(No Model.)

N. B. MARSTON & W. M. KIMBALL.

CAR MOVER.

No. 480,333. Patented Aug. 9, 1892.

Fig. 1.

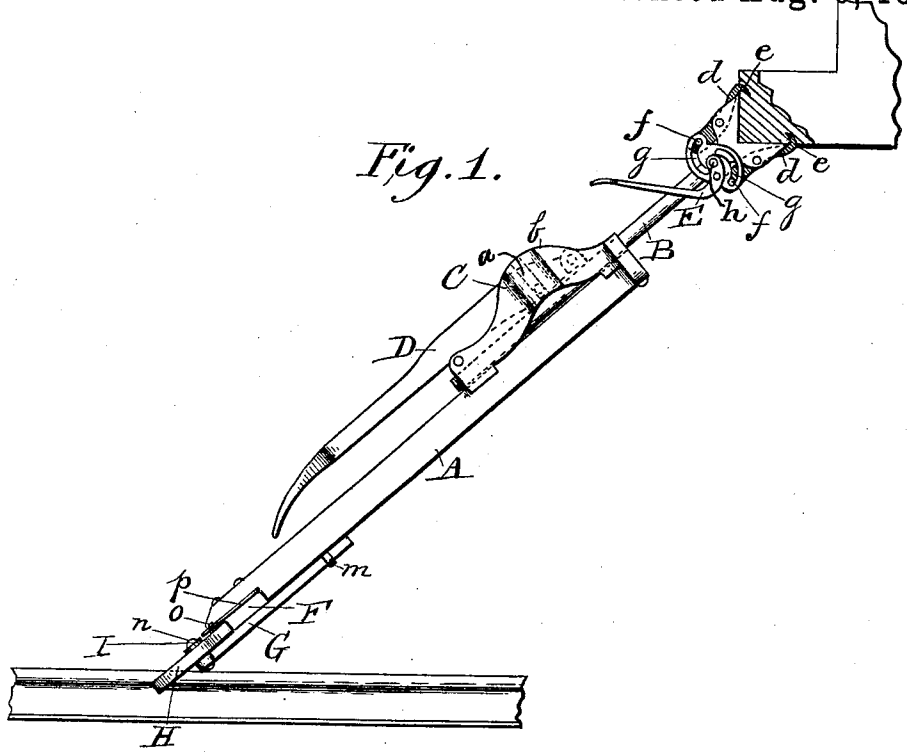


Fig. 2.

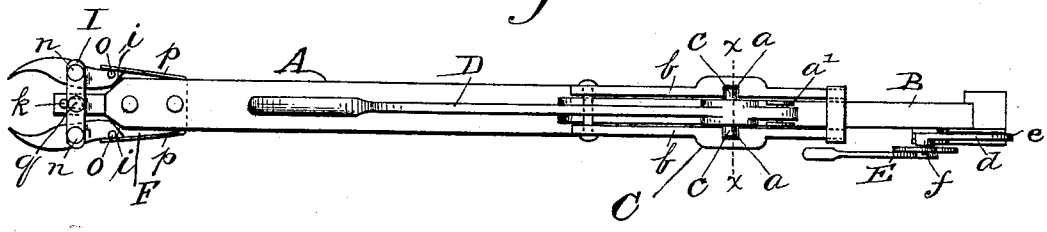


Fig. 3.

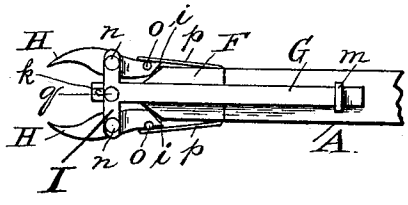
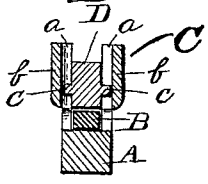


Fig. 4.



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UNITED STATES PATENT OFFICE.

NATHANIEL B. MARSTON, OF LEBANON, NEW HAMPSHIRE, AND WILLIAM M. KIMBALL, OF BARRE, VERMONT.

CAR-MOVER.

SPECIFICATION forming part of Letters Patent No. 480,333, dated August 9, 1892.

Application filed April 23, 1892. Serial No. 430,344. (No model.)

To all whom it may concern:

Be it known that we, NATHANIEL B. MARSTON, residing at Lebanon, county of Grafton, and State of New Hampshire, and WILLIAM M. KIMBALL, residing at Barre, county of Washington, and State of Vermont, citizens of the United States, have invented certain new and useful Improvements in Car-Movers; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Our invention relates to an improvement in car-movers, and has for its object to provide a car-mover which is simple in construction, efficient in operation, exceedingly durable, and which can be manufactured at moderate expense.

Our invention consists in the features and details of construction hereinafter described, and specifically pointed out in the claims.

It is illustrated in the accompanying drawings, in which—

Figure 1 is a side view in elevation; Fig. 2, a top plan; Fig. 3, a bottom plan view of the rail gripping-jaws and their connections, and Fig. 4 a cross-section on line *x x* of Fig. 2.

In the drawings, A represents the main portion or beam of the device; B, a sliding bar mounted and sliding in a bracket C, secured to the upper end of the beam. The said bracket is provided with two slats *a a*, formed in the inner faces of the sides *b b* thereof.

D is the operating-lever, pivoted at its upper end to the sliding bar at *a'* and provided with pins *c c*, which engage and slide vertically in the slots *a a* of the bracket C.

The sliding bar B has a V-shaped head at its upper end in which two dogs *d d* are pivoted. These dogs are hooked and pointed at their upper ends *e e* and have pins *f f* projecting from their lower ends, which engage and work in the eccentric slots *g g* in cam-lever E, which lever is pivoted at *h* to the head of the sliding bar. The V-shaped head of bar B, the dogs, and the cam-lever are for the purpose of securing the car-mover to the sill or platform of a car when it is desired to move the same.

At its lower end the beam A is provided with a rail-clutch, in which F is a base piece, of metal, bolted to the end of the said beam, having beveled shoulders *i i* on its opposite sides and an elongated slot *k* in the lower portion thereof.

G is a sliding bar with a T-head connected to the said beam on its under side by a staple *m*, in which it slides. The T-head of the sliding bar G is provided with two bolts or pins *n n*, on which clamping-jaws H H are mounted. These jaws have pins *o o*, against which springs *p p*, fastened in the end of beam A, bear. These springs retain the jaws along the rail when following the motion of the car and allow the spreading of the same when passing over inequalities of the rails, especially on side tracks with worn-out rails, while contracting them instantly at narrower points. The head of bar G is also provided with a bolt or pin *q* in the center thereof, which works in the slot *k* in base-piece F and limits the movement of the bar G. I is a cross-piece, which extends across the upper faces of jaws H H and serves to connect the bolts *n n* and *q*.

The operation is as follows: The lower end of beam A is placed on the rail. Then the head of the sliding bar B is by pulling the cam-lever downward and clamping the hooked ends of the dogs *d d* into the sill or end of a car, securely fastened to the same. Then by depressing the operating-lever D the sliding bar B moves upward and at the same time the T-bar G is pressed against the rail, and said bar also moves upward and carries with it the jaws H H, and the jaws, coming in contact and sliding up the inclined or beveled shoulders of the piece F, are contracted and grip firmly the sides of the rail and offer a sufficent degree of resistance to set the car in motion.

Although we preferably make the beam of the car-mover of wood and the other parts of iron or steel, any other suitable material could be used.

Having thus described our invention, what

we claim, and desire to secure by Letters Patent, is—

1. In a car-pusher, the combination of the main beam, having the spring-actuated gripping-jaws at one end and the bracket at the opposite end, the operating-lever, the sliding bar working in said bracket, a head on said bar, and dogs pivoted to said head, and the cam-lever for operating the said dogs, substantially as described.

2. In a car-pusher, the combination of the beam, the rail-clutch attached to the lower end, the base-piece having beveled shoulders and a slot, a slidable bar provided with a pin engaging said slot, the gripping-jaws, the pins on said jaws, and the spring for bearing on said pins and operating said jaws, substantially as described.

3. In a car-pusher, the main beam, the bracket rigidly mounted on said beam and provided with vertical slots, the operating-lever having pins to engage and slide in said slots by which a sliding fulcrum is provided for the said operating-lever, and the sliding bar attached to the operating-lever, substantially as described.

4. The combination of a slidable bar, a head, a pair of holding-jaws pivoted to said head and provided with pins, the lever for operating the jaws, said lever having eccentric slots therein to engage the pins on the jaws, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

NATHANIEL B. MARSTON.
WILLIAM M. KIMBALL.

Witnesses as to the signature of N. B. Marston:

F. H. FOSTER,
F. H. HOSFORD.

Witnesses as to the signature of W. M. Kimball:

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