

(No Model.)

2 Sheets—Sheet 1.

G. P. WALKER.

TRACK FOR CASH AND PARCEL CARRIERS.

No. 282,417.

Patented July 31, 1883.

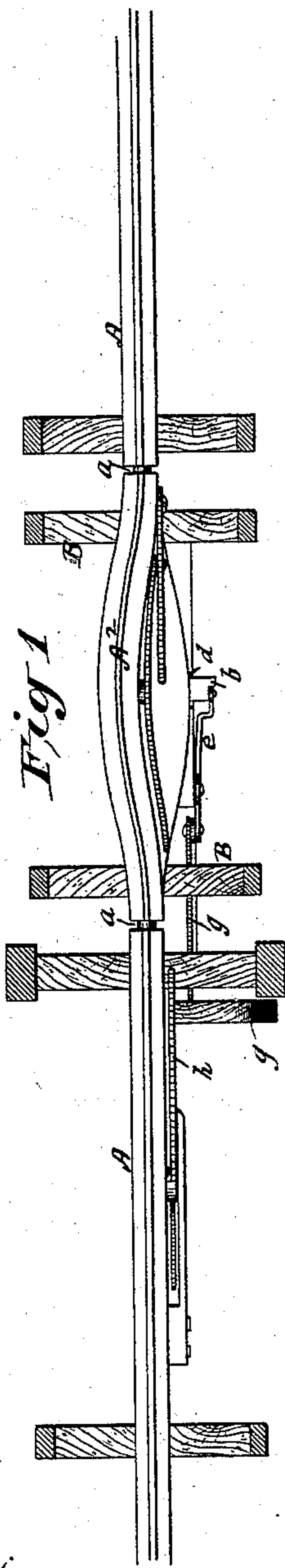


Fig 1

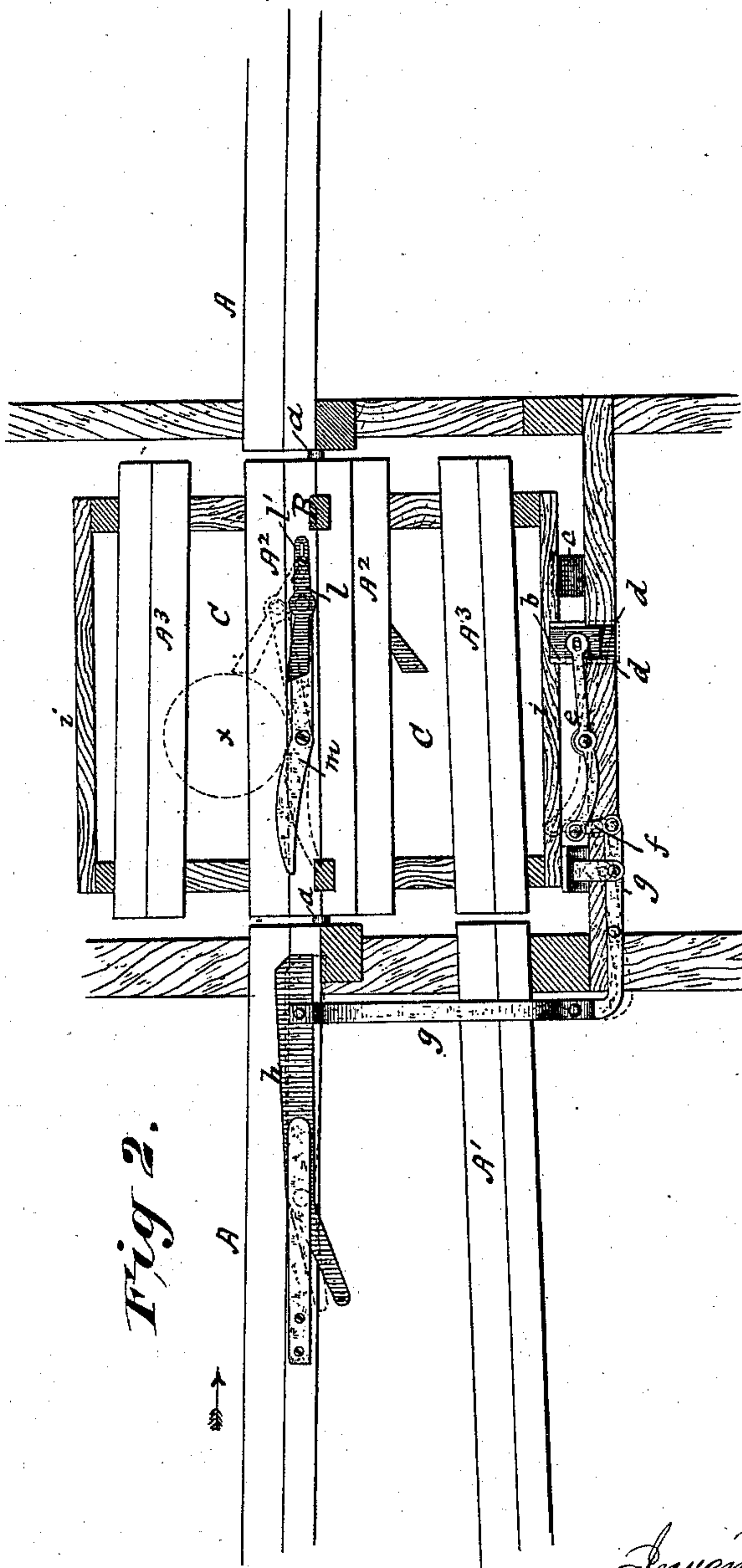


Fig 2.

Attest:

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Esq.

Inventor,  
George P. Walker  
by Marshall Bailey  
his attorney

(No Model.)

2 Sheets—Sheet 2.

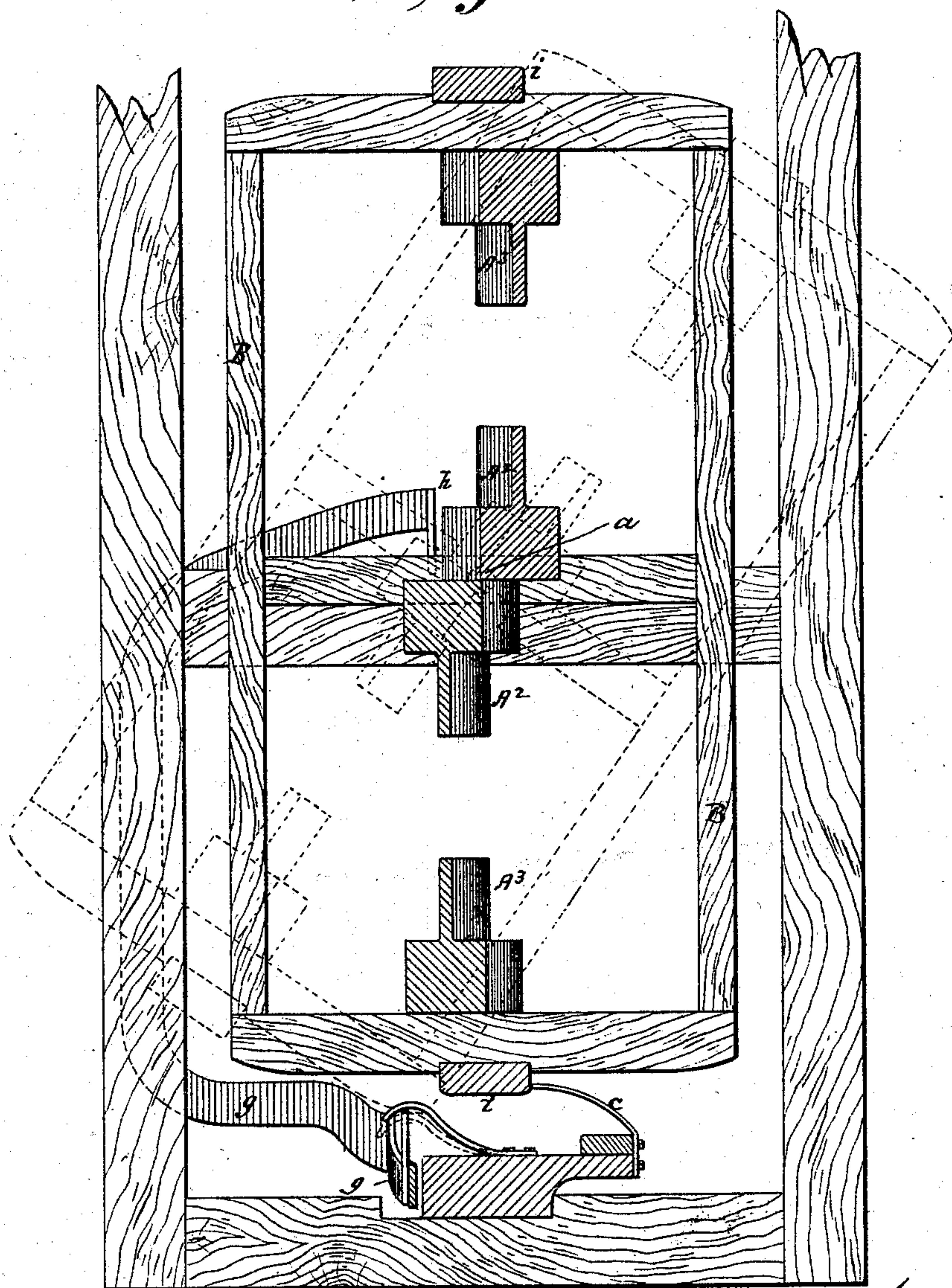
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*Fig 3.*



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# UNITED STATES PATENT OFFICE.

GEORGE P. WALKER, OF LOWELL, MASSACHUSETTS, ASSIGNOR OF ONE-HALF  
TO ABEL T. ATHERTON, OF SAME PLACE.

## TRACK FOR CASH AND PARCEL CARRIERS.

SPECIFICATION forming part of Letters Patent No. 282,417, dated July 31, 1883.

Application filed June 18, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE P. WALKER, of the city of Lowell, in the State of Massachusetts, have invented certain new and useful Improvements in Tracks for Cash and Parcel Carriers, of which the following is a specification.

My invention has reference to means for shunting the cash or parcel carrier from one track to another, and is characterized mainly by the combination, with the main track, of a cage-like track-section, normally forming a part or prolongation of the main track, and mounted upon a horizontal axis, so as to be capable of rotating in a plane at right angles with or transverse to the line of track. This rotating section contains two carrier-receiving compartments, each of which alternately is brought into line with the main track, and the compartments are so arranged with reference to the center of gravity that when the carrier enters one of them it will bring a preponderance of weight to one side of the axis of rotation, and thus cause the section (when released from control of suitable locking mechanism) to revolve. The section makes a half-revolution only, (being arrested at this point by automatic detent or locking mechanism,) thus reversing the position of the carrier-receiving compartments, bringing the empty compartment uppermost and in line with the main track, and carrying the filled compartment down in line with the branch or side track, onto which the carrier will be shunted from this compartment.

The invention can be readily understood by reference to the accompanying drawings, in which—

Figure 1 is a sectional plan view of so much of a cash-carrier track as needed for the purpose of explanation. Fig. 2 is a side elevation of the same. Fig. 3 is a transverse vertical section of the rotating cage-section on an enlarged scale.

The track may be supported in any of the usual ways, and can be of any suitable construction. In the present instance it is a single-rail track, the rail having the form in cross-section of an inverted T, adapted for a carrier having a peripheral central groove to fit upon the vertical web of the rail. This feature,

however, is not here claimed, inasmuch as I have made it the subject of another application for Letters Patent of even date herewith.

The stationary part of the main track is lettered A. The carriers, one of which is shown by dotted lines at *x*, Fig. 2, travel down it in the direction indicated by the arrow in Fig. 2. The rotating cage-like track-section is lettered B, and is placed in the line of track at the point at which it is desired to shunt or divert therefrom any particular carrier or set of carriers. It is mounted on pivots or gudgeons *a*, so as to be capable of rotary movement on a horizontal axis in a plane transverse to the line of track, and is composed of two exactly similar and diametrically-opposite carrier-receiving compartments, C. Each compartment consists of a track-section rail, A<sup>2</sup>, of the same form as the main-track rail, and a guard-rail, A<sup>3</sup>, of like form, which is placed directly over and in line with the section-rail A<sup>2</sup>, and at such distance therefrom that when the carrier *x* rolls from the main track onto the rotatable track-section it will engage not only the rail A<sup>2</sup> below, but the rail A<sup>3</sup> above, and will thus be held securely from falling out from the compartment during the rotary movement of the track-section. Section-rails A<sup>2</sup> A<sup>3</sup>, at their ends, are in line with the axis *a* and main track A; but between their ends they are laterally curved, as indicated in Figs. 1 and 3, so that the carrier, as it rolls along on the track-section, will be carried to one side of the axis of rotation, and will thus bring a preponderance of weight upon that side of the section. The effect of this upon the section—if the latter be free to move—will of course be to cause it to partially rotate and turn bottom side up, carrying the loaded compartment down in line with, for instance, a branch or side track, A', and the unloaded compartment up into line with the main track. Under this arrangement it will be seen that the section-rails A<sup>2</sup> A<sup>3</sup> of each compartment act alternately as track-rails and as guard-rails. When the compartment is up, A<sup>2</sup> is the track-rail and A<sup>3</sup> is the guard-rail. When the compartment is down, A<sup>3</sup> is the track-rail and A<sup>2</sup> is the guard-rail.

In order to insure the accurate working of the rotating section it is essential to employ



locking mechanism which will automatically lock the section in place at each half-revolution, and to combine therewith releasing mechanism operated by the moving carrier to unlock or release the section at the proper time.

It is manifest to those skilled in the art to which my improvements relate that various known devices for these purposes can be employed, and I do not therefore desire to be restricted to the special form of mechanism shown in the drawings in illustration of this part of my invention.

To arrest the movement of the section I make use of a front stop, *b*, and a spring back stop or catch, *c*. The front stop in this instance is positively operated. It slides vertically in suitable stationary guides, *d*, and is actuated by a pivoted lever, *e*, connected through a connecting-piece, *f*, to the end of a bent lever, *g*, pivoted at *g'* to some stationary part of the track or track-framing, and jointed at its upper end to a lever, *h*, pivoted at *h'* to the side of the main track *A*, and arranged so that it will project upwardly in a position to be struck and depressed by a moving carrier, when the stop *b* is raised into position to intercept the section *B*. The section is normally held in position by the stops *b* and *c*, which grasp between them the center lower strip, *i*, of the section *B*. After the stop *b* has been lowered it becomes necessary to again raise it before the released section has completed its half-rotation. For this purpose I make use of a presser-pad, *j*, which is struck by one of the corners of the revolving sections, as indicated in Fig. 3, and is thereby depressed, striking a finger, *k*, projecting upwardly from lever *g*, and consequently depressing the front arm of this lever with the effect of raising the stop *b*.

In order to arrest the carrier at the point where the lateral swell of the section-track rails is the greatest, I make use of an automatic carrier-stop consisting of a stop-finger, *l*, secured to the track-rail *A*<sup>2</sup> by a pin-and-slot connection, *l'*, and jointed to one arm of a lever, *m*, pivoted at *m'* to the section-rail *A*<sup>2</sup>, with its other arm normally projecting up, so that it will be acted on and depressed by the moving carrier.

The operation of the parts is as follows: The carrier, as it travels down the track, will, just before it passes onto the section *B*, strike and depress the lever *h* with the effect of drawing down the front stop, *b*, out of the path of the section, as indicated by dotted lines in Fig. 2. The lever *h*, stop *b*, and parts connecting the same remain in this position until positively actuated to move in a reverse direction, a friction pad or spring, *p*, being for this purpose caused to bear at all times laterally on lever *h*. After thus causing the withdrawal of the stop *b* the carrier rolls onto the section *B*, and, passing over the lever *m* depresses it and causes the stop-finger *l* to be thrown up, as indicated by dotted lines in Fig. 2, which stop-finger thus arrests the carrier at the center of

the section, where the lateral swell or curvature of the section-rail is greatest. There is thus a preponderance of weight on the side of the section opposite to that on which the stop *b* is situated, and as this stop is drawn down out of the way the section naturally revolves and turns bottom side up. In so doing its corner strikes and depresses the pad *j* and finger *k* with the effect of again throwing up the front stop, *b*, so that by the time its half-revolution is completed its shoulder *i* will bring up against the front stop, while the spring back stop, *c*, which had been depressed by the passage of the shoulder-piece *i* over it, will snap up in rear of the latter. Thus the section will be securely locked in place with the track-rail *A*<sup>3</sup> of the lower loaded compartment in line with the side or branch track rail, *A'*, and the carrier will at once trundle out from the section onto *A'*.

Carriers which are not so formed as to strike and depress the levers *h* and *m* will pass freely and without obstruction over the section *B* onto the main track *A* beyond. Consequently, when employing a number of these rotating sections in the line of track, carriers can be shunted and distributed at these various points along the line by varying the positions of these levers at the several shunting-points, and by correspondingly forming those carriers which are intended to act thereon.

Having now described my improvements, what I claim as new and of my own invention is—

1. The combination, with the main track, of a track-section rotating on a horizontal axis in a plane transverse to the line of track, means for locking the same in position upon each semi-revolution, and mechanism operated by the moving carrier to effect the release of the section from said locking device, substantially as and for the purposes hereinbefore set forth.

2. The combination, with the main track, of a track-section rotating on a horizontal axis in a plane transverse to the line of track, provided with two diametrically-opposite similar carrier-receiving compartments so formed that the carrier, when contained in one or the other of them, will bring the center of gravity to one side of the axis of rotation of the said section, and locking and releasing mechanism arranged to operate in connection with the said rotatable section and carrier, substantially as and for the purposes hereinbefore set forth.

3. The combination, with the rotating track-section, of a carrier-stop operated by the moving carrier in such manner as to be thrown into the path of the said carrier, substantially as and for the purposes hereinbefore set forth.

4. The positively-operated section-locking mechanism, adapted to be actuated in one direction by the moving carrier and in the opposite direction by the rotating track-section, in combination with the main track and the



rotating track-section, under the arrangement and for joint operation, substantially as hereinbefore set forth.

5 In a cash or parcel carrier track, the combination, with the stationary track and movable shunting track-section, of a stop carried by said section and operated by the moving carrier, to project into the path of and arrest the onward movement of said carrier, sub-

stantially as and for the purposes hereinbefore set forth. 10

In testimony whereof I have hereunto set my hand this 8th day of June, 1883.

GEORGE P. WALKER.

Witnesses:

A. T. ATHERTON,  
C. T. ATHERTON.