

No. 847,070.

PATENTED MAR. 12, 1907.

J. F. HAYES.
CASH CARRIER.

APPLICATION FILED MAY 18, 1906.

2 SHEETS—SHEET 1.

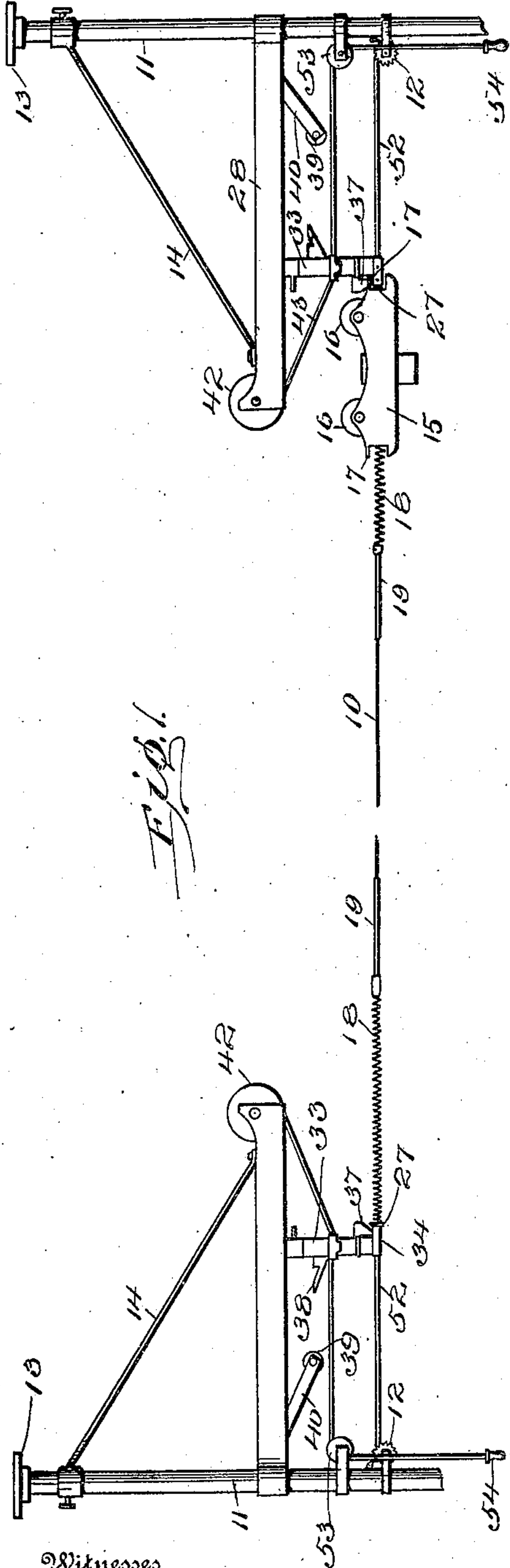


Fig. 1.

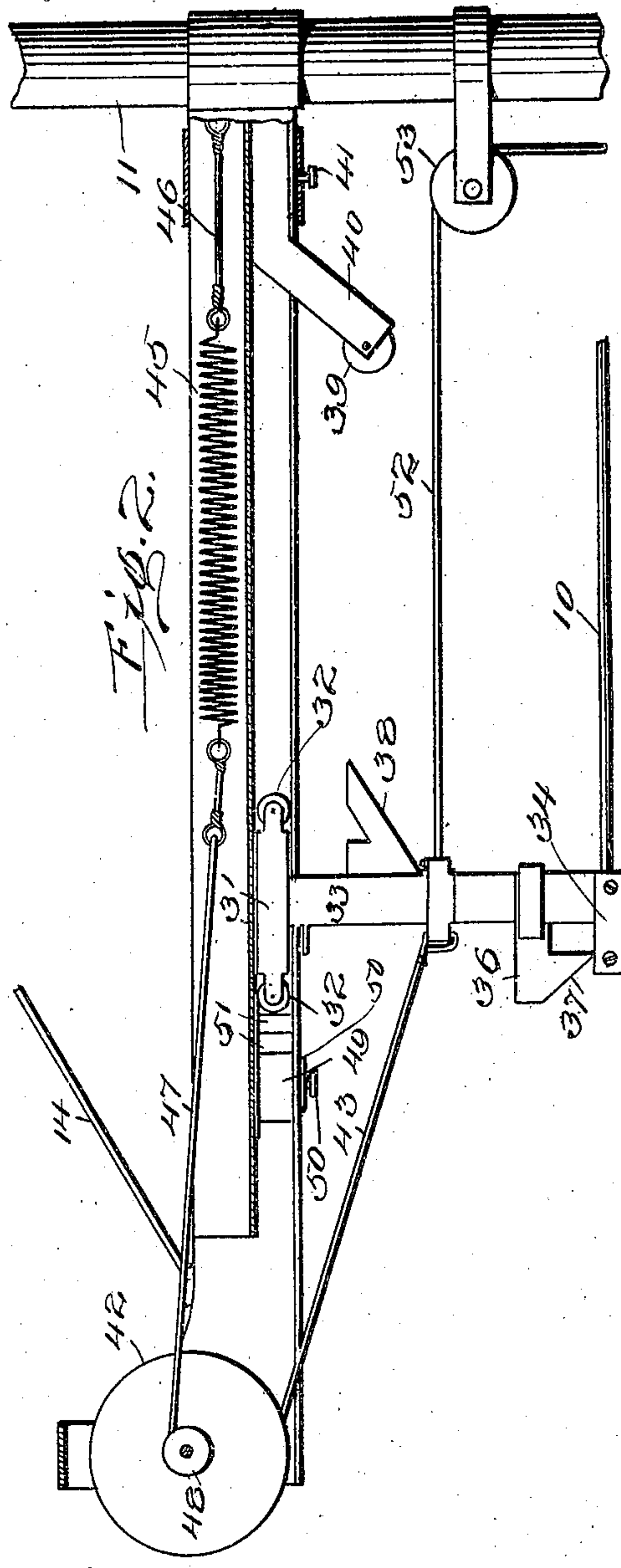


Fig. 2.

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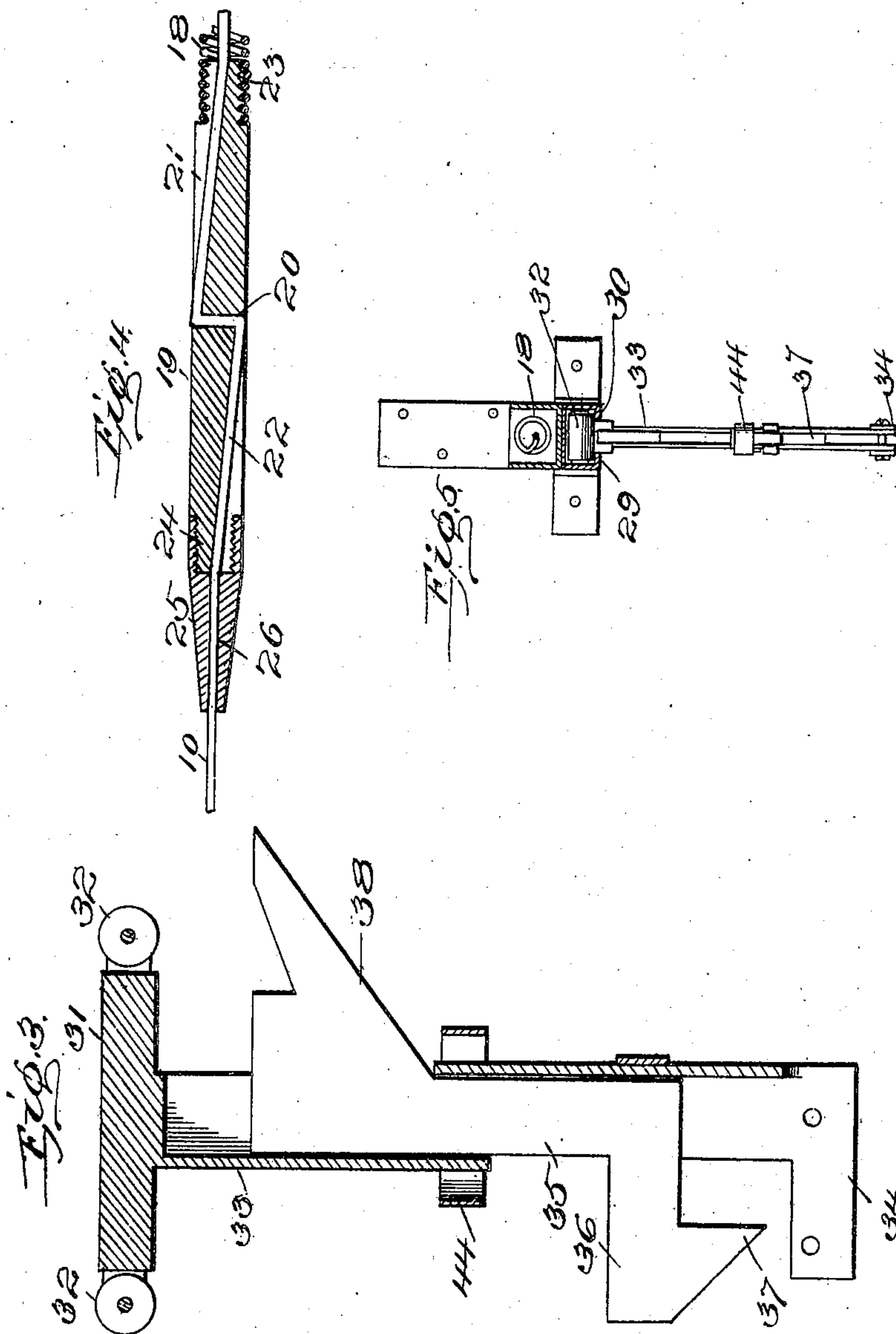
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UNITED STATES PATENT OFFICE.

JOHN F. HAYES, OF SCRANTON, PENNSYLVANIA.

CASH-CARRIER.

No. 847,070.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed May 18, 1906. Serial No. 317,576.

To all whom it may concern:

Be it known that I, JOHN F. HAYES, a citizen of the United States, residing at Scranton, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Cash-Carriers; and I do hereby 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.

This invention relates to cash-carriers for store service, and has for an object to provide a carrier of the class described embodying new and improved features of reliability, convenience, adaptability, and efficiency.

A further object of the invention is to provide in a carrier of the class described a carriage-actuating spring mounted upon a carrier-cable in an improved manner.

A further object of the invention is to provide in a carrier of the class described a carriage-engaging grip and grip-operating means of improved construction.

With these and other objects in view the invention consists of certain other novel constructions, combinations, and arrangements of parts, as will be hereinafter more fully described and claimed.

In the drawings, Figure 1 is a view of the improved carrier in side elevation. Fig. 2 is a view of the carriage-grip and grip-operating mechanism in longitudinal vertical section. Fig. 3 is a vertical sectional detail view of the carriage-grip. Fig. 4 is a detail longitudinal sectional view of the device for engaging the actuating-spring upon the carrier-cable.

Like characters of reference designate corresponding parts throughout the several views.

In its preferred embodiment the improved cash-carrier forming the subject-matter of this application comprises a carrier-cable 10, arranged in substantially the usual and approved manner by attaching by any convenient means to any conveniently-disposed stationary object, as the brace or strut 11, at opposite ends of the cable or otherwise. For exerting the necessary tension upon the cable any approved means may be applied thereto, as the ratchet-winch 12. The braces or struts 11 may be mounted in any approved manner, as by the plate 13, and rigidly secured, as by the inclined brace 14. A carriage 15, of any approved form and construction, is mounted for movement upon the

cable 10 and provided with the usual rollers 16 and with engaging loops or eyes 17.

Adjacent to each end of the cable is mounted a spring 18, encircling the cable 10 and secured thereon by means of a retainer 19. The retainer 19 is constructed from a substantially solid rod of metal provided adjacent its center with a transversely-extending opening 20 and with inclined grooves 21 and 22, communicating with the central opening 20 and extending to the opposite ends of the retainer 19. The opposite ends of the retainer 19 are provided with reduced portions 23 and 24, preferably screw-threaded externally. Upon the reduced screw-threaded portion 23 the spring 18 is secured by engaging the coils of the said spring upon the screw-threads of the portion 23. Upon the reduced end 24 is secured a tapered cap 25, provided with an axial opening 26, registering at its inner end with the inner surface of the groove 22. The retainer 19 is secured upon the cable 10 by having the said cable inserted through the opening 20 and moving the retainer angularly until the cable occupies the grooves 21 and 22 upon opposite sides of the said central opening. The spring 18 and the cap 25 are then seated upon their screw-threaded portions and the retainer thereby maintained in proper position upon the cable and to properly position the spring 18. The spring 18 at its end opposite the retainer 19 is provided with a head 27, arranged and proportioned to engage the carriage 15 when the said carriage moves over the length of the spring 18 and comes into contact therewith.

Adjacent the end of the cable 10, upon which is mounted the spring 18, is positioned a guide member 28, provided with spaced guide-flanges 29 and 30 upon its under surface, within which is slidably mounted a block 31, provided at its opposite ends with rollers 32 for the purpose of reducing frictional contact between the block and the guide-flanges. The block 31 is provided with a downwardly-extending arm in the nature of an angular sleeve 33, having at its lower end means, as the elbow 34, for slidably embracing the cable 10. Within the sleeve 33 is slidably mounted a detent 35, having at its lower end an outwardly and forwardly extending offset portion 36, provided with a downwardly-extending catch 37. The catch 37 is in position to engage with the loop 17 upon the carriage 15 when

the said carriage is in normal position in contact with the edge 27 of the spring 18. The detent member 37 is also provided with a rearwardly-extending cam-arm 38, in position for engagement with a roller 39, carried upon the downwardly-extending arm 40, movably and adjustably mounted upon the guide member 28 in any approved manner, as by means of a set-screw 41. At the forward end of the guide member 28 is journaled a pulley 42, having about its periphery a groove within which is wound a cord or cable 43, engaging at its free end with a loop 44 upon the sleeve member 33.

Within the guide member 28 and extending longitudinally thereof is mounted a coiled spring 45, secured at one end in any approved manner, as by the link 46, and carrying at its other end a cord 47, wound about the hub 48 of the pulley 42 in the direction opposite to the winding of the cord 43, so that the said cords 43 and 47 are held in tension by means of the said spring 45. The spring 45 and its associated cords 43 and 47 tend to move the block 31 and its associated parts forwardly of the guide member 28, and such forward movement is limited in any approved manner, as by a stop 49, adjustably secured within the guide-flanges 29 and 30 in any approved manner, as by the set-screws 50, and cushioned in any approved manner, as by the insertion of elastic disks 51. The sleeve 33 and its associated parts are moved against the tension of the spring 45, as by means of a cord 52, passing over a pulley 53 and provided with any approved means for conveniently grasping the said cord, as the handle 54. When the carriage 15 is moved into engagement with the head 27 and the catch 37, carried by the sleeve 33, the said catch will be raised and dropped into the loop 17 of the carriage by force of gravity, as shown in Fig. 1 at the right-hand end, which is the normal position of the carriage. It is to be understood that the carriage may be at either end of the cable 10 and in contact with either head 27. When it is desired to operate the carriage, the handle 54 is drawn downwardly, and by means of the engagement of the cord 52 with the sleeve 33 and the engagement of the catch 37 with the carriage 15 the said sleeve and carriage are moved in the direction of the pulley 53 against the tension of the spring 18. When the cam-arm 38 comes in contact with the roller 39, the detent 35 is moved upwardly within the sleeve 33 until the catch 37 is released from the loop 17, when the tension of the spring 18 is permitted to act upon the carriage to force the said carriage along the cable 10 and until it contacts with the head 27 at the opposite end, in which position it is engaged and retained by the hook 37. After the carriage 13 is released from the

catch 37 the handle 54 may be released and

the sleeve 33 and its associated parts moved forwardly into position for engagement with the carriage upon its return by means of the tension of the spring 45 and the cords 43 and 47.

The forward movement of the sleeve 33 and its associated parts may be adjusted by an adjustable movement of the stop 49, so that the said sleeve 33 and catch 37 will be limited in its forward movement to properly engage the loop 17 of the carriage upon its return. The tension to which the spring 18 is subjected prior to the release of the carriage may be adjusted to different lengths of cable or other conditions by an adjustable movement of the arm 40 longitudinally of the guide member 28, so that the carriage will be released at any predetermined and desirable point in its movement.

I claim—

1. In a cash-carrier, the combination of a cable, a resilient member mounted upon the cable, a guide member, an outwardly-projecting arm mounted upon the guide member and extending into engagement with the cable, a catch carried by the said arm, a carriage mounted upon the cable and engaging with the said catch whereby it is drawn against the action of the resilient member, and means whereby the carriage will be automatically released after being moved against the action of the resilient member.

2. In a cash-carrier, a cable, a resilient member mounted upon the cable, and a retainer for the resilient member comprising a bar extending longitudinally upon the cable and provided with a transverse opening through which the cable is inserted.

3. In a cash-carriage, a cable, a resilient member mounted upon the cable, and a retainer for the resilient member comprising a bar disposed longitudinally upon the cable and provided with a central transverse opening, and with reversely-inclined grooves communicating with the said opening and proportioned to accommodate the cable.

4. In a cash-carrier, a cable, a resilient member surrounding the cable, a retainer for the resilient member comprising a bar provided with a centrally-disposed, transverse opening and with reversely-inclined grooves communicating with the central opening and extending to the opposite ends of the bar, means upon one end of the bar for engaging the resilient member, and means upon the other end of the bar for positioning the said bar upon the cable.

5. In a cash-carrier, a cable, a resilient member upon the cable, a guide mounted adjacent to the cable, an arm slidably mounted upon the said guide member and extending to the cable, a catch member movably mounted upon the arm, and a carriage mounted upon the cable and provided with means for engagement with the catch where-

by it can be moved against the action of the before-mentioned resilient member.

5 6. In a cash-carrier, a cable, a resilient member mounted upon the cable, a carriage mounted and movable upon the cable, a guide member mounted adjacent the cable, a sleeve downwardly extending from the guide member and movable longitudinally thereof, a catch slidably mounted upon the sleeve and in position for engagement with the carriage, means to move the sleeve and engaged carriage upon the cable against the tension of the resilient member, and means to release the carriage.

15 7. A cash-carrier comprising a cable, a resilient member mounted upon the cable, a carriage mounted and movable upon the cable and over and in engagement with the resilient member, a guide member mounted adjacent the cable, a sleeve projecting from and longitudinally movable upon the guide member, means carried upon the sleeve detachably for engaging the carriage, means to move the sleeve and the engaged carriage rearwardly upon the guide member against

the tension of the resilient member, and means to release the carriage.

8. In a cash-carrier, the combination of a cable, a resilient member mounted upon the cable, a guide member located adjacent the cable, an outwardly-projecting arm movable longitudinally with respect to the guide member and extending into engagement with the cable, a catch movably mounted upon the before-mentioned arm and provided with a trip, a carriage mounted upon the cable and engaging with the catch upon the before-mentioned arm whereby it is drawn against the action of the resilient member, and means carried by the guide member for engaging the trip and releasing the carriage after the latter has been moved against the action of the resilient member.

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

JOHN F. HAYES.

Witnesses:

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FRANK W. BEAVER.