

(No Model.)

F. M. FOOTE.

CAR COUPLING.

No. 346,034.

Patented July 20, 1886.

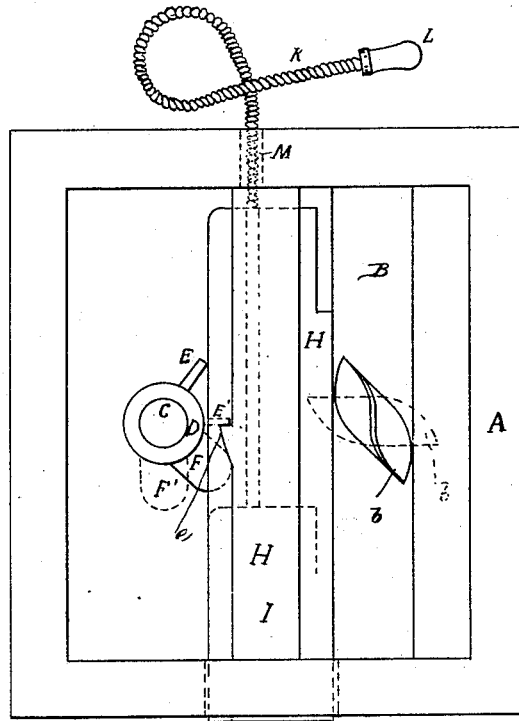


FIG. 1.

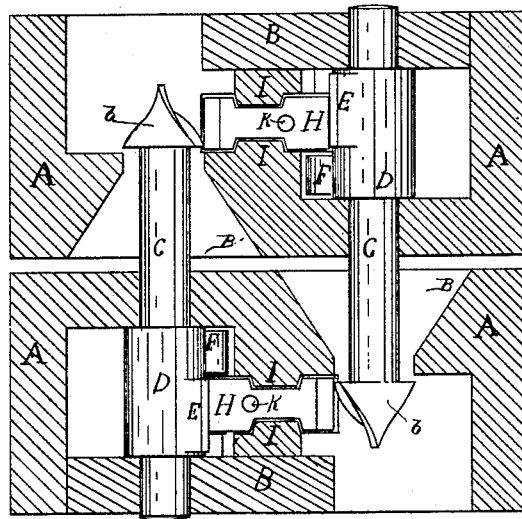


FIG. 2.

Witness:
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UNITED STATES PATENT OFFICE.

FRANK M. FOOTE, OF CERESCO, MICHIGAN.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 346,034, dated July 20, 1886.

Application filed May 19, 1886. Serial No. 202,676. (No model.)

To all whom it may concern:

Be it known that I, FRANK M. FOOTE, a citizen of the United States, residing at Ceresco, county of Calhoun, and State of Michigan, have invented new and useful Improvements in Formation in Car-Couplings, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention pertains to certain new and useful improvements in car-couplings, whereby the use of the ordinary link is dispensed with; and it consists in the detail construction, combination, and arrangement of the parts, whereby the cars can be automatically coupled, substantially as hereinafter fully shown and described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a rear elevation of my invention with parts removed, and Fig. 2 is a horizontal sectional view thereof.

In carrying out my invention I employ, preferably, a square frame or casting, A, which on its front surface to one side is provided with a beveled slot or aperture, B, which opens into a larger compartment, for a purpose hereinafter stated.

Through slots or openings in the frame or casting A is passed and supported therein a connecting-rod, C, the inner end of which rests in a slot or opening formed in a rear plate or partition of the frame or casting, and its other outer forward end is provided with an oblong scroll-like head, b.

D is a weighted sleeve fitted on and around the connecting-rod C, within a chamber of the frame or casting A, and said sleeve is provided with a projecting pin, E, and a weight, F, which latter holds the sleeve in its normal position. (Shown in dotted lines in Fig. 1.)

An oblong trip-plate, H, is grooved on either face to slide in ways I, formed in central inwardly-projecting portions of the frame or casting. This trip-plate is on the side contiguous to the weighted sleeve of the connecting-rod provided with an outwardly-projecting arm or protuberance, e, for engagement with the arm E of the said weighted sleeve,

and its other side is grooved for entrance therein of one end of the scroll-like head b, the purpose of which will appear further on.

A cord or chain, K, is connected to the top of the oblong trip-plate H, and is provided with a suitable handle or link, L, for connecting said cord or chain with a lever or levers (not shown) at the top or side of the car. Said cord or chain after being connected to the trip-plate is passed through a suitable slot or opening, M, in the top cross-bar of the frame or casting A.

In operation, as the opposite draw-heads of the approaching cars meet or come in contact, the scroll-like head b of each coupler strikes the sides of the bevel slot B of the approaching draw-head, the said scroll-like head will be caused to assume a nearly-vertical position, as shown in full lines, Fig. 1, and upon entrance into the larger compartment of the frame or casting the said head will, by reason of the weighted sleeve, be caused to assume a horizontal position. (Shown in dotted lines, Fig. 1.)

To effect the uncoupling of the cars, the trip-plate is raised by its cord or chain, which causes the partial rotation of the weighted sleeve and the connecting-rod, (shown in full lines, Fig. 1,) and said trip-plate on its opposite side also causes the scroll-like head of the connecting-rod of the opposite car to assume a nearly-vertical position, thus permitting the passage of the said head out through the beveled slot or aperture B.

From the foregoing it will be seen that my invention is simple, cheap, and durable, being free from all complication and devoid of springs of all kinds, which, as is well known, are liable to get out of order, causing confusion and frequently loss of life and limb.

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

1. The herein-described car-coupling, comprising the frame or casting having a beveled slot or aperture and a larger compartment, the connecting-rod having the scroll-like head, the weighted sleeve having an arm or projection, and the trip-plate sliding on ways, substantially as shown and described.

2. The combination, with the connecting-rod, of the weighted sleeve having an arm or projection and the trip-plate having a shoulder, substantially as shown and described.

5 3. The combination, with the frame or casting having ways formed on central inwardly-projecting portions, of the trip-plate having

a shoulder on one side and a groove on the other, the weighted sleeve, and the connecting-rod, substantially as shown and described.

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Witnesses:

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