

No. 785,490.

PATENTED MAR. 21, 1905.

W. HILLS.
TROLLEY MAIL BOX.
APPLICATION FILED NOV. 29, 1904.

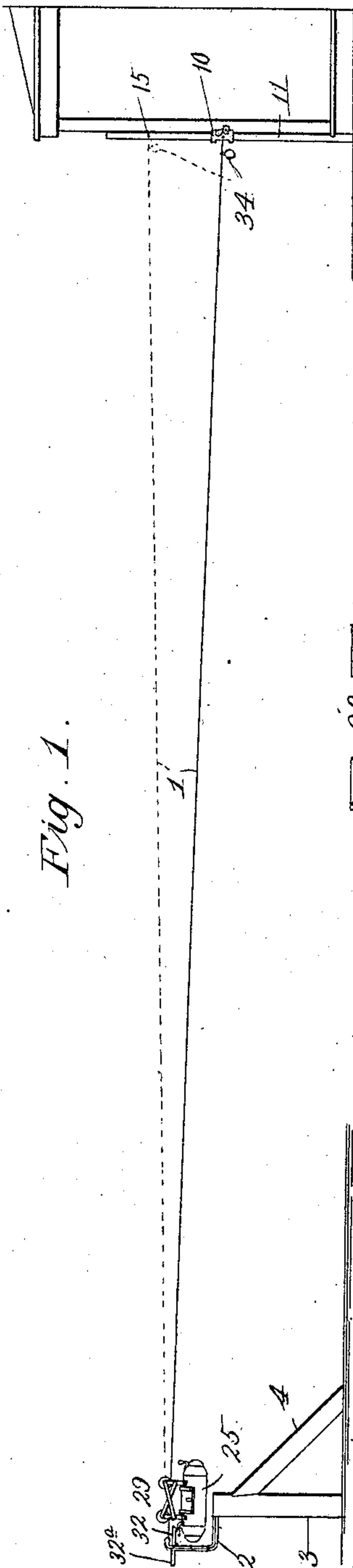


Fig. 1.

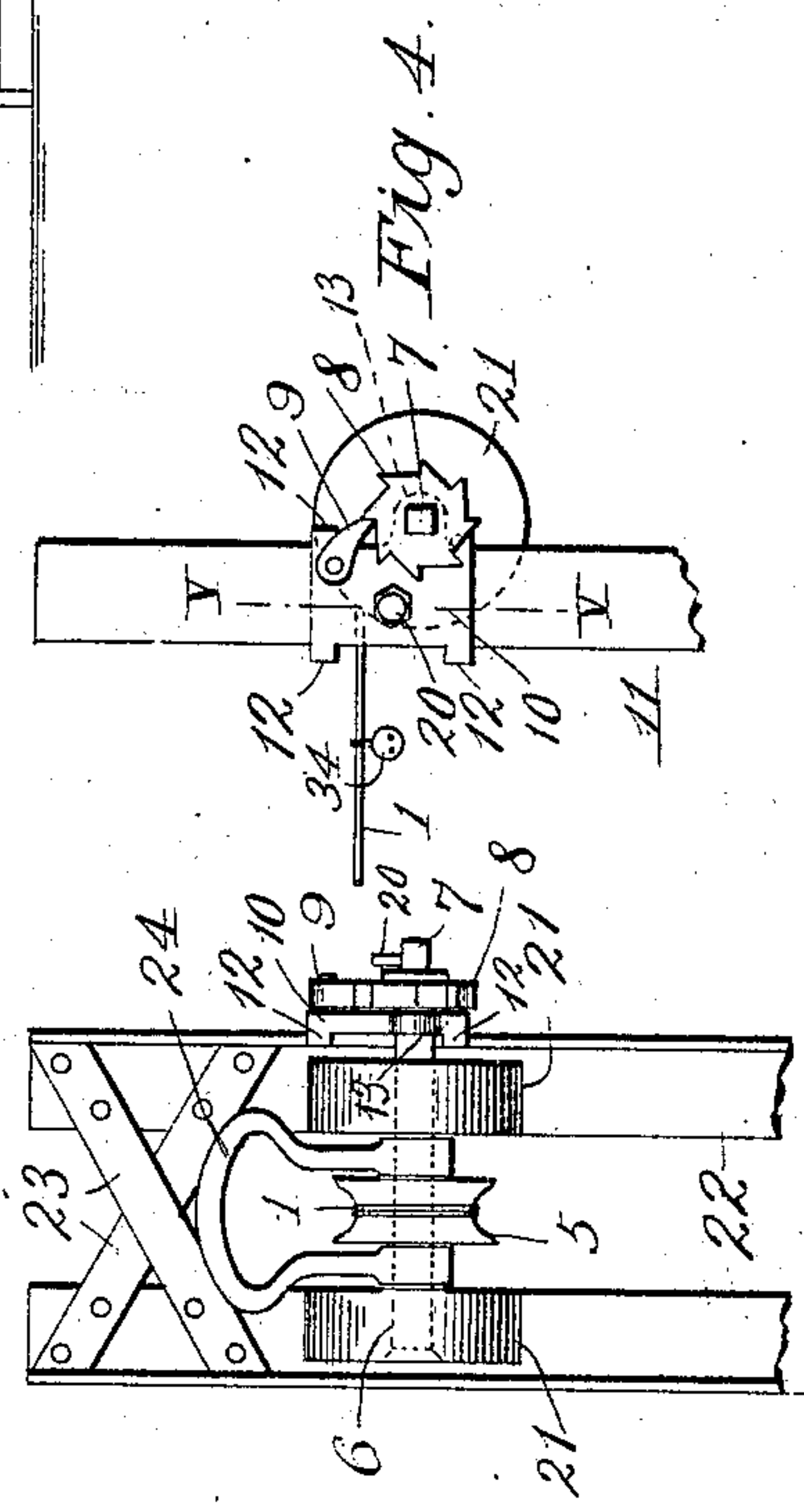


Fig. 3.

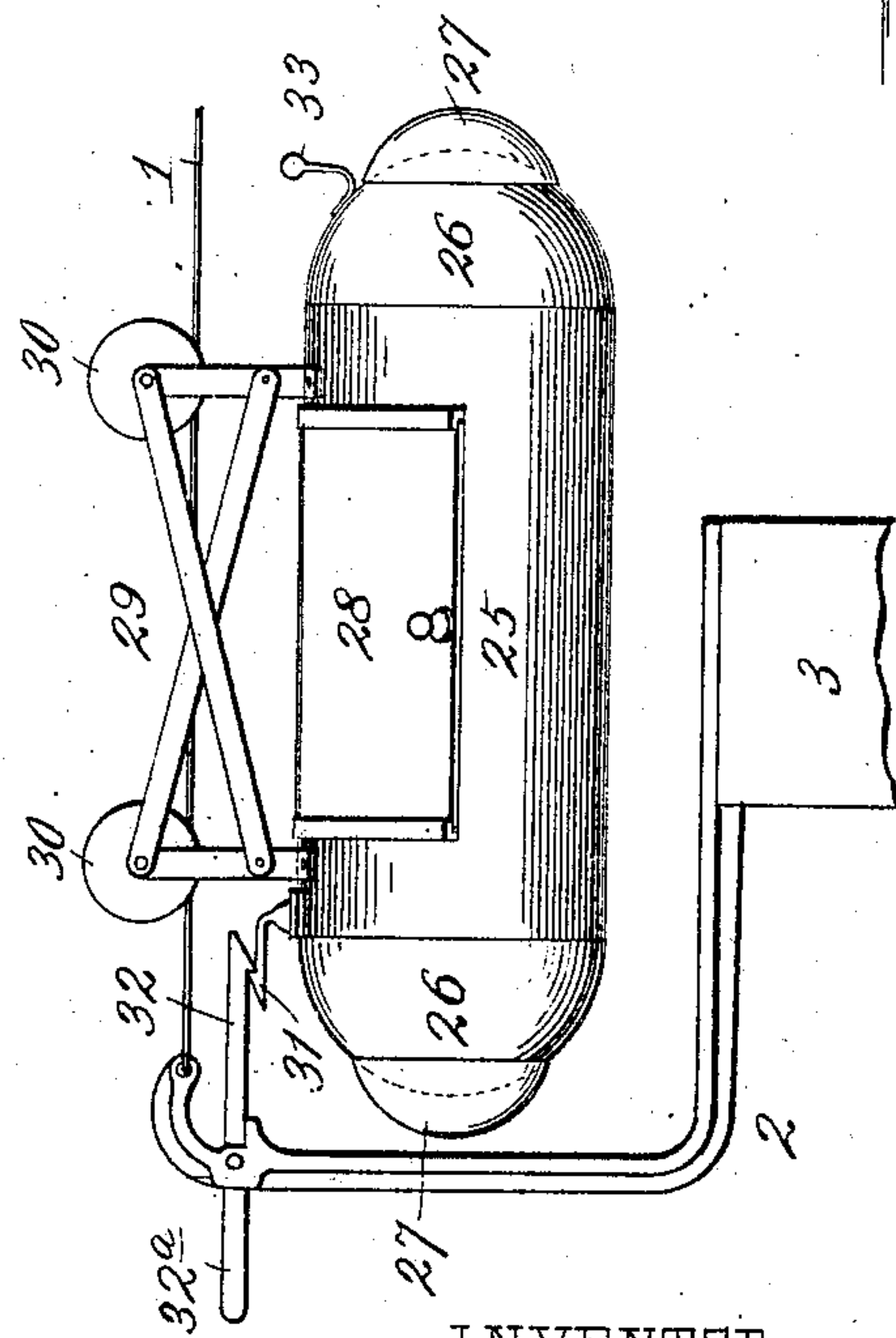


Fig. 2.

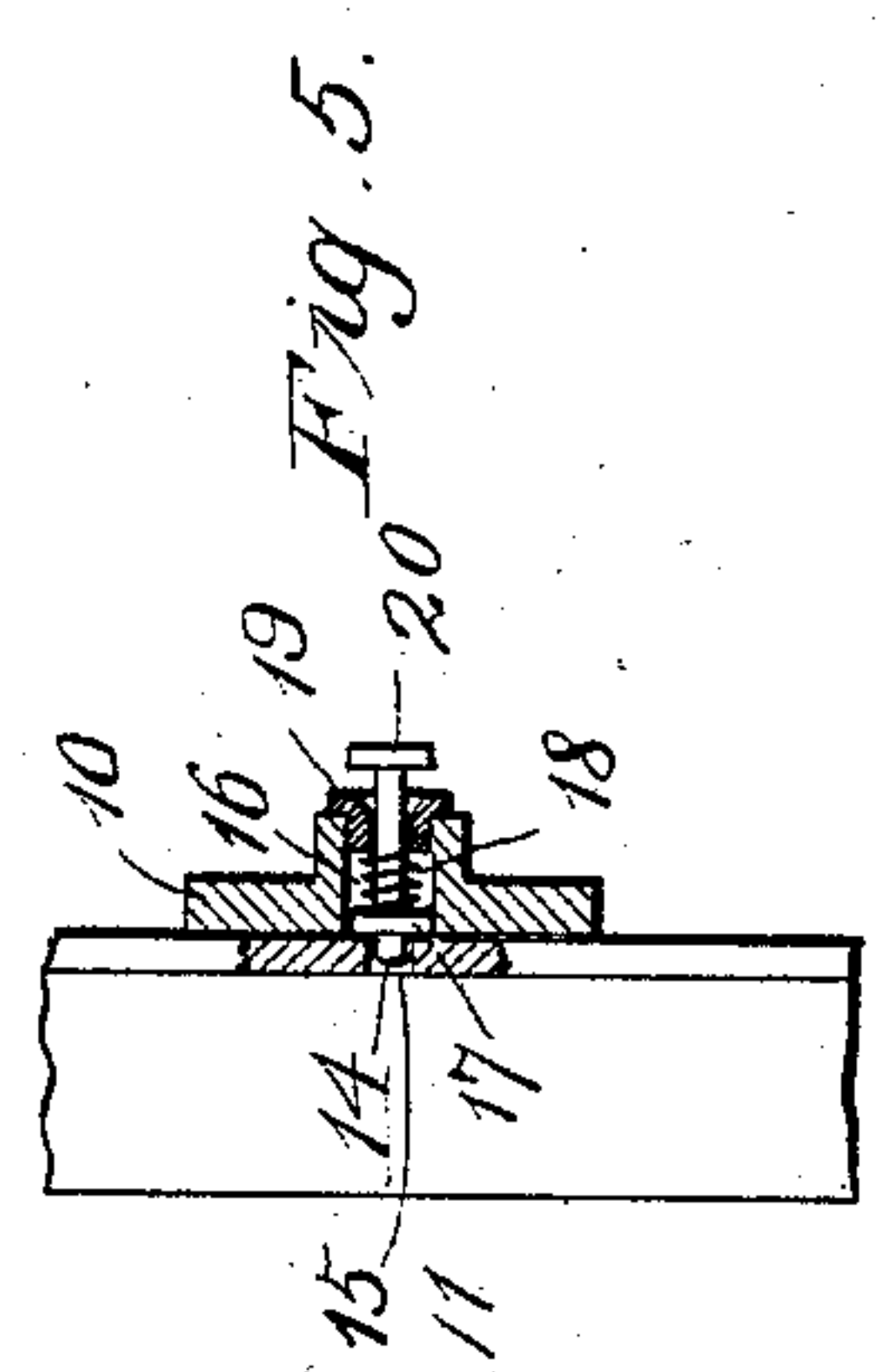


Fig. 5.

WITNESSES:

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UNITED STATES PATENT OFFICE.

WALLIE HILLS, OF KANSAS CITY, KANSAS.

TROLLEY MAIL-BOX.

SPECIFICATION forming part of Letters Patent No. 785,490, dated March 21, 1905.

Application filed November 29, 1904. Serial No. 234,814.

To all whom it may concern:

Be it known that I, WALLIE HILLS, a citizen of the United States, residing at Kansas City, in the county of Wyandotte and State of Kansas, have invented certain new and useful Improvements in Trolley Mail-Boxes, of which the following is a specification.

My invention relates to improvements in trolley mail-boxes for transmitting mail-matter between rural routes and houses adjacent thereto.

The invention consists in the novel construction, arrangement, and combination of parts hereinafter described, and pointed out in the claims.

In the accompanying drawings, which illustrate the invention, Figure 1 represents a side elevation of the apparatus. Fig. 2 is an enlarged side elevation of the mail-box forming part of the invention, located at the road end of the track. Fig. 3 is a rear elevation of a standard and mechanism for raising and lowering the house end of the track. Fig. 4 is a broken side elevation of the same. Fig. 5 is a vertical section taken on line V V of Fig. 4, showing the means whereby the mechanism for raising and lowering the house end of the track is locked from accidental movement.

In carrying out my invention I employ a track 1, composed of a single strand of wire attached at the road end of the track to the upper end of an L-shaped bracket 2, projecting forwardly from the top of a supporting-post 3, reinforced to resist the strain produced thereon by the track with a brace 4. The opposite end of track 1 is attached to a drum 5, rigidly mounted upon a short transverse shaft 6, terminating at one end in a rectangular portion 7 for the reception of a wrench, whereby the drum is turned in order to take up all slack occurring from the stretching of track 1. After said drum has been turned sufficiently to take up the slack in the track it is held from backward rotation by a ratchet 8, rigidly mounted upon shaft 7, and a gravity-pawl 9, engaging the teeth of said ratchet-wheel.

Pawl 9 is pivotally secured to a pawl-carrier 10, slidably mounted upon one side of a standard 11, which it embraces with four integral arms 12. Said carrier is also provided at its

lower rear side with an integral bearing 13, through which shaft 6 extends, so that when the latter moves either up or down with the ratchet-wheel said carrier will move therewith, and thus retain pawl 9 in engagement with the ratchet-wheel. The upward and downward movements of pawl-carrier 10 are limited by a stop-pin 14, which engages either of the two openings 15 at one side of standard 11. Stop-pin 14 extends through a central opening 16 in carrier 10 and is provided near its inner end with a rigidly-secured collar 17, against which one end of an expansion-spring 18 presses, so that the inner end of the pin will be automatically forced into either of openings 15 when brought into coincidence therewith. The opposite end of spring 18 bears against the inner end of nut 19, engaging the threaded end of opening 16. Pin 14 is provided at its outer end with a knob 20, which is grasped and pulled outwardly when it is desired to disengage the inner end of said pin from either of the openings 15.

21 designates a pair of rollers mounted upon shaft 6 and arranged to travel upon the inner sides of two angle-irons 22, forming standard 11 and connected at their opposite ends with braces 23.

24 designates a bail pivotally secured upon shaft 6 between the lower end of the drum. Said bail affords a convenient handhold in raising and lowering shaft 6 and the parts connected thereto.

25 designates a cylindrical mail-box having semispherical terminals 26, provided with semispherical resilient buffers 27, one of which contacts with bracket 2 when the mail-box reaches the road end of the track, while the other contacts with standard 11 when said mail-box reaches the house end of the track. Access is had to the interior of the mail-box for the insertion and removal of mail-matter through a sliding door 28, having its ends arranged in guides secured to the cylindrical portion of said box.

29 designates a truck from which the mail-box is suspended, provided with two grooved wheels 30, mounted upon track 1.

The mail-box is provided at one end with a hook 31, which is automatically engaged by

gravity-latch 32 when the mail-box reaches the road end of the track. Latch 32 is pivotally secured to the upper portion of bracket 2 and has a handle 32^a projecting outwardly within convenient reach of the mail-carrier. The mail-box is provided at its other end with a striker 33, which contacts with and rings a bell 34, secured to track 1, when said mail-box arrives at the house end of the track.

By employing L-shaped bracket 2 the mail-box is permitted to move out over post 3 to within convenient reach of the mail-carrier, so the latter may either insert or remove mail-matter from said mail-box without dismounting.

In practice mail is forwarded from the house by placing the mail-matter in mail-box 25, which latter descends by gravity to the road end of the track when the house end of the latter is elevated to the position shown by dotted lines in Fig. 1. When the mail-box reaches the road end of the track, gravity-latch 32 automatically engages hook 31 and prevents said mail-box from returning to the house end of the track when the latter is lowered to the position shown by full lines in Fig. 1 until released by the mail-carrier.

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

1. In an apparatus of the character described, a standard, a pair of rollers arranged to travel thereon, a shaft carried by said rollers, a ratchet-wheel rigidly secured upon said shaft, a pawl-carrier slidably arranged upon the standard and connected to the shaft, a pawl pivoted to said pawl-carrier and engaging the ratchet-wheel, and a wire track suitably secured at one end to the shaft.

2. In an apparatus of the character described, a standard, a pair of rollers arranged to travel thereon, a shaft carried by said rollers, a drum rigidly mounted upon said shaft, a ratchet-wheel also rigidly mounted upon said shaft, a pawl-carrier connected to the shaft, arms on said pawl-carrier slidably engaging the standard, a pawl pivoted to said pawl-carrier and engaging the ratchet-wheel, and a wire track attached at one end to the drum.

3. In an apparatus of the character described, a standard, a pair of rollers arranged to travel thereon, a shaft carried by said rollers, a bail pivotally secured to said shaft, a

ratchet-wheel rigidly secured upon said shaft, a pawl-carrier slidably arranged upon the standard and connected to said shaft, a pin carried by said pawl-carrier, a spring also carried by the pawl-carrier for pressing one end of said pin into engagement with openings in the standard, a pawl pivoted to said pawl-carrier and engaging the ratchet-wheel, and a wire track suitably secured at one end to the shaft.

4. An apparatus of the character described consisting of a wire track, a standard to which one end of said track is adjustably secured, an L-shaped bracket suitably supported and provided with an eye to which the opposite end of the track is attached, a gravity-latch pivotally secured to said bracket provided with a handle, a bell attached near one end of the track, a mail-box arranged to travel upon the track, a hook attached near one end of said mail-box adapted to engage the gravity-latch, and a striker secured near the opposite end of the mail-box adapted to contact with the bell.

5. In an apparatus of the character described, a wire track movably arranged at one end so that said end may be raised and lowered, an L-shaped bracket provided with an eye at its upper end to which the opposite end of the track is attached, a gravity-latch pivotally secured to the upper portion of said bracket and provided with an outwardly-extending handle, a mail-box arranged to travel upon the track, and a hook secured to said mail-box and adapted to engage said gravity-latch.

6. In an apparatus of the character described, a mail-box comprising a cylindrical portion, guides secured to said cylindrical portion, a sliding door having its opposite ends arranged in said guides, semispherical terminals closing the ends of the cylindrical portion, semispherical resilient buffers rigidly secured to the semispherical terminals, and a two-wheel truck secured to the top of the cylindrical portion, substantially as shown and described.

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

WALLIE HILLS.

Witnesses:

F. G. FISCHER,
R. E. HAMILTON.