S. A. HAYDOCK.
Car-Coupling.

No. 210,117. Patented Nov. 19, 1878.

Fig. 1.

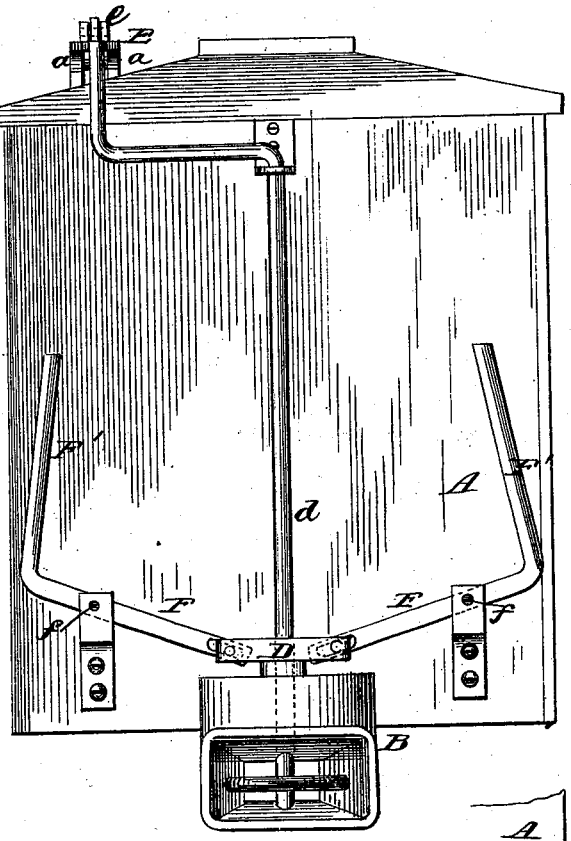


Fig. 2.

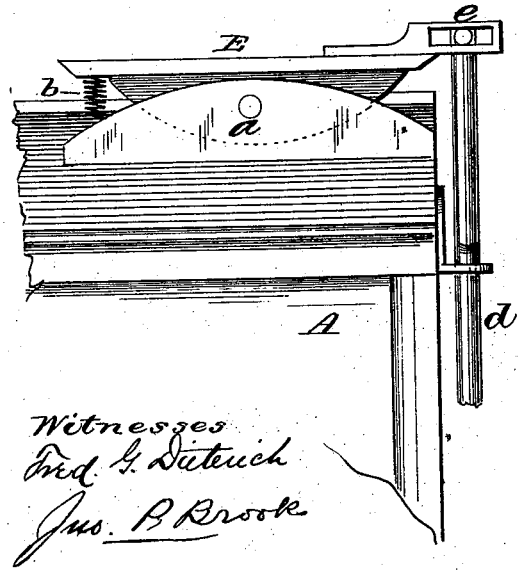


Fig. 3.

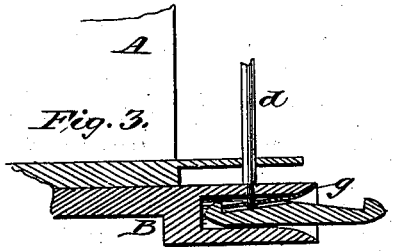
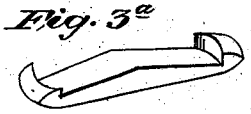


Fig. 3a



Witnesses
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UNITED STATES PATENT OFFICE.

SARAH A. HAYDOCK, OF OSTRANDER, OHIO.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **210,117**, dated November 19, 1878; application filed June 7, 1878.

To all whom it may concern:

Be it known that I, SARAH A. HAYDOCK, of Ostrander, in the county of Delaware and State of Ohio, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a front elevation of a car provided with my improved coupling. Fig. 2 is a side elevation of the upper part or portion of the front end of a car, showing the treadle device by which the coupling is operated; and Figs. 3 and 3ª represent, respectively, a sectional detail view of a certain form of coupling-link and its holding-spring, with which, among others, my improvement is especially applicable, and a detached perspective view of said link.

Similar letters of reference indicate corresponding parts in all the figures.

My invention relates to automatic car-couplings, or that class of couplings by which the coupling is effected automatically when the cars come together; and it consists in the construction and arrangement of a treadle, placed upon and operated from the top or roof of the car, by which the cars may be uncoupled without endangering life and limb by going between the cars.

It further consists in the employment, in connection with the coupling-pin-operating rod, of hand-crank levers, by which the said rod is caused to operate the coupling-pin resting upon the coupling-link inclosed within the buffer, and acted upon by a spring.

In the drawing, A is the car, and B the draw-head, which may be of any suitable construction. D is the coupling-pin, which is hinged to the end of a rod, *d*, bent, as shown in Fig. 1, so as to reach to one side of the car, where it is hinged to the forward end of a treadle, E, as at *e*, or otherwise, which consists of a board or plate pivoted between two bearings, *a a*, secured upon the roof of the car. *b* is a spiral spring, secured under the front end of treadle E, so as to draw this down against the roof of the car in an inclined position. F F are two cranked or angle levers, pivoted at *f f* to bearings in front of, or secured upon, the platform of the car, as shown, and terminating in handles F′ F′.

This device, as represented in Figs. 1 and 2, is intended to be used with an ordinary link; but by constructing the draw-head with a spring-catch, *g*, as shown in the sectional view, Fig. 3, it may be used with a link, *g′*, constructed as represented in the perspective view, Fig. 3ª, the end of rod *d* being hinged to the top of spring or catch plate *g*, as shown.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination, with the pivoted treadle E and its spring *b*, of the bent rod *d* and coupling-pin D, substantially as and for the purpose set forth.

2. The combination, with the coupling-pin-operating rod *d*, of the crank-levers F F′, buffer B, coupling-link *g′*, spring *g*, and pin D, substantially as shown and described, for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

SARAH A. HAYDOCK.

Witnesses:
D. G. CRATTY,
J. WALTER HILLS.