

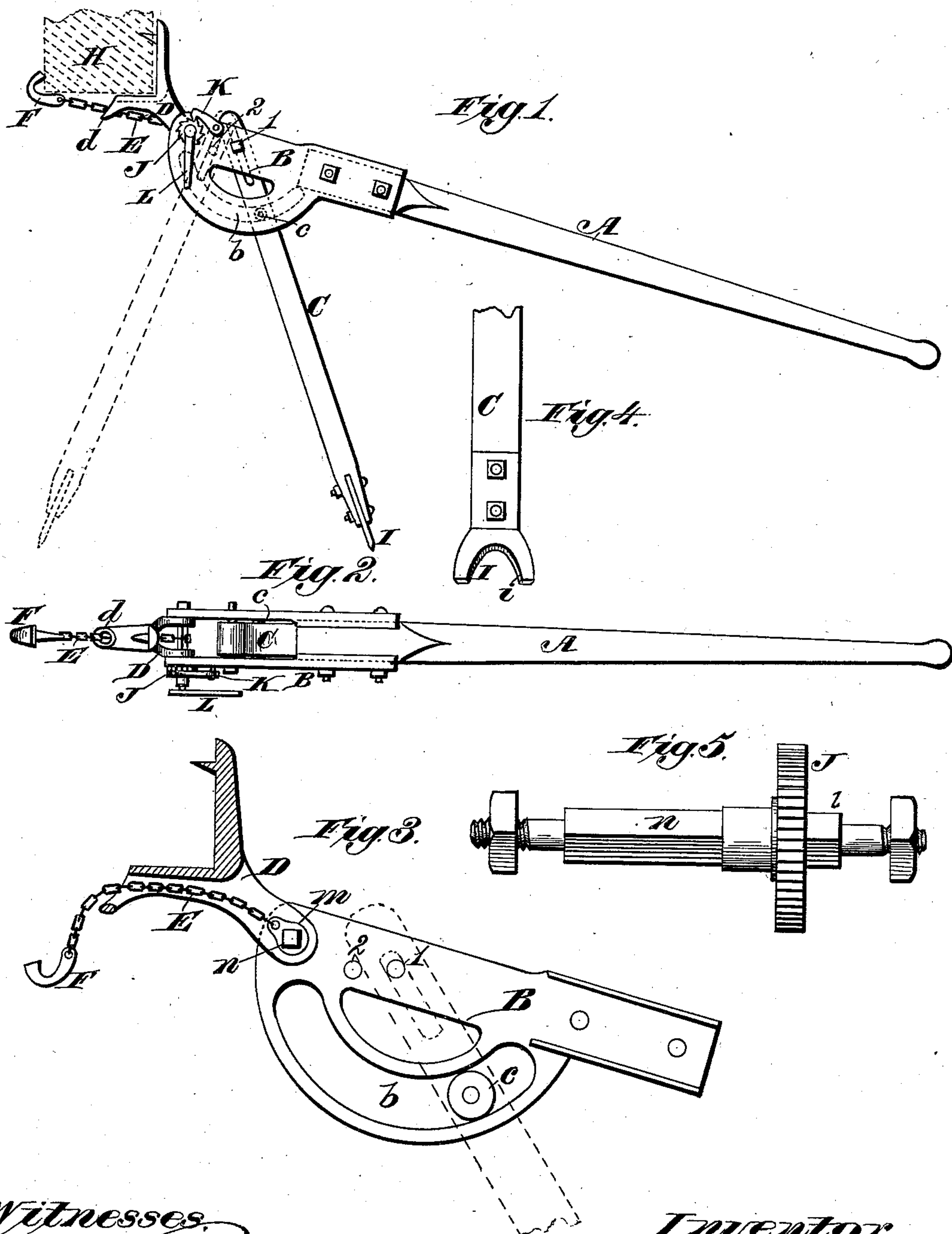
(No Model.)

L. B. GIFFORD.

CAR MOVER.

No. 373,358.

Patented Nov. 15, 1887.



Witnesses.

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UNITED STATES PATENT OFFICE.

LORD B. GIFFORD, OF TOLEDO, OHIO.

CAR-MOVER.

SPECIFICATION forming part of Letters Patent No. 373,358, dated November 15, 1887.

Application filed April 18, 1887. Serial No. 235,268. (No model.)

To all whom it may concern:

Be it known that I, LORD B. GIFFORD, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented new and useful Improvements in Car-Movers, of which the following is a specification.

My invention relates to improvements in car-movers such as are used to move empty or loaded cars on sidings and around warehouses, elevators for grain, &c., easily moving by hand-power one or more empty or loaded cars.

The object of my invention is to provide a machine for this purpose that is light, durable, powerful, and easily operated; so arranged that it will act on the rail and against the sill or body of a car and start it and follow it as it moves along, and also arranged so that it may be easily adjusted so as to make either a push or a pull on a car, as may be desired or convenient. I accomplish this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my machine complete as attached to a section of the sill of a car. Fig. 2 is a top or plan view of my machine complete. Fig. 3 is an enlarged detail view of one of the slotted fulcrum-plates with the saddle block in section and omitting the leg. Fig. 4 is an enlarged detail view of the lower end of the leg C and the bifurcated shoe as attached to it. Fig. 5 is an enlarged detail view of the ratchet and reel.

In all of the views like letters refer to like parts.

A is a lever, to the end of which are secured on the two opposite sides two circular-slotted tracked fulcrum-plates, B B. These plates are provided with an inside circular-slotted track, *b*, in which a trunnion, *c*, travels on a pivot in the leg C. The upper end of the leg C is provided with a slot, by means of which, with a pin or bolt in the adjustment-holes 1 2, it is pivoted between the plates B B. The lower end of the leg C is sloped down on each side and slotted to receive a bifurcated shoe, I, which is made secure by means of bolts and plates. To the front ends of the fulcrum-plates B B is pivoted a bifurcated saddle-block, D, one arm of which is mounted with a spur or tang, and the other is provided with a loop, *d*. A chain, E, having a hook, F, on one end, passes

through the loop *d*, and is secured by a plate, M, to a square on a reel-bolt, N, which is provided with a ratchet, J, and pawl K, and operated by a lever, L, on a square, *l*.

H represents a section of the sill of a car, to which the machine is securely and quickly fastened by means of the spur on the upper arm and the hook F and chain E, operated by the reel N, ratchet J, pawl K, and lever L.

When the machine is designed to be used for pushing a car, the leg C is placed and works at an acute angle to the lever A, and is pivoted by its slot in its upper end in hole No. 1, as shown in Fig. 1, and when it is used to pull a car with, as shown in dotted lines, Fig. 1, it is pivoted at its upper end in hole No. 2 and works at an obtuse angle to the lever A.

I may construct the whole machine of iron and steel; but for the sake of cheapness, lightness, and convenience I prefer to make the lever A and the leg C of wood. I also obtain special advantages by having a machine so constructed that it can be easily and practically applied to a car, so as to either push or pull it; and I also find great advantages and especially adapt my machine to fasten over the sill of the car on the under side.

Having described the parts of my machine and their working relation to each other, the manner of operating it is as follows: The leg C is placed with the bifurcated shoe I on the rail. The bifurcated saddle-block D is then placed so that it rests against the end of the car and against the under side of the sill. The tang is then forced into the wood, the hook is placed over the inner edge of the sill, and the chain is then drawn up tight by means of the reel, ratchet, pawl, and lever. Then by the continued working of the lever A the car is moved forward or backward, according as the leg C is inclined and adjusted in the holes 1 and 2.

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

1. In a car-mover, the lever A and fulcrum-plates B B, provided with circular-slotted tracks *b b* and with adjustment-holes 1 and 2, in combination with the leg C, with its slotted upper end, pin and trunnion *c*, and bifurcated shoe I, secured in a slot by means of plates and bolts, substantially as described and specified.

2. In a car-mover, the combination of the

lever A, fulcrum-plates B B, having the ad-
justment-holes 1 and 2, leg C, bifurcated shoe
I, trunnion c, circular-slotted tracks b b, bifur-
cated saddle-block D, with tang and loop d,
5 chain E, hook F, plate M, reel N, ratchet J,
pawl K, lever L, and square l, substantially as
described and specified.

In testimony whereof I have hereunto set my
hand in the presence of two subscribing wit-
nesses.

LORD B. GIFFORD.

Witnesses:

J. T. GREER,

WILLIAM H. TUCKER.