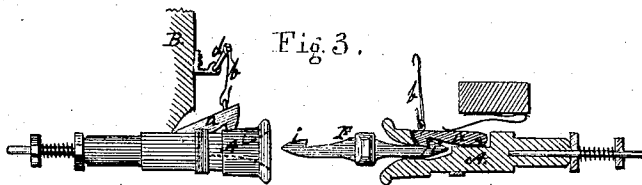
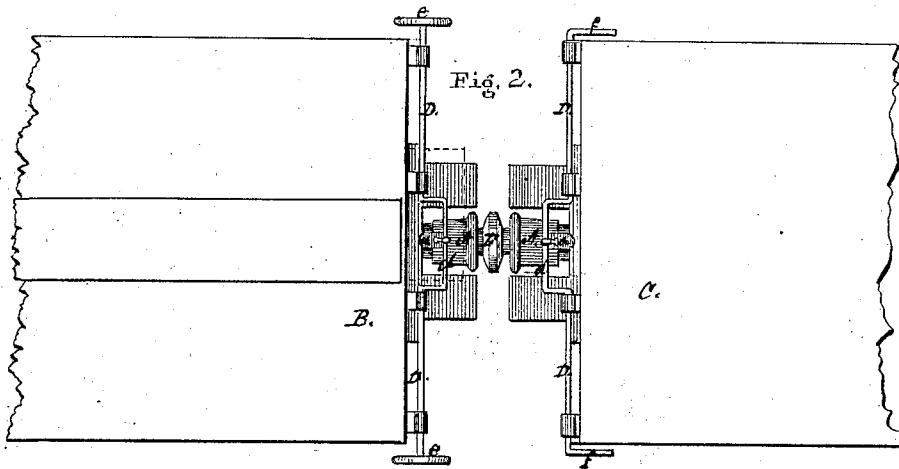
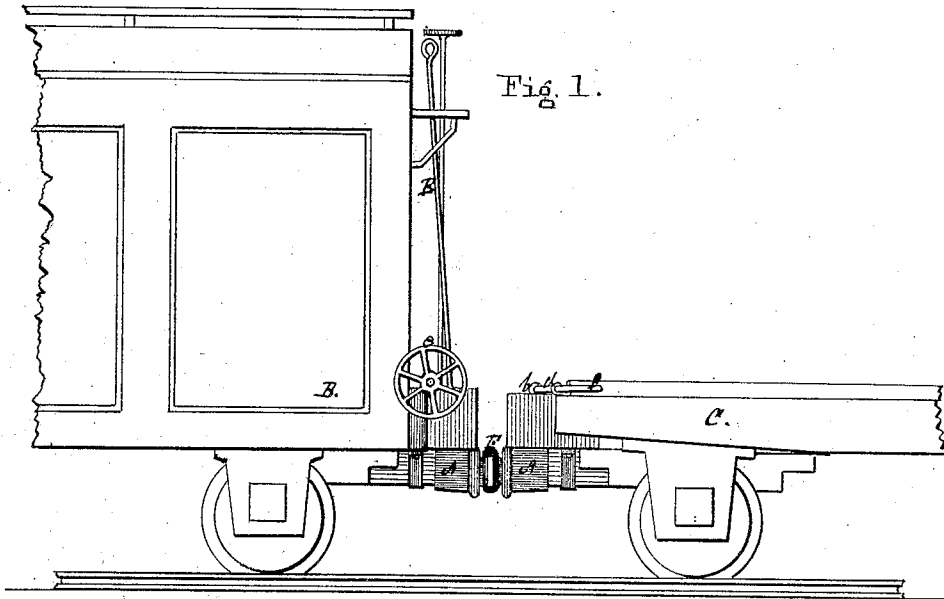


W. M. INGSTRUM.
Car Coupling.

No. 101,018.

Patented March 22, 1870.



Witnesses.

Chas. H. Poole
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Inventor.

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WILLIAM MILLER INGSTRUM, OF HORNELLSVILLE, NEW YORK.

Letters Patent No. 101,018, dated March 22, 1870.

IMPROVEMENT IN 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, WILLIAM MILLER INGSTRUM, of Hornellsville, in the county of Steuben and State of New York, have invented certain new and useful Improvements in Self Car-Coupling and Uncoupling or a detaching apparatus; and the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 represents a side view of the coupling on a broken-off section of a car and a truck-car.

Figure 2 shows a plan or top view of the same.

Figure 3 shows sectional views of the car-coupling detached.

The object of my invention is to facilitate the coupling and uncoupling of cars, and prevent injury to persons, which so often occurs by their going in between the cars; and

It consists in the horizontal bow or crank-shaft, extending the whole width of the cars, with a wheel or lever at both ends to operate it on either side, so arranged as to be self-coupling or not, at pleasure, the crank-shaft being combined with a latch or a pin by a link, and also provided with a vertical rod for operating from the top of the car.

To enable others to make and use my improvement, I will describe it more fully, referring to the drawings and the letters marked thereon.

The coupling-sockets and bumpers A A are constructed in the usual form, and secured to the box-car B and truck-car C in the usual manner.

In the top of the sockets A A are long mortises, in which strong hook-latches *a a* are fitted, the latches being connected by links *b b* to the cranks *d d*, in the central portion of the horizontal shafts D D, which extend the whole width of the cars, and are secured to

the frames and bodies on the outside of the ends, in the proper position to be operated by the hand-wheels *e e* on the right-angle levers *f f*, by a person on either side of the train, or by the brakeman on the top of such cars as are provided with a vertical rod, E, connecting with the crank *d*.

The most efficient device for coupling in the manner above described is by the bar F, with a bulb in the center and hooks *i i* on each end for the hook-latches *a a* to catch into.

The manner of operating my car-coupling and uncoupling device is as follows:

For self-coupling, let the bow or crank *d* lay down flat on the frame, with the latch *a* in position for the holding of the coupling-bar F, which, being placed in one of the sockets A, when the two bumpers are brought together the latch *a* will raise to receive the hook *i*, and fall again and secure them together; but when the bow *d* is turned up and a little past the center, resting against the car, the connection is made by turning the shaft D so that the latch will drop in.

It will readily be seen that by the above device no person need ever go between or be injured by the coupling or uncoupling of cars.

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

The combination of the crank-shaft D, vertical rod E and latch *a*, as constructed and arranged to operate either self-coupling or not, as herein set forth.

In testimony whereof I hereunto subscribe my name in the presence of—

WM. MILLER INGSTRUM.

Witnesses:

H. HALLIDAY,
B. C. DEWITT.