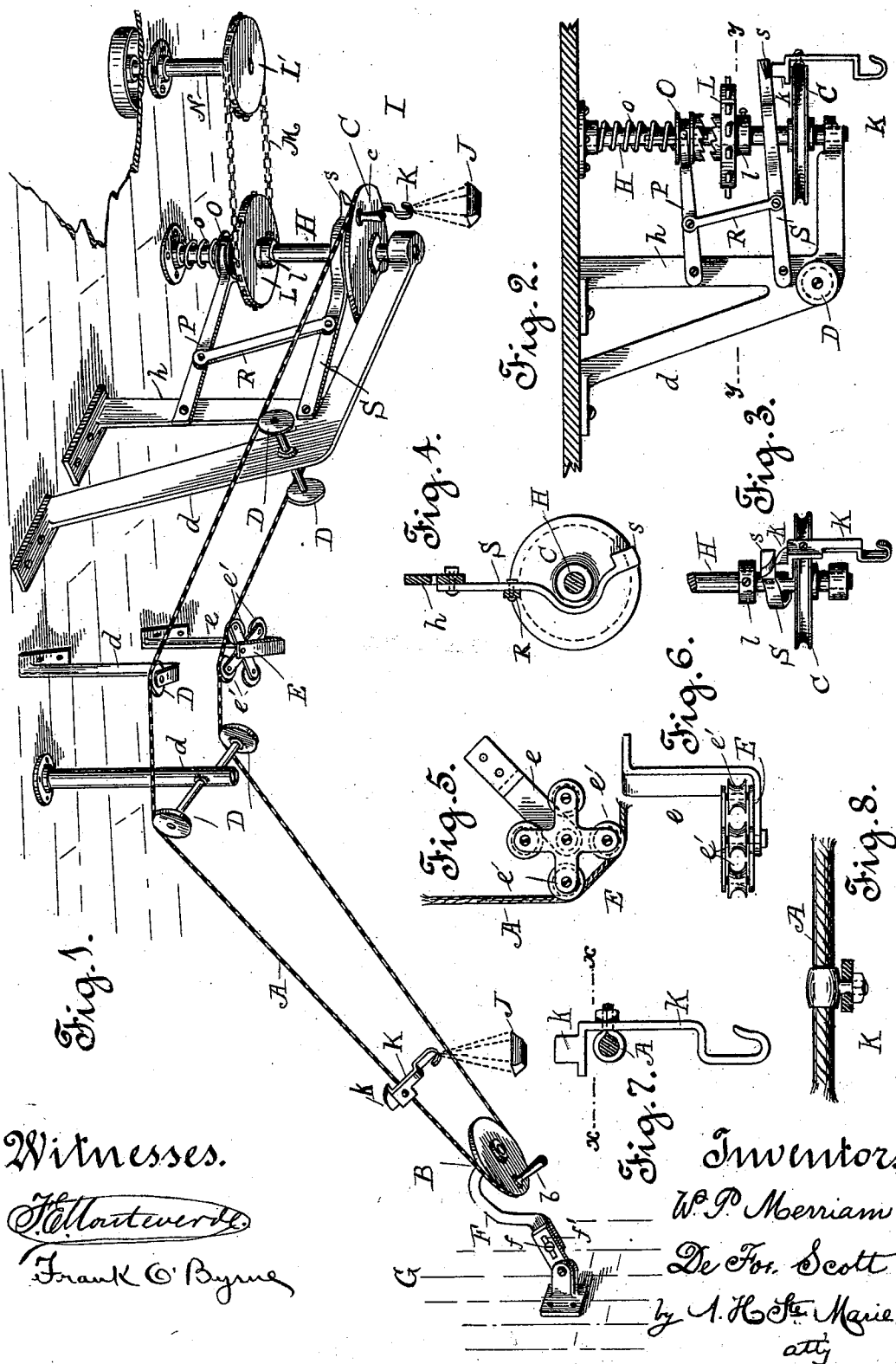


(No Model.)

W. P. MERRIAM & DE FOE SCOTT.
PARCEL AND CASH CARRIER.

No. 548,261.

Patented Oct. 22, 1895.



Witnesses.

J. H. Marten

Frank C. Byrne

Inventors

W. P. Merriam

De Foe Scott

by A. H. St. Marie
att'y

UNITED STATES PATENT OFFICE.

WILLIAM P. MERRIAM AND DE FOE SCOTT, OF SAN FRANCISCO, ASSIGNORS
OF ONE-THIRD TO OREN J. MULLEN, OF OAKLAND, CALIFORNIA.

PARCEL AND CASH CARRIER.

SPECIFICATION forming part of Letters Patent No. 548,261, dated October 22, 1895.

Application filed January 3, 1895. Serial No. 533,705. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM P. MERRIAM and DE FOE SCOTT, citizens of the United States, and residents of the city and county of San Francisco, State of California, have invented certain new and useful Improvements in Parcel and Cash Carriers, of which the following is a specification.

This invention relates to devices employed for conveying the cash given in payment for goods bought at the sales' counters of a store, as also the goods themselves, to the cashier's desk and wrapping-counter and afterward returning the cash-box with the change, if any, and the goods made up in suitable packages.

The object of our said improvements is to provide a novel mode of construction for this class of devices which will enable them to take packages or cash, or both, to an elevation, as well as down an incline, and around curves, angles, and corners, as the peculiar structure or lay of any given store may possibly require.

A further object is to provide against the wear and tear or misuse of the working parts of parcel and cash carriers when there is nothing to convey, or after the things conveyed have reached their destination, by supplying means for automatically disconnecting the carrier-propelling mechanism from the source of power.

Referring to the accompanying drawings, which form part of this specification, Figure 1 is an overhead perspective view giving a general outline of our improved carrier. Fig. 2 is a broken side elevation of the devices used in working and stopping the same. Fig. 3 is a front elevation of part of said working and stopping devices. Fig. 4 is a top view of the construction shown at Fig. 3, taken from the line *y y*, Fig. 2, looking downward. Fig. 5 is a plan of an angle-block or multiple sheave used as a guide for our carrier in certain places. Fig. 6 is a side elevation of said block or sheaves. Fig. 7 is an edge view of a basket-hook and rope-clamp forming part of our said carrier; and Fig. 8 is a sectional plan taken on the line *x x*, Fig. 8.

The letter A represents an endless cable or rope passed around grooved pulleys B C. These pulleys are located in different planes,

so that the cable will run up and down an incline from one to the other. Sheaves D and an angle-block E are also provided for the cable to ride upon and cause it to be deflected from a straight course, thus indicating that it may be placed in any convenient position and led in any desired direction. The lower pulley B is mounted upon the end of a hinged bracket F, fastened to a side wall, as at G, somewhere by the side of a sales' counter within easy reach of a salesman, while the upper one C is secured firmly to an upright shaft H, to be found by the package-counter in the cashier's department, as at I, at any suitable height above the floor. Hangers *d e h* or equivalent supports are provided to properly sustain the sheaves D, angle-block E, and vertical shaft H.

The goods sold and accompanying cash to be transmitted by the salesman to the cashier and the cash-box and packages sent back by the latter to the former are carried in baskets J that are hung on hooks K, securely fastened to the cable and placed at opposite points or at equal distances apart thereon, so that one may always be at the disposal of either the salesman or the cashier after the other has been sent to the opposite end of the line.

Motion is imparted to the cable in order to carry the baskets back and forth by rotating the vertical shaft H, which is connected by sprocket-wheels L L' and a chain M to a driving-shaft N, run by a motor or other power adapted to accomplish the required work. The wheel L runs loose on the shaft H, on which it is held in position by a collar *l*, set under it. This wheel is in constant motion, being driven by the chain M from the main driving-wheel L', and it is provided with a clutch-gear, through the medium of which it can be engaged by a clutch O, placed on the shaft H and secured thereto by a key in such a manner that it may revolve with it. The clutch being dropped into place in the wheel L—that is to say, coupled with said wheel—it turns the shaft H and the pulley C, carried by the latter, and thereby sets the cable in motion, consequently shifting the hooks K and carrying the baskets and their contents to and from the package-counter. Having a hook at each end or by each pulley with a detachable

basket makes it convenient for a second basket to be sent while the other, which is taken off, is being attended to. The clutch is pressed downward upon the sprocket-wheel L by means of a spiral spring *o*, coiled around the shaft H and set between that shaft's upper bearing and the upper side of the clutch, the normal condition of which is therefore to remain coupled with the wheel L. It is thrown out of gear or uncoupled through the agency of a lever P, pivotally connected with the hanger *h*, that supports the shaft H and joined by a link or bar R to a lower lever S, also pivotally connected with the hanger *h* and extending across the upper side of the pulley C, both levers being thus adapted to swing in a vertical plane and move up and down together, carrying with them the clutch along the shaft H. The levers P S are operated by a tripping device or lift *k*, formed on the upper end of the hooks K and projecting above the cable in such a way that when the hook and lift are brought around the end of the lever S, which is enlarged and rounded at *s*, as shown, is thrown up, and with it the bar R and clutch-lever, thereby throwing up the clutch, arresting the shaft H, and stopping the movement of the pulleys and cable. To set the cable in motion again, the hook and lift are forced past the end of the trip-lever S, when the spring *o* and the weight itself of the interconnected levers will throw back the clutch into engagement with the wheel L and set the shaft and connected pulley turning. The starting of the cable is effected by means of small knobs or handles *b c*, attached, respectively, to the pulleys B C on the under side, and which are provided to give the pulleys a turn far enough to throw the lift from under the lever, when the clutch drops at once into place and remains closed until the lower basket-hook reaches the pulley, and the lift on it once more raises the levers and, lifting the clutch, stops the cable. The connection between the lifts and the enlarged end of the trip-lever is such that a slight touch on either handle *b c* will throw the clutch into gear and start the hooks on the cable and their suspended baskets forward on their journey, speedily sending them from one pulley to the other. The lower pulley B, being hung on a hinged bracket, allows the cable to adjust itself as each basket leaves or returns. The cable is also kept taut by means of this bracket, which can be moved either forward or backward within its fastenings, to which it is secured by a set-screw *f*, passing through a slot *f'*, and can thus fill the office of a cable-tightener.

The angle-block E is provided, mainly, for inside curves. The arms or members of which it is composed have each a loose pulley or sheave *e'*, so the cable may run easily over it when in motion. The block itself remains stationary, except when the hooks, which are on the outside of the cable, pass this point. Here they drop in between the arms of the

angle-block, which then turns about a quarter around, letting them by without displacing the cable or stopping it. The hooks and lifts thereon are so arranged as to pass readily over the sheaves, notwithstanding curves and elevations.

It will be observed that the chain on the main driving-wheel can be used singly to turn any desired number of cable-pulleys—that is, it can be passed around a series of wheels like C, located on suitable shafts, each provided with a cable running over different sets of pulleys to different parts of a store, thus concentrating the various lines and economizing the space required for the driving mechanism needed to run the same.

Among other advantages to be gained by the use of our improved carrier is the following: In many stores it is not possible to have a package-counter or cash-desk conveniently located without elevating it, and it oftentimes occurs that sales' counters cannot reach it with an ordinary carrier, that cannot be sent around corners or up an incline, and it necessitates the employment of cash boys.

With this invention the carrier can be made to travel in any direction and in any position, though it is not necessary that it should be put in an elevated position at all times, as it can be run on a level as well. It is also adapted to carry heavier packages than the ordinary carrier, being equipped with a power-driven cable instead of a simple wire, upon which articles descend by gravity.

Having now described our invention, what we claim, and desire to secure by Letters Patent of the United States, is—

1. The combination of a suitably-supported cable, a clutch and intermediate mechanism for connecting the cable with and disconnecting it from a motive power, a carrier moved by the cable, and a traveling clutch-working device controlling the movement of the cable and carrier.

2. The combination of an endless cable, pulleys therefor, whereby movement is imparted to the cable, a normally-coupled clutch controlling the application of power from a motor, a carrier drawn by the cable, and a traveling tripping device adapted to uncouple the clutch and thereby stop the cable wherever it is desired to stop the carrier.

3. The combination of an endless cable, pulleys for the same, a rotary shaft adapted to impart motion to said cable and pulleys, power connections, a clutch controlling the rotation of said shaft, mechanism for operating said clutch, and hooks provided with lifts located upon the cable and adapted to actuate the clutch-operating mechanism.

In testimony whereof we affix our signatures in presence of two witnesses.

W. P. MERRIAM. [L. S.]
DE FOE SCOTT. [L. S.]

Witnesses:

GEO. A. YOUNG,
A. H. STE. MARIE.