

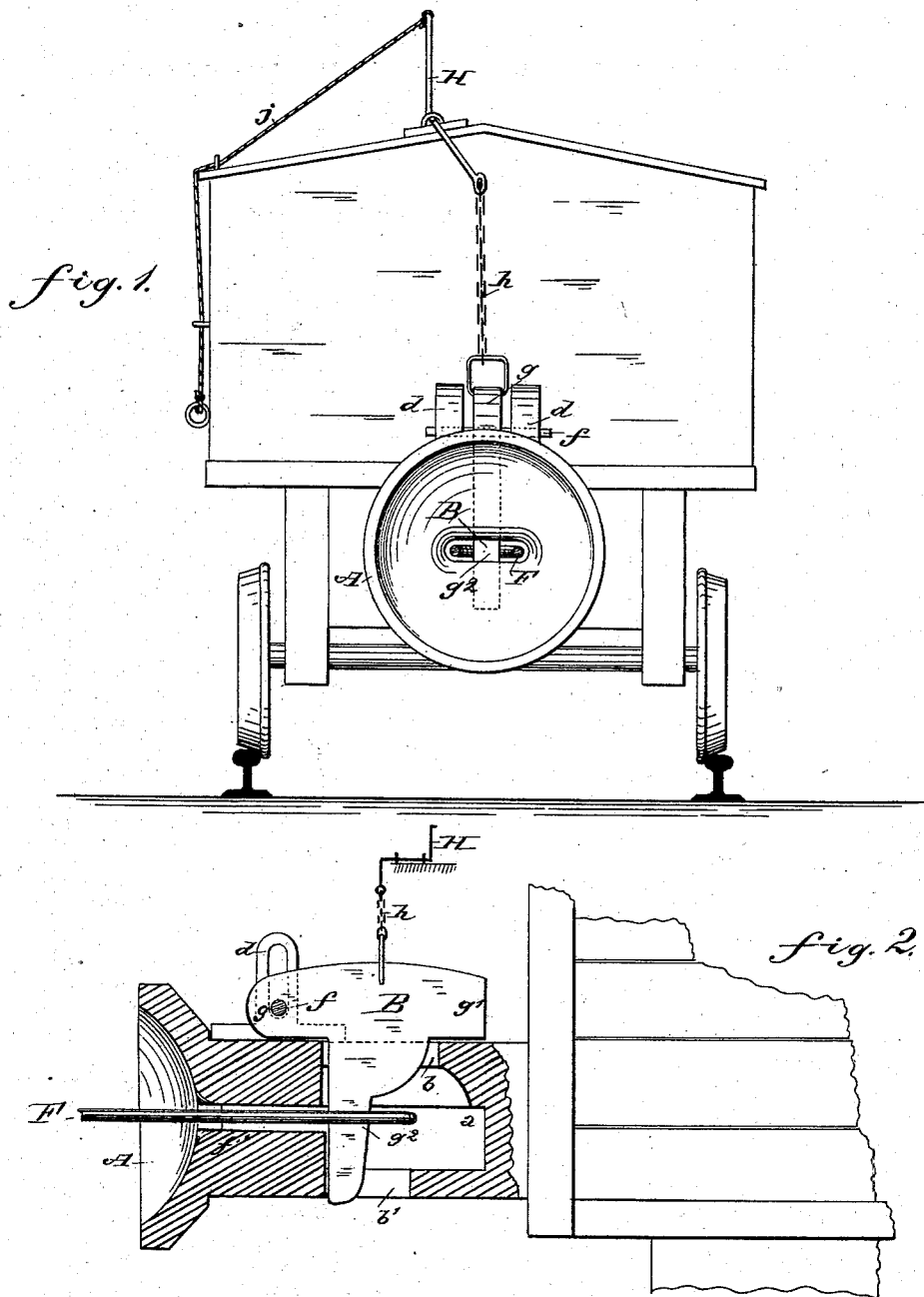
(No Model.)

C. J. EDWARDS.

CAR COUPLING.

No. 263,879.

Patented Sept. 5, 1882.



WITNESSES:

Wm. Beyer
C. Sedgwick

INVENTOR:

C. J. Edwards

BY

Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES J. EDWARDS, OF FAIRVILLE, MISSOURI.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 263,879, dated September 5, 1882.

Application filed June 13, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES J. EDWARDS, of Fairville, in the county of Saline and State of Missouri, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

The object of my invention is to provide an automatic car-coupling which shall be efficient, cheap, and durable.

My invention consists of the combination, with a draw-head having vertical loops or staples and properly chambered and slotted, of a T-shaped coupling-pin pivoted in the said staples or loops upon the draw-head in such manner that it will be capable of vertical movement, and also automatically drop through the coupling-link as the link enters the draw-head, and thus couple the cars without the necessity of incurring the danger of going between the cars for coupling, as with the couplers in ordinary use.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a front elevation of a railroad-car having my new and improved car-coupling applied thereto, and Fig. 2 is a detailed partially-sectional elevation of the same.

A represents the draw-head, which is bell-mouthed and chambered, as shown at *a*, and slotted at top and bottom, as shown at *b b'*; and B represents the coupling-pin, which is made by preference substantially T-shaped, as shown in Fig. 2. The said coupling pin is pivoted by means of the bolt *f*, secured in the forward arm or extension, *g*, thereof, in the upwardly-projecting lugs or ears *d d*, formed or secured upon the upper side of the draw-head. These lugs or ears are by preference slotted to permit the coupling-pin to have a vertical as well as a pivotal movement. The rearward extension, *g'*, of the coupling-pin is of such length relative to the locality of the lugs *d d* and the length of the slot *b* that when the pin is in position for holding the link F said rearward extension will rest upon the upper side of the draw-head, in rear of the said slot *b*, as shown in Fig. 2, and assist in hold-

ing the pin against the strain of the draft of the cars. The downward extension *g''* of the pin B is the part which passes through and holds the link, and is of such length relative to the size of the draw-head that when in position for retaining the link its lower end passes through the slot *b'* in the lower side of the draw-head, as shown in Fig. 2, but is not so long relative to the length of this slot but that the pin is left free to be turned upon its pivot for releasing the link and for permitting its free entrance to the draw-head.

The bell-crank lever H, secured to the top of the car, and the chain *h*, connecting it to the pin B, are provided for raising the pin for uncoupling from the top of the car, and the cord or small chain *j*, leading from the upper end of said lever H down the side of the car, is provided for uncoupling the car from the side of the car. Various other means might be devised for operating the pin B from the sides, top, or platform of the car, and not depart from the spirit of my invention.

In uncoupling the first movement of the pin B is vertical in the loops *d*, and this vertical movement is sufficient to raise the lower end of the downward extension *g''* above the link F, releasing it. The movement of the pin is then upon its pivot. After the link has been released the coupling-pin will, by its own weight, drop to its original position, ready for coupling again, so that all that is necessary for coupling is to place the link in one of the draw-heads of the cars to be recoupled and back the cars together. As the link enters the draw-head and comes against the coupling-pin the pin will be moved back upon its pivot until the end of the link passes under the lower end of the downward extension *g''*, when the said extension will drop through the link, and the pin will drop to its original position, thus automatically coupling the cars. The chamber *a* is so formed as to form the ledge *f'* for supporting the link somewhat above the bottom of the chamber, as shown in Fig. 2, and the slot *b'* is so formed that when the car is started forward the downward extension *g''* will come to the forward end of the slot, and in this manner the pin is supported at two

points against the strain upon it from the link, thus making the coupling very strong and durable.

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

1. The combination, with the draw-head provided with the vertical loops *d d*, of the T-shaped coupling-pin pivoted therein, so that the pin is adapted to have both vertical and pivotal movement, as set forth.

2. The draw-head formed with the slots *b*

and *b'*, in combination with the T-shaped pin B, pivoted in the vertical loops *d d*, substantially as and for the purposes set forth.

3. The draw-head, chambered so as to form the ledge *f'*, in combination with the T-shaped pin B, pivoted upon the draw-head in the vertical loops *d d*, substantially as described.

CHARLES JOSEPH EDWARDS.

Witnesses:

ALBERT B. SMITH,
JAMES A. SMITH.