

No. 835,450.

PATENTED NOV. 6, 1906.

L. A. MARTIN.  
ELEVATED CARRIER.

APPLICATION FILED MAY 14, 1906.

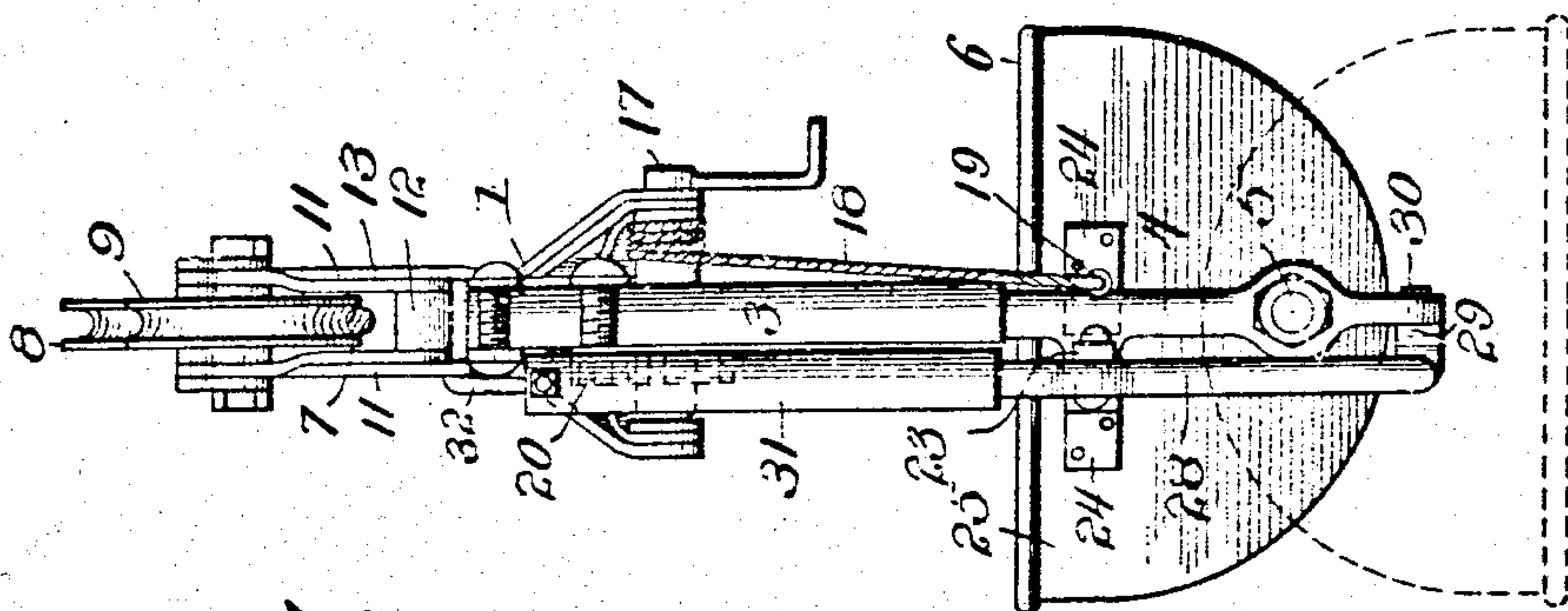


Fig. 2.

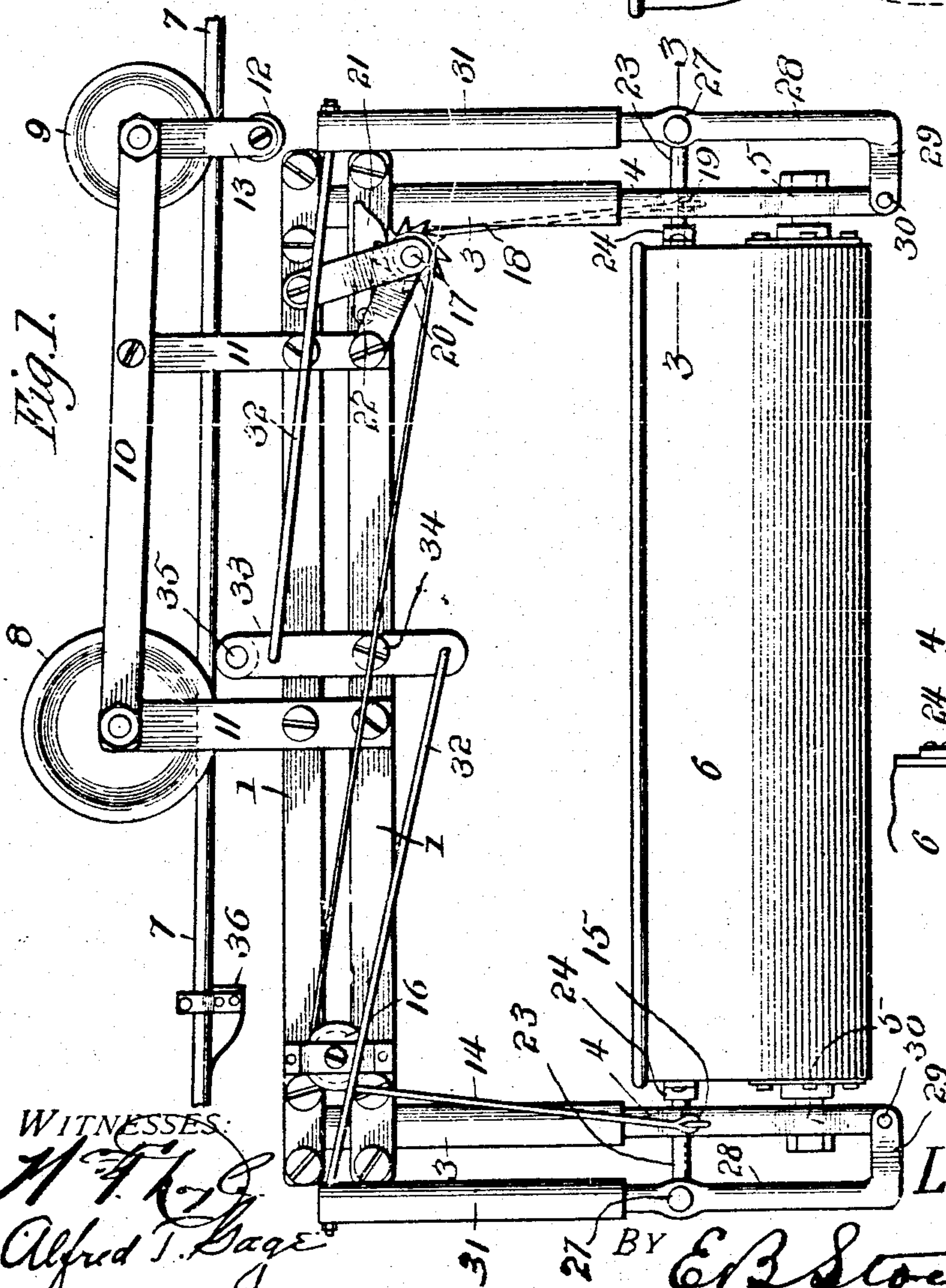


Fig. 1.

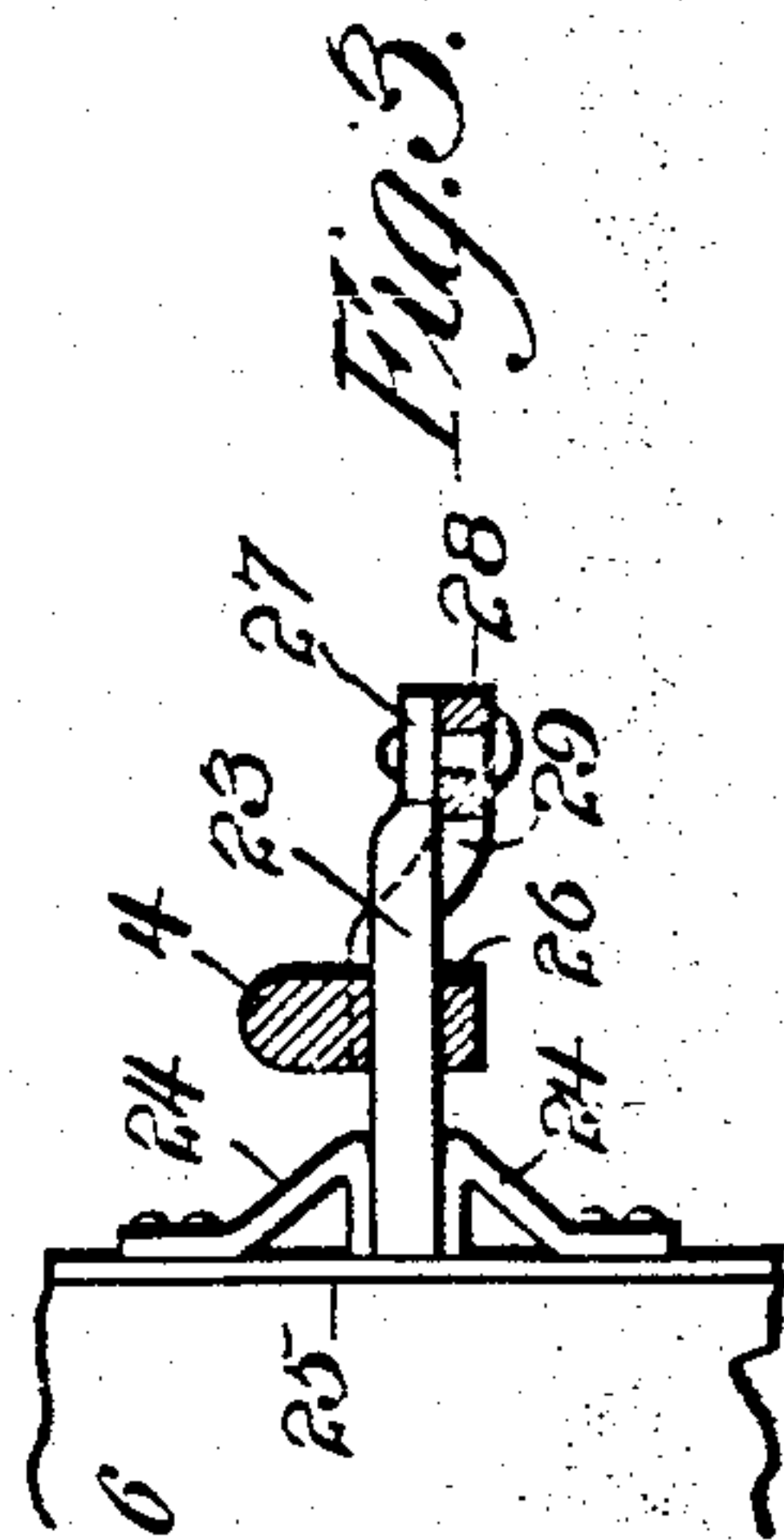


Fig. 3.

WITNESSES:  
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# UNITED STATES PATENT OFFICE.

LOUIS A. MARTIN, OF STEVENS POINT, WISCONSIN, ASSIGNOR OF ONE-HALF TO GEORGE E. VAUGHN, OF STEVENS POINT, WISCONSIN.

## ELEVATED CARRIER.

No. 835,450.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed May 14, 1906. Serial No. 316,826.

*To all whom it may concern:*

Be it known that I, LOUIS A. MARTIN, a citizen of the United States, residing at Stevens Point, in the county of Portage, State of Wisconsin, have invented certain new and useful Improvements in Elevated Carriers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to an elevated carrier, and particularly to a structure involving an automatic dump-bucket controlled by means carried by the track or way for the carrier thereof.

The invention has for an object to provide a novel and improved construction of carrier whereby the bucket or receptacle may be vertically adjusted or elevated relative thereto and the carrier maintained in a substantially horizontal position while traveling upon an inclined track or way.

Another object of the invention is to provide an improved construction and arrangement of latch mechanism for retaining the bucket in carrying position and for permitting the automatic dumping thereof when withdrawn from engagement with the bucket.

Other and further objects and advantages of the invention will be hereinafter fully set forth and the novel features thereof defined by the appended claims.

In the drawings, Figure 1 is a side elevation of the invention. Fig. 2 is an end view thereof, and Fig. 3 is a detail section on the line 3-3, Fig. 1.

Like numerals of reference indicate like parts throughout the several views of the drawings.

The numeral 1 designates the frame of the carrier, which may be of any desired construction or configuration and is provided at its opposite ends with depending hangers 3, preferably of tubular shape and adapted to receive the carrier-rods 4, having at their lower ends pivots 5 for the bucket 6. This carrier is adapted to travel in any desired manner upon the track or way, preferably one inclined in position, as shown at 7, and for the purpose of maintaining the bucket in a horizontal plane during its travel upon such inclined track the wheels 8 and 9 thereof are mounted in the frame 10 and at different distances from the top of the carrier 1, so

as to compensate for the inclination of the track 7. The wheel 8 is disposed substantially over the center of the bucket, so as to secure a bearing with the minimum of frictional resistance, while the wheel 9 prevents any longitudinal rocking of the carrier in its travel. The frame 10 is connected with the carrier by means of standards 11, and for the purpose of retaining the parts upon the track 7 a wheel 12 is disposed beneath the same and carried by the hanger 13, extending downward from the journal of the wheel 9.

The telescoping hangers 3 and rods 4 allow for the vertical adjustment of the bucket relative to the carrier in order that the same may be lowered to the ground for the purpose of loading and then raised so as to travel clear thereof. This elevation of the bucket is adapted to be accomplished by the cable 14, connected to a rod, as shown at 15, and extending over the bearing-pulley 16 to a winding-shaft 17. Leading to this shaft is a further cord or cable 18, connected at 19 to a rod at the opposite end of the bucket. The winding-shaft 17 is provided with a ratchet-wheel 20, adapted to be held in position by a pawl 21, pivotally mounted upon the carrier at 22, as shown in Fig. 1.

For the purpose of retaining the bucket in its normal position, as shown in Fig. 1, a latch-pin 23 is provided and adapted to engage between oppositely-disposed lugs 24, carried by the end wall 25 of the bucket. This pin extends through an opening 26 in one of the rods 4 and is pivotally connected at 27 with the operating-lever 28, which at its lower end is pivoted by the angular arm 29 to the bottom of the rod 4, as shown. The upper end of the lever 28 is provided with a telescoping casing 31, connected by the rod 32 with the trip-lever 33, which is pivotally mounted upon the carrier at 34 and provided with the contact-roller 35 at its free end, which in the travel of the carrier is adapted to engage the stop-block 36 upon the track and be thus shifted to withdraw the latch from the bucket. The bucket is pivotally mounted at one side of its exact center in the bearings 5, so that when this latch is withdrawn the contents of the bucket are dumped by gravity.

In the operation of the invention it will be seen that the bucket may be lowered to re-



ceive a load and then raised to its position relative to the carrier, which being forced out upon the inclined track travels thereon until the stop-block is engaged which shifts the trip-lever, and thus withdraws the latch from the bucket, permitting the same to automatically dump. The inclination of the track then returns the carrier and inverted bucket to its original position, where it may be lowered for reloading and reengaged with its holding-latch. The construction of the carrier-wheel with the balance-wheel at the rear prevents the machine from longitudinal oscillation or movement due to the impact or pressure necessary to carry the same along the track and also prevents any jumping or displacement of the same from the track.

The invention is especially adapted for use in stables and barns as a means for carrying manure. While the telescoping construction retains the parts always in connected relation against lateral movement while permitting a vertical adjustment toward and from each other, the latch mechanism is also constructed and arranged to permit this adjustment. It will also be noted that the disposition of the carrier-wheels at different points from the carrier equalizes the inclination of the track, so that the carrier and its bucket travel in a horizontal plane, thus preventing any spilling or dumping of the contents thereof in their movement along the track.

In order to effect an easy operation of the latch and trip, the former may be duplicated at the opposite ends of the bucket, as shown in Fig. 1, by connecting each latch with the opposite ends of the trip-lever.

Having now described my invention and set forth its merits, what I claim, and desire to secure by Letters Patent, is—

1. In an elevated carrier, a carriage provided with depending portions, a bucket and support mounted thereon for vertical movement, a transversely-disposed winding-shaft upon the carriage, elevating-cables extending from the opposite ends of the bucket-support to said shaft, and a latching mechanism

pivotaly mounted upon the carriage-support at the lower end thereof.

2. In an elevated carrier, a carriage, a bucket supported therefrom, an operating-lever pivotaly mounted at the lower end of the bucket-support, a latch-bar carried by said lever to engage said bucket, and means for actuating the upper end of said lever to operate the latch-bar.

3. In an elevated carrier, a carriage, a bucket supported therefrom, an operating-lever pivotaly mounted below the pivot of the bucket, a latch-bar carried by said lever and passing through the bucket-support to engage the bucket, and a trip-lever supported upon the carriage and connected by a rod with the operating-lever.

4. In an elevated carrier, a carriage, a bucket supported therefrom, a carrier-wheel mounted above the carriage centrally of the length of the bucket, a guide-wheel supported from the carriage at one end thereof, a hanger depending from the guide-wheel, and a roller carried by said hanger beneath the guide-wheel.

5. In an elevated carrier, a carriage having a supporting-wheel, tubular hangers depending from said carriage, rods telescoping into said hangers, a bucket pivotaly mounted at the lower end of said rods, elevating-cables extending from said rods to a winding-shaft carried by the carriage, a latch-pin adapted to engage one end of the bucket and disposed within a bearing carried by one supporting-rod thereof, an operating-lever for said latch pivotaly mounted at the lower end of said supporting-rod, a telescoping section at the upper end of said operating-lever, and a pivoted trip-lever disposed upon the carriage and connected to said telescoping section.

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

LOUIS A. MARTIN.

Witnesses:

STEVE HAUZINGER,  
H. J. FINCH.