J. Walker,

Loading Locomotive Tenders,

No. 69,871, Patented Oct. 15, 1867.

Fig. 1.

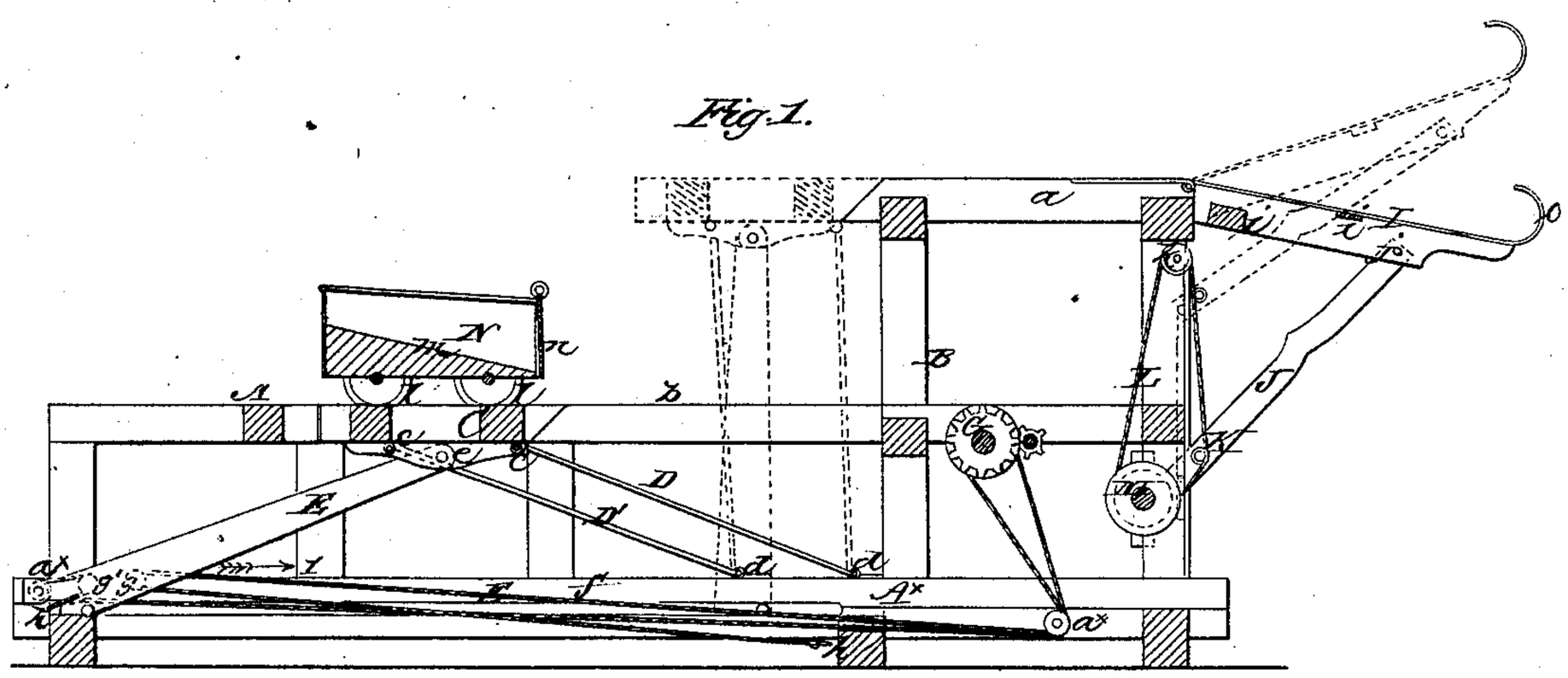
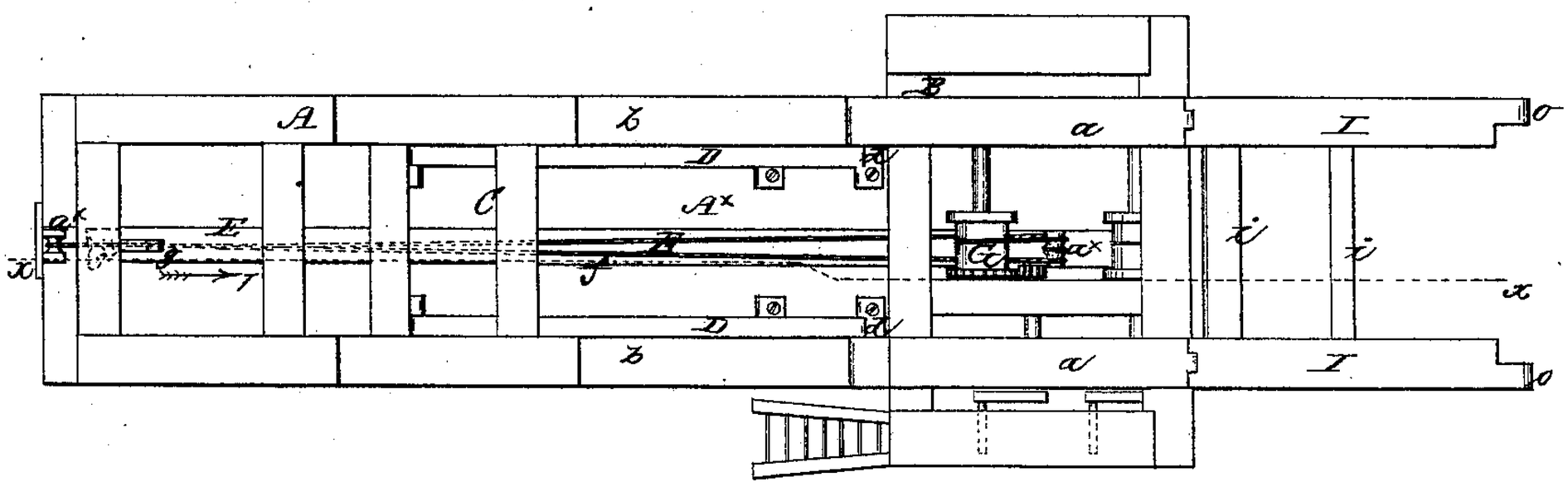


Fig. 2.



Witnesses
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United States Patent Office

JOSHUA WALKER, OF KANSAS CITY, MISSOURI.

Letters Patent No. 69,871, *dated October* 15, 1867.

IMPROVEMENT IN ELEVATOR.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOSHUA WALKER, of Kansas City, in the county of Jackson, and State of Missouri, have invented a new and improved Elevator; and that the following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvements, by which my invention may be distinguished from all others of a similar class, together with such parts as I claim, and desire to have secured to me by Letters Patent.

This invention relates to a new and improved device for elevating articles, and is more especially designed for loading the tenders of locomotives with wood or coal, although it is applicable to other purposes. The object of the invention is to economize in labor and facilitate the loading of boats, locomotive tenders, etc., etc. In the accompanying sheet of drawings—

Figure 1 is a side sectional view of my invention taken in the line *x x*, fig. 2.

Figure 2 a plan or top view of the same.

Similar letters of reference indicate like parts.

A represents a track for cars, which has an upright framing, B, at its terminus on which two ways or rails *a a* are secured, which are in line with or correspond in position to the rails *b b* of the track A. The track A has a section or portion, C, made separate from the main part. This section or portion C is of sufficient length to receive a car, and to its under side there are firmly secured by joints *c* the upper ends of two pairs of parallel arms D D D′ D′, the lower ends of the latter being attached by joints *d d* to the base or platform A× of the track A. The arms D are attached to one end of the section C, and the arms D′ to the opposite end, as shown clearly in fig. 1. E is an arm, the upper end of which is secured by a joint, *e*, to the under side of the section or portion C. The lower end of the arm E is fitted in a longitudinal slot, *f*, in the base or platform A×, and has two pulleys *g g′* in it, around which a rope, F, passes, and also around fixed pulley *a*×, in the base or platform, the ends of the rope being attached at the points *h h*, as shown clearly in fig. 1, and passing around a drum or windlass, G, in the framing B. The arm E, like the arms D D D′ D′, is inclined, but E has a reverse position to D D′. The part or section C of the track, when the loaded car H is upon it, is elevated by turning the windlass G from left to right, the lower end of the arm E being drawn in the direction indicated by the arrow 1, and the part or section C with its car raised to a level with the ways *a a* on the upright framing B, as shown in red in fig. 1, so that the car may be moved on the ways *a a*. I I represent two rails or ways, which are connected by one or more cross-ties *i*, and secured to the upper end of the framing B in line with the rails *a a* on the framing. Each of these rails or ways I has an arm, J, connected to it by a pivot, *j*, and the lower ends of the arms are fitted in grooves in the outer posts or uprights of the framing B, and are allowed to slide freely up and down therein. These arms J J are connected near their lower ends by a cross-rod, K, and to said rod there is attached a cord, L, which extends upward and passes around a pulley, *k*, attached to the upper part of the framing B, and also passes around a drum, M, in said framing, (see fig. 1.) N is a car, the wheels of which are provided with flanges *l*, to work at the outer sides of the rails. This car is provided with an inclined bottom, *m*, and has a suspended or swinging door, *n*, at one end.

The operation is as follows: The car N is loaded and moved forward upon the section or portion C of the track A, and by turning the windlass G the section C, with the loaded car upon it, is elevated, as shown in red in fig. 1, until the rails *b b* are brought in line with the rails *a a* of the framing B. The car N is then moved on the rails *a a*, the rails I I being elevated say to an angle of twenty-two degrees, as shown in red, by means of the windlass M. When the engine or boat to be supplied with fuel arrives under the rails I I, the latter are lowered by turning the windlass M to the position shown in black, and the fireman by means of a hook pulls the car N, which will run down on the ways I I, and the front wheels of the car will come in contact with the hooks *o* at the ends of the ways, and be suddenly stopped, the jar or concussion throwing open the door *n* and allowing the contents of the car to be discharged into the tender, boat, or other vehicle designed to receive it. The rails I I are then, by turning the windlass M, raised to the position shown in red, and the car N will descend and move back over the rails *a a* upon the section or part C, which, by turning the windlass G, is lowered to the level of the track A, and moved back to be filled, a loaded car being placed on C to be again raised and dumped

when required. This invention may be used for elevating all substances or articles. The flanges of the wheels may be placed either on their inner or outer sides, and the door *n* of the car may be provided with a catch or fastening so arranged as to open and liberate the door when the front wheels of the car come in contact with the hooks *o* at the ends of the rails I.

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

1. In combination with the car tracks laid at different heights, a movable section C arranged and applied in such a manner as to admit of being raised and lowered from one track to the other and carry the car from one track to the other, substantially as set forth.

2, The hinged rails or ways I I, arranged with the arms J J and windlass M, to operate in connection with the adjustable section C, substantially as and for the purpose specified.

3. The arrangement as shown of the arms D D′ and E with the windlass G, for the purpose of raising and lowering the section C, for the purpose set forth.

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Witnesses:

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