

(No Model.)

J. H. PUDNEY.

LINK OPERATOR FOR CAR COUPLINGS.

No. 301,830.

Patented July 8, 1884.

Fig. 1.

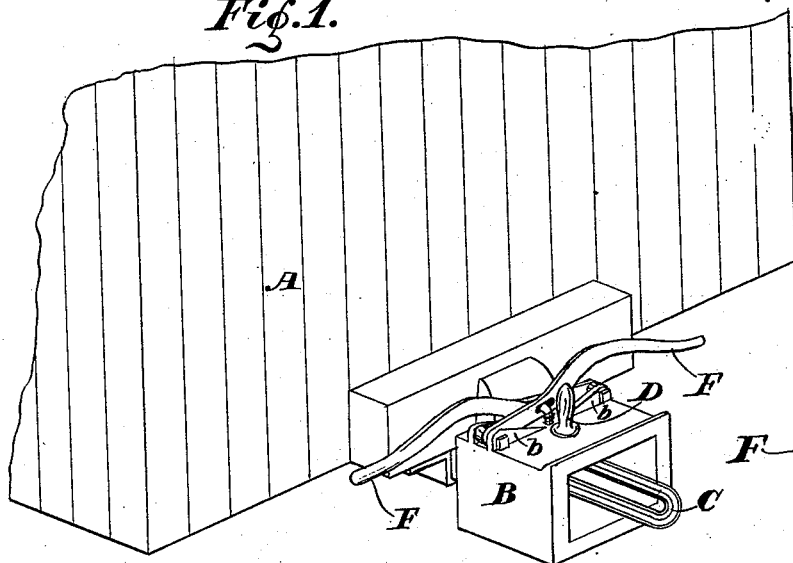


Fig. 2.

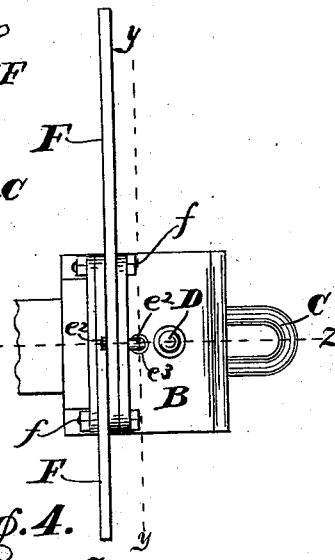


Fig. 3.

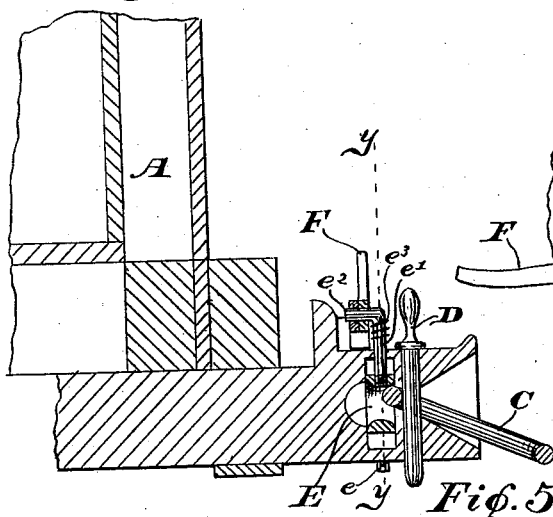


Fig. 4.

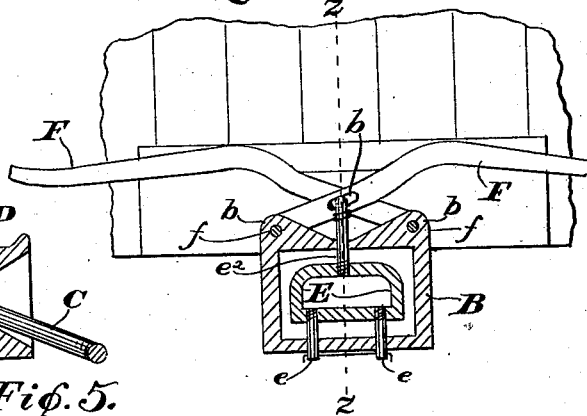
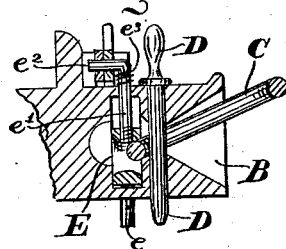


Fig. 5.



WITNESSES.

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LINK-OPERATOR FOR CAR-COUPPLINGS.

SPECIFICATION forming part of Letters Patent No. 301,830, dated July 8, 1884.

Application filed December 31, 1883. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. PUDNEY, of the town of Franklin, county of Johnson, and State of Indiana, have invented certain new and useful Improvements in Devices for Handling Car-Coupling Links, of which the following is a specification.

The object of my said invention is to provide a means for handling the coupling-links of an ordinary car-coupler, by the use of which the necessity of taking hold of said link with the hand, and thereby rendering it liable to injury, will be avoided, as will be hereinafter fully set forth.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a perspective view of a portion of the end of a car-body provided with a draw-head to which my invention is applied; Fig. 2, a top plan of said draw-head; Fig. 3, a longitudinal vertical sectional view on the dotted line *z z*; Fig. 4, a cross-section of the same, looking to the left from the dotted line *y y*; and Fig. 5 a detail view of a portion of Fig. 3, showing the link as raised up by the operation of my device.

In said drawings, the portions marked A represent the car; B, the draw-head; C, the link; D, the pin; E, a stirrup which forms a part of my invention, and F F levers for operating said stirrup.

The draw-head B is substantially an ordinary draw-head. A short distance behind the pin-hole a recess is formed large enough to admit the stirrup E and permit the necessary vertical movement of the same. Directly over this recess are formed bearings *b*, in which the ends of the levers F are pivoted by pivots *f*.

The link C and pin D are of the ordinary construction, and need no special description.

The stirrup E is of sufficient size to admit the end of the link, and is located in the recess formed in the draw-head behind the pin-hole, as shown. It is provided on its under side with two guide-pins, *e e*, which project down through holes in the under side of the draw-head. On its top side it is provided with an upwardly-projecting pin, *e'*, which serves as a guide, and also as a means for con-

necting said stirrup to the levers, it being provided on its top with a hook or horizontal part, *e'*, which engages with a hole or slot in said levers. It is also provided with a spring, *e''*, between this horizontal part and the top face of the draw-head, which operates to keep the stirrup raised high enough when not in operation to allow the link to remain in its normal position, similar to that which it occupies in common draw-heads.

The levers F are pivoted in the bearings *b* in the draw-head, and cross each other in the center of said draw-head, where they are provided with slots or oblong holes *f*, into which the horizontal part *e'* of the pin *e'* enters, thus securing the levers together at this point. Said levers may be of any length desired.

The operation of my invention is as follows: The stirrup E is inserted through the mouth of the draw-head into the recess formed therein to receive it, as before described. It is then turned into the proper position and the guide-pins *e* are inserted through the holes provided therefor in the bottom of the draw-head, and into the holes in the under side of said stirrup. They are preferably threaded at their top end, and adapted to be screwed into the holes in the stirrup, as shown. (See Fig. 3.) The pin *e'* is then put down through the hole in the top of the draw-head and screwed into the hole in the top of said stirrup, provided to receive it, the spring *e''* being first put on. The levers F are then put in position, the horizontal part *e'* of the pin *e'* being inserted through the slots *f*. The rear end of the link, when in position in the draw-head, extends back into this stirrup, and thus the depressing or lifting of said stirrup by means of the lever F operates to raise or lower the front end of said link to any position desired, the extremes being shown in Figs. 2 and 4, so far as ordinary use extends.

I regard the construction just described as preferable, but, as will be readily understood, the stirrup (which is in effect only an extension of the pin) can be omitted from the construction without materially impairing the operativeness of the device. The forward portion of the link always being kept down by its own weight, it is only necessary to have

a means for lifting it, and by forming the lower end of the pin e' so that it will bear upon the rear end of the link, said end can be borne down and the forward end raised without the aid of the stirrup. By attaching the levers F to the pin e' at their ends and pivoting them in the bearings b a short distance from their ends, instead of having the reverse construction shown, the spring e^3 can be dispensed with, as the weight of said levers on each side will be sufficient to keep said pin up out of the way of the link; but, as before stated, I regard the construction shown, and previously described, as the most complete and efficient, and therefore preferable.

By the use of this device the usual danger attending the coupling of cars is avoided, as it obviates the necessity of touching the link, and by extending the levers F to sufficient length will obviate the necessity of even stepping between the approaching cars.

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

1. A draw-head for car-couplers provided at the rear of the pin-hole with a vertically-movable stirrup, which is adapted to receive the end of the link, and is provided on its top with means for operating the same, whereby it is adapted to raise and lower said link as it is depressed or lifted, substantially as set forth.

2. The combination, with a draw-head for

car-couplers adapted to receive the vertically-movable stirrup E , of said stirrup, provided with downwardly-projecting guide-pins e and an upwardly-projecting pin, e' , whereby said stirrup is held in place and operated, substantially as described, and for the purposes specified.

3. In a car-coupling, the combination of the draw-head B , stirrup E , mounted in said draw-head, and provided with an upwardly-projecting pin, e' , having a horizontal part, e^2 , and the levers F , provided with slots f , through which the horizontal part e^2 of the pin e' is inserted, substantially as described, and for the purposes specified.

4. The combination, with a draw-head for car-couplers, of the levers F , pivoted on each side of said draw-head, and attached at the center of the draw-head to a vertically-movable pin, and said vertically-movable pin, the lower end whereof is adapted to engage with the rear end of the coupling-link, substantially as described, and for the purposes specified.

In witness whereof I have hereunto set my hand and seal at Indianapolis, Indiana, this 27th day of December, A. D. 1883.

JAMES H. PUDNEY. [L. S.]

In presence of—

C. BRADFORD,
E. W. BRADFORD.