the outer ones d' being narrower than the inner ones d , and having a wedge-shaped enlargement, d'' , between them.

The operation may be stated as follows:

The link D being pressed into the draw-head A by the hand or by the action of the cars coming together, it strikes the eccentric bar or jaw B, which rises as it turns upon its pivotal point, which movement causes its inwardly-extended arm to raise the pin C partially above the link; the jaw then passes over the opening d' , its relative width being greater, when it encounters the wedge-shaped enlargement d'' , which raises the jaw still higher and completes the raising of the pin C, when the pin C falls in the aperture d' and the jaw B in the aperture d .

Having thus described our invention,

What we claim, and desire to secure by Letters Patent of the United States, is—

The combination of the jaw B and pin C with the link D $d d'$ d'' , whereby said jaw and pin will be made to register with the openings $d d'$, respectively, thus forming a double safety-lock, substantially as shown and described, and for the purpose specified.

In testimony whereof we have signed our names to this specification this 6th day of August, A. D. 1870.

SAMUEL H. REED.
GEORGE A. REED.

Witnesses:

GEORGE IRELAND,
A. GRUNTER.