

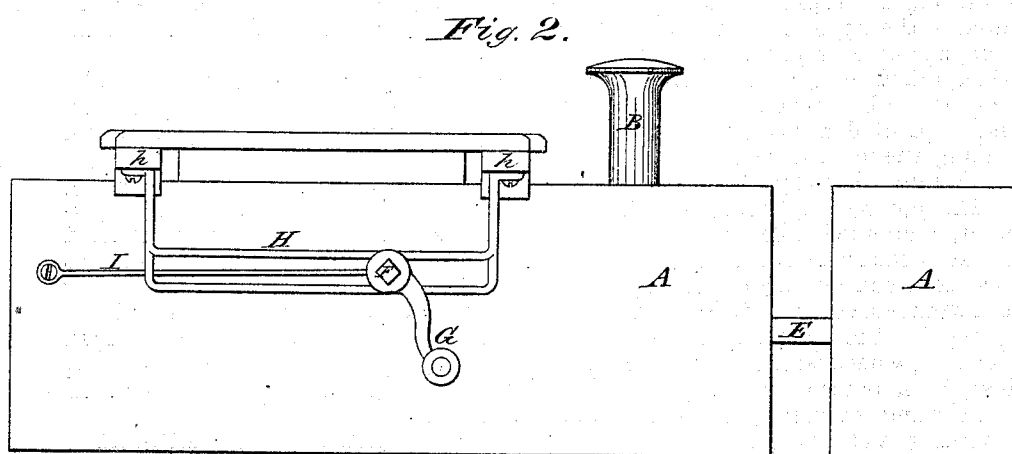
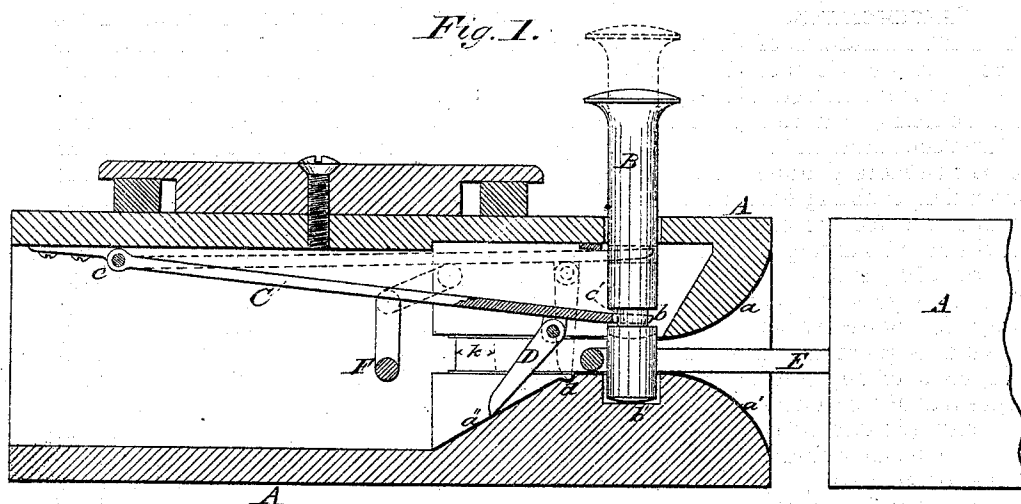
(122.)

M. G. FARNAM.

Improvement in Car Couplings.

No. 122,375.

Patented Jan. 2, 1872.



Witnesses
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IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 122,375, dated January 2, 1872.

SPECIFICATION.

I, MARVIN GATES FARNAM, of the town of Clifton, in the county of Compton and Province of Quebec, have invented certain Improvements in "Car-Couplings;" and it consists in the peculiar construction and arrangement of parts, all of which will be more definitely described in this specification, enabling others skilled in the art to make and use the same, reference being had to the accompanying drawing forming a part thereof, in which—

Figure 1 is a longitudinal section of my coupling. Fig. 2 is a side elevation of the same.

In the drawing, A represents a rectangular casing or box, made of any suitable material, having inclines *a a'* at its front end above and below. Said casing is secured under the ends of the cars in the usual well-known manner. A pin, B, of the common kind, is provided with a groove, *b*. Said pin B passes through the upper part of the coupling-box A and immediately in the rear of both inclines *a a'*, and into a suitable hole, *b'*, in the lower part of the box or casing A, which hole *b'* may be cut or cast entirely through, if preferred, as shown in dotted lines in Fig. 1. A pivoted or hinged lever, C, secured to the upper part of the casing A by a hinge-joint, *c*, is provided at its front end with a forked end, *c'*, which enters the groove *b* in the pin B. Just at the rear of the forked end is pivoted a pawl, D, for the purpose of holding the lever C and pin B up before the link E enters between the inclined planes *a a'*. The pin and forked lever are raised by a shaft, F, cranked or bent at its center and journaled in each side of the casing or box, and also at each end by a double stirrup, H, secured to the outside corners of the sill, as shown at *h h*, Fig. 2. The shaft may be operated by a crank, G, wheel, wrench, or other equivalent device. A brace or rod, I, passes around the shaft F and is fastened to the rear part of the coupling, and prevents the shaft from being bent laterally. When the link E enters the opening by striking the pawl D it throws said pawl back and thereby allows the pin and lever to drop, and secures the link.

The pawl is held in a shallow notch, *d*, in the rear of the pin, and, when pushed back by the link, said pawl slides down upon an incline, *a''*, in the rear thereof. To prevent the link from entering too far into the coupling, projections *k*, shown in dotted lines on each inside of the open space, may be arranged, against which the link strikes, also keeping said link in a horizontal position, when the pin in the opposite coupling is dropped and thereby secures the link.

The advantages of my improved car-couplings are that they may be automatically coupled or uncoupled without the necessity of going in between the ends of the cars, the couplings being operated from each side of the cars, thereby avoiding the numerous accidents occasioned in coupling or uncoupling cars. It is simple and durable, and can be attached to any car at a very moderate cost. The draft of the link is confined to a very small space of the pins, thereby making it much stronger than the couplings now in use. Both of the couplings being alike, it matters not which end of the car is coupled; and the car need not be reversed.

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

1. The combination of the hinged forked lever C and pin B with the shaft F and stirrup H, as shown and described, for the purpose set forth.

2. The combination of the casing A, having a notch, *d*, with the hinged forked lever C, pivoted pawl D, and link E, when constructed and arranged substantially as and for the purpose specified.

3. The combination of the casing A, having notch *d* and inclines *a a'*, with the hinged lever C, pivoted pawl D, shaft F, stirrup H, pin B, and link E, all arranged for operation substantially as set forth.

MARVIN G. FARNAM.

Witnesses:

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