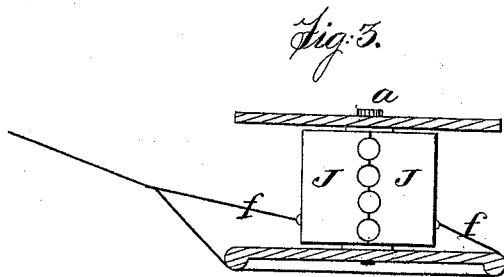
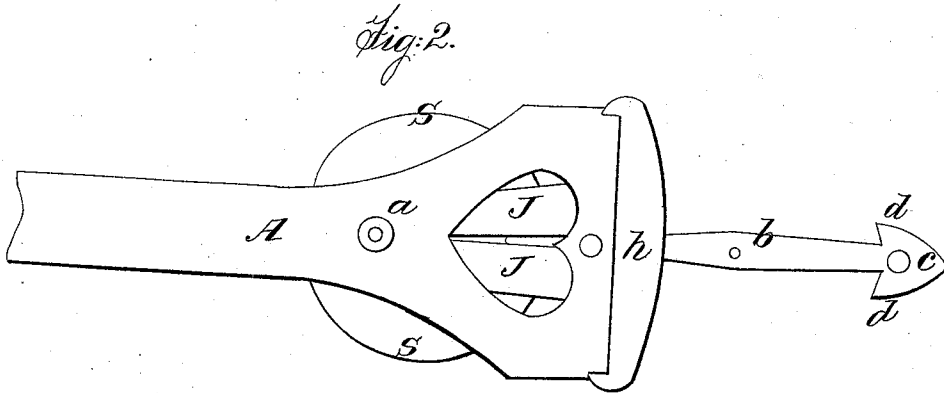
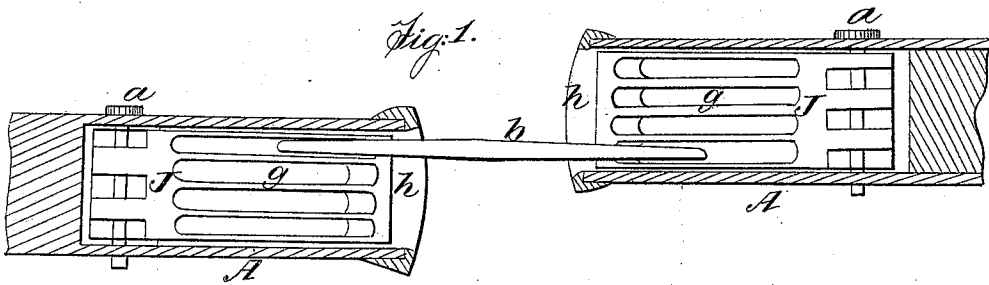


R. RICKKON.  
Car Coupling.

No. 24,146.

Patented May 24, 1859.



# UNITED STATES PATENT OFFICE.

RICHARD RICKKON, OF ROCHESTER, NEW YORK.

## CAR-COUPLING.

Specification of Letters Patent No. 24,146, dated May 24, 1859.

To all whom it may concern:

Be it known that I, RICHARD RICKKON, of Rochester, in the county of Monroe and State of New York, have invented a new and useful Self-Adjusting Car-Coupler; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, making a part of the same, in which—

Figure 1, is a vertical section of two couplings united, and showing their adaptation to cars of unequal height. This figure also shows the grooves *g*, in the jaws *J*, and the manner in which they are hinged together by the pin *a*, one jaw in each coupling being removed. Fig. 2, is a plan of one coupling with the arrow-headed bolt *b*, and showing the spring *S*, which closes the jaws. Fig. 3, is an end view of the coupling with the bumper-head *h*, removed, and showing the end of the jaws *J*, and the arrangement of the chains *f*, by which the said jaws are opened for uncoupling.

The nature of my invention consists in constructing car couplings in such a manner that they shall uncouple when the engine or any car in the train is thrown off the track, and thereby leaving the rest of the cars on the track,—they couple themselves, and are uncoupled by changing a lever, at the corner of the car, with which the chains *f*, are connected, and without going between the cars, thereby avoiding, entirely, the danger which has been attended heretofore with so many serious, and in many instances fatal accidents while coupling and uncoupling cars. They are also adapted to cars of different heights.

I construct the bumper-bar *A*, in the usual form, and in the opening to receive the link, I place two grip jaws *J*, having a common axis at *a*, and containing several grooves *g*, in their vertical inner face, to receive the

blades or hooks *d*, of the connecting bolt *b*. These grooves terminate in front with a shoulder to catch the hook *d*, of the bolt *b*. The object of having several grooves, is that cars of unequal height may be coupled together, and the draft remain in a horizontal line through the entire train. Such inequality in the height of cars, is the result of one car being loaded and another empty, and cars that have been some time in use, are also lower than when they are first built. The strap spring *S*, is fixed to the bumper bar *A*, and admits of the horizontal changes of the draft as when passing curves. The connecting bolt *b*, is provided with a pin hole *c*, so that one of these couplings may be connected with those in present use.

When the bolt *b*, is in one coupling, it is supported in a horizontal position, by the grooves *g*, and when two cars are being connected, the bolt guides itself into the groove of the opposite coupling, which shall correspond in height to its own.

There is a chain *f*, fixed to each of the jaws *J*, and united as seen in Fig. 3, and by drawing the chain, the jaws are opened and the car is uncoupled.

When one car is off the track, the relative position of the two couplings are so much changed that the connecting bolt *b*, presses the jaws apart and the uncoupling is there by effected.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

Constructing self-adjusting car couplings with a series of grooves *g*, as above specified, so as to admit of the coupling, (with self-couplers,) of cars of unequal heights, for the purpose set forth.

RICHARD RICKKON.

Witnesses:

P. M. CRANDALL,  
WM. S. LOUGHBOROUGH.