(No Model.)

O. E. ROSE.

CAR MOVER.

No. 389,600. Patented Sept. 18, 1888.

Fig. 1.

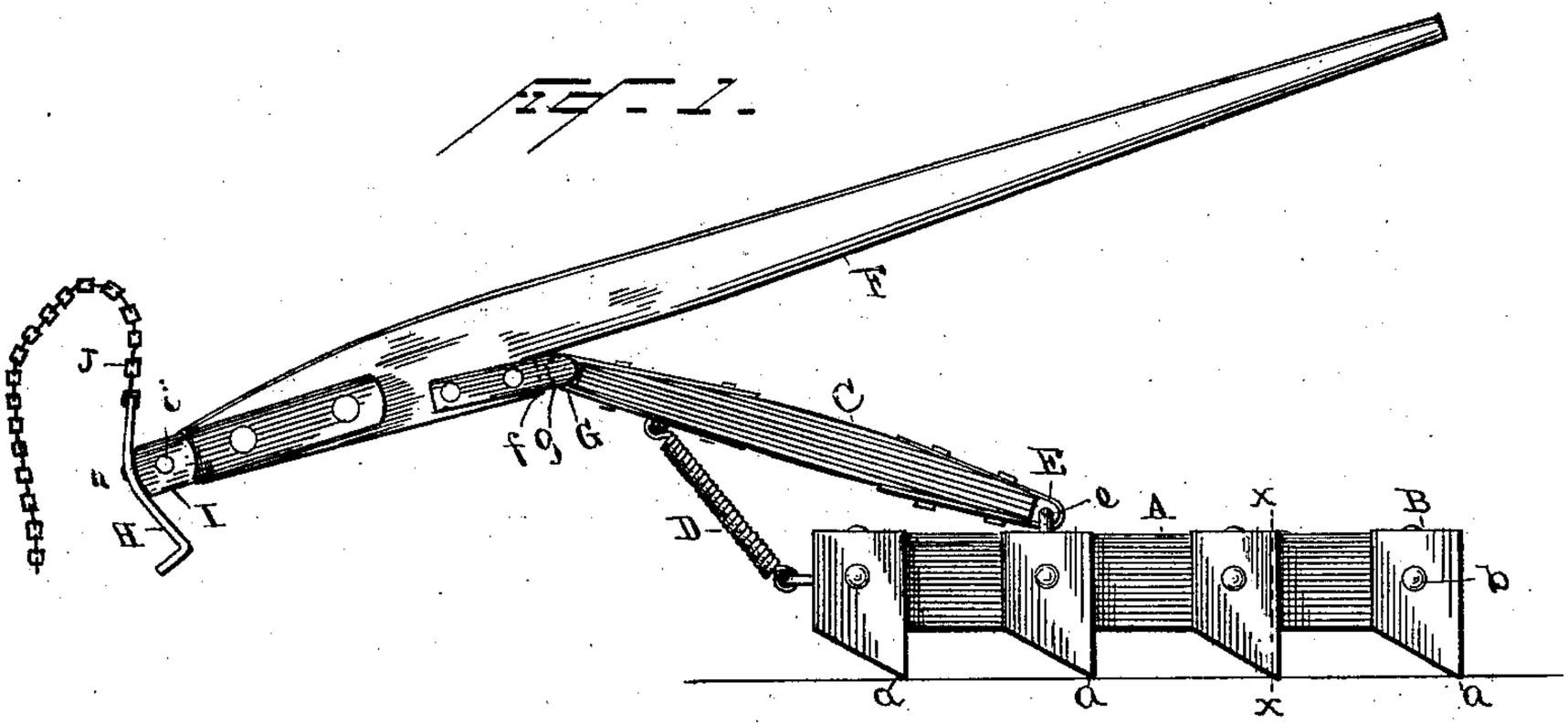

Fig. 2.

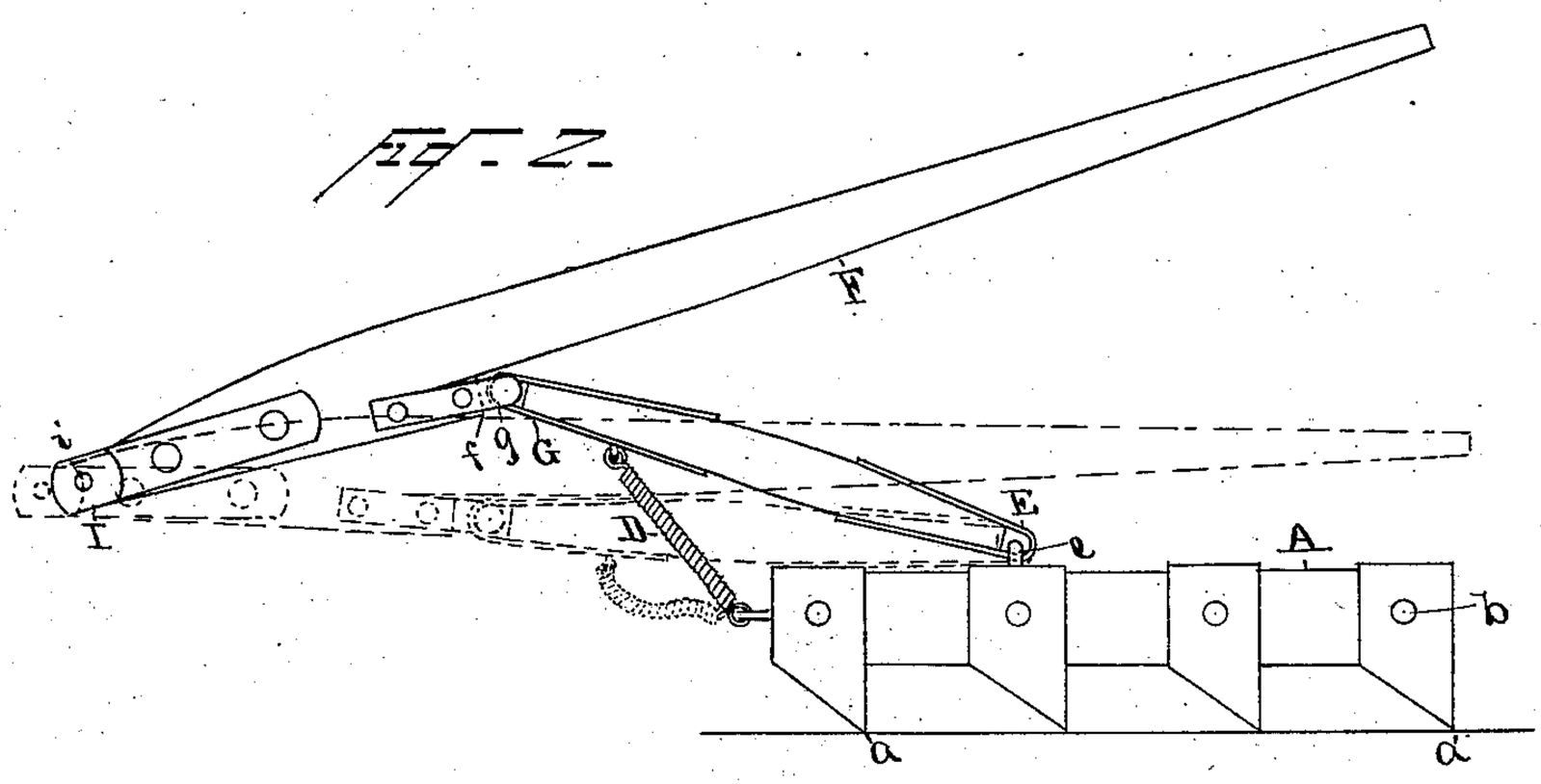

Fig. 3.

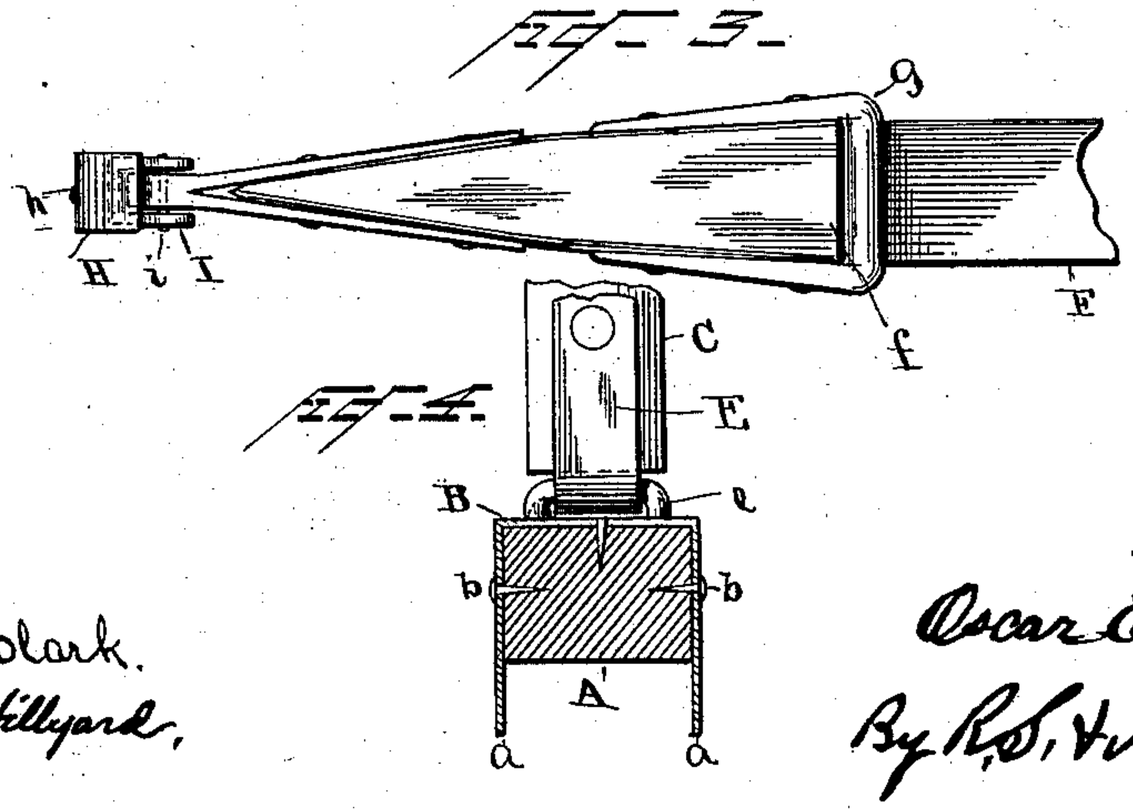

Fig. 4.

WITNESSES

Norris & Clark.

Van Buren Hillyard.

INVENTOR

Oscar E. Rose

By R. S. & A. P. Lacey

Attys.

UNITED STATES PATENT OFFICE.

OSCAR E. ROSE, OF TOPEKA, KANSAS.

CAR-MOVER.

SPECIFICATION forming part of Letters Patent No. 389,600, dated September 18, 1888.

Application filed December 30, 1887. Serial No. 259,414. (No model.)

To all whom it may concern:

Be it known that I, OSCAR E. ROSE, a citizen of the United States, residing at Topeka, in the county of Shawnee and State of Kansas, have invented certain new and useful Improvements in Car-Movers; and I 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 and figures of reference marked thereon, which form a part of this specification.

This invention relates to car-movers, and has for its object the production of a device which can be easily manipulated by one man for moving a loaded car, and which will be light, compact, efficient, and convenient of operation.

The improvement consists of a base or foot provided with teeth, which have their front edges sloped or beveled and their rear edges substantially at right angles to the under side of the base or foot, the sloping edges of the teeth permitting them to ride easily over the road-bed when the base is advancing, and the vertical edges offering resistance against the backward movement of the base or foot when the power is applied to propel the car, a standard pivotally connected with the base and normally inclining to a vertical line, a spring interposed between the standard and base for holding the base down when advancing to obtain a new purchase prior to applying the power, the lever pivotally connected with the standard and having a shoulder against which the end of the standard bears to relieve the strain from the connection between the lever and standard when applying the power, a plate pivotally connected with the end of the lever, and a chain for fastening the plate to the car to hold the lever firmly in position when operating the lever.

The improvement further consists in the novel features presently to be described, and more particularly pointed out in the claims.

In the drawings, Figure 1 is a side view of a car-mover of my invention; Fig. 2, a diagram of the device, showing its operation by dotted lines; Fig. 3, a bottom plan view of the front end of the operating-lever; Fig. 4, a cross-section of the base or foot on the line *x x* of Fig. 1, showing a portion of the standard.

The base or foot A is provided with a series of teeth, *a*, which are thin and wide to adapt them to cut their way into the earth the more readily, the front edges being sloped to allow them to ride over the road-bed when the foot or base is advancing, and the rear edges being at right angles to the under side of the base or foot to offer resistance to the backward movement of the base or foot when the power is applied to the operating-lever for propelling the car. The teeth are formed from flat bars, which are cut up into the required lengths and bent into the inverted-⊔-shaped-form pieces, B, and applied to the foot or base in such a manner that the closed end rests on top of the base or foot and the parallel limbs embrace the sides thereof, as shown most clearly in Fig. 4. The ends of the ⊔-shaped pieces extend beyond the under side of the foot or base and form the said teeth *a*. The pieces B embrace the foot or base on three sides, and are secured thereto by suitable devices, as spikes *b*.

The standard C, pivotally connected at its lower end with the foot or base by the strap E looping into the clip *e*, secured to one of the pieces B, inclines normally to a vertical line, and is connected with the base or foot by the spring D, which exerts a pressure to hold the standard and foot separated at their front ends and to keep the foot down on the road-bed.

The operating-lever F is pivotally connected with the top of the standard C by the clip G and strap *g*, and is reduced to form the shoulder *f*, against which the end of the standard bears when applying power to the said lever, thereby relieving clips G and straps *g* from all excessive strain. The plate H at the end of lever F is connected with the clip I by rivet *h*, and the clip I is pivotally connected with the lever by bolt *i*, to permit it to adapt itself to the movements of the said lever. The chain J, fastened at one end to one end of the plate H, is adapted to secure the plate to the car, and be secured at its other end to the opposite end of the plate.

To move a car, the end of the operating-lever F is placed against it and secured in position by the chain J, as hereinbefore described, and the foot or base is adjusted on the road-bed until the lever and standard assume about the position shown by full lines in Fig. 2. The lever and standard form a toggle-lever. Now,

by pressing down on lever F its end will be advanced, carrying with it the car-lever F and standard C, assuming the relative position shown by dotted lines in the said Fig. 2. On elevating the rear end of lever F, its front end being fixed to the car, the foot or base will be drawn forward a distance equal to the distance just traveled by the car. When the power is applied to the lever, the foot or base will become fixed by the teeth obtaining a new purchase on the road-bed.

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

1. A car-mover composed of a base having a series of teeth, a standard pivoted to the base and inclining to a vertical line normally, a spring interposed between the standard and base, the operating-lever pivotally connected with the top of the standard and having a shoulder for the end of the standard to bear against, the plate connected with the end of the operating-lever by a clip having a pivotal connection with the said lever, and the chain connected at one end with the plate, substantially as and for the purpose described.

2. In a car-mover, the combination, with the foot or base carrying the car-moving devices, of the teeth located on each side of the base, composed of thin and wide pieces of metal having their front edges sloping and their rear edges at substantially right angles to the under side of the base or foot, substantially as and for the purpose specified.

3. The combination, with the base carrying the car-moving devices, of the teeth composed of ⊔-shaped pieces of flattened metal embracing and secured to the base on three sides, and having their parallel sides extending beyond the lower side of the base and their front edges sloped, substantially as specified.

4. The combination of the base, the ⊔-shaped pieces having their lower ends forming teeth, the clip applied to one of the ⊔-shaped pieces, the standard hinged to the said clip, the spring, and the operating-lever pivotally connected with the standard and having a shoulder against which the end of the standard bears, substantially as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

OSCAR E. ROSE.

Witnesses:
MILO NORTON,
ANTON MYERS.