

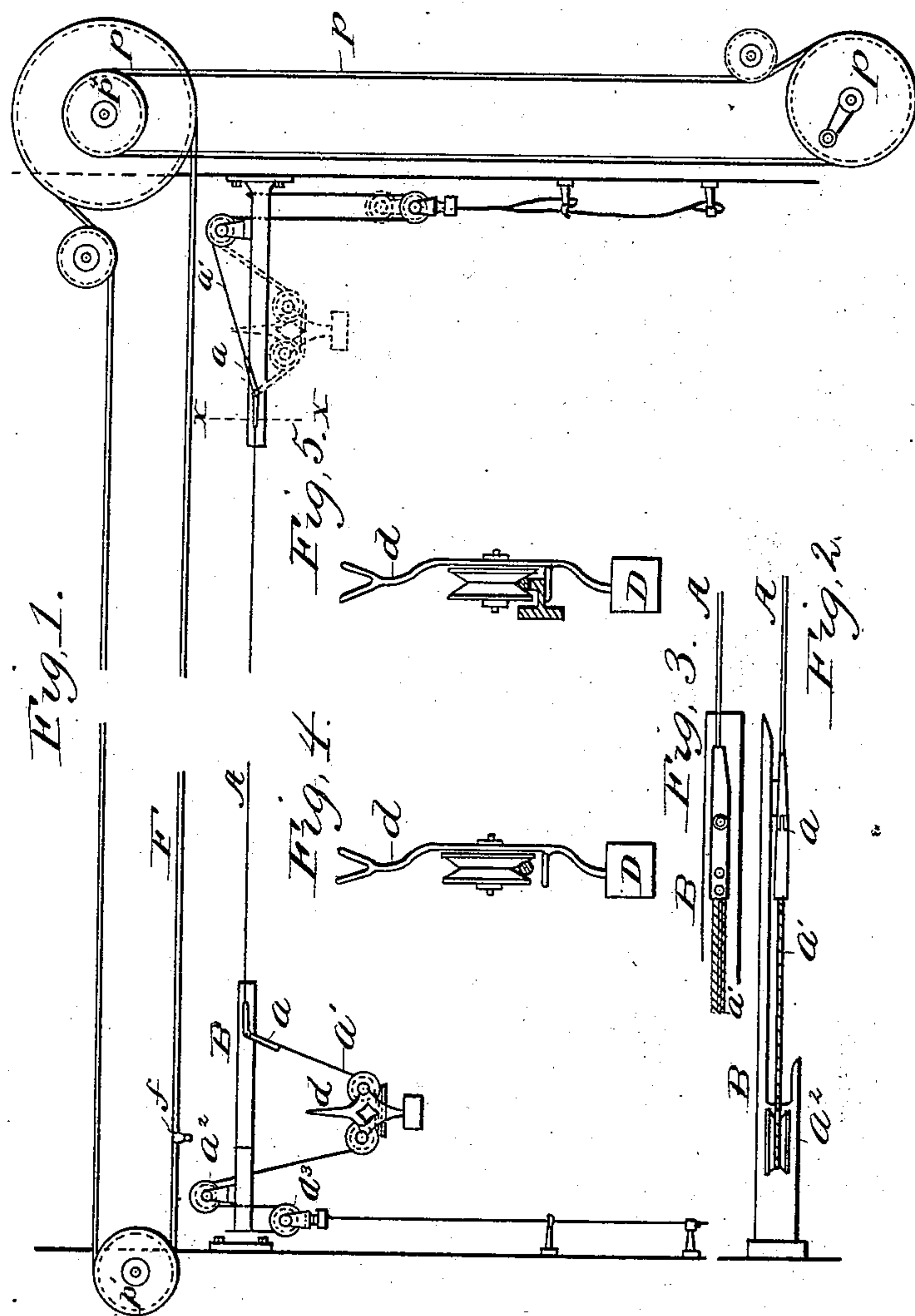
(No Model.)

M. CLARK & J. T. COWLEY.

STORE SERVICE APPARATUS.

No. 312,089.

Patented Feb. 10, 1885.



WITNESSES

J. F. White.
J. L. Duffey.

INVENTOR

Milton Clark
Jas. T. Cowley
per O. E. Duffey Attorney

UNITED STATES PATENT OFFICE.

MILTON CLARK, OF NEW YORK, N. Y., AND JAMES T. COWLEY, OF BALTIMORE, MARYLAND.

STORE-SERVICE APPARATUS.

SPECIFICATION forming part of Letters Patent No. 312,089, dated February 10, 1885.

Application filed January 10, 1885. (No model.)

To all whom it may concern:

Be it known that we, MILTON CLARK, of New York, in the county of New York and State of New York, and JAMES T. COWLEY, of Baltimore, in the county of Baltimore and State of Maryland, have invented a new and useful Store-Service Apparatus, of which the following is a specification.

This invention relates, primarily, to means for lowering the car at one or both ends of the main track of a store-service apparatus, in order that it may be more easily handled and for returning it again to such main track; and it consists, principally, in the combination, with the main track, of a terminal track, which forms a continuation of the main track when the car passes onto it from such main track or from it onto the main track, which terminal track readily lowers the car to within convenient reach of the operator when the said car is caused to pass upon it, and serves also in again raising the car to pass from it onto the main track, and of means for propelling or causing the car to travel the main track, as will hereinafter be distinctly described.

Referring to the annexed drawings, Figure 1 represents in side elevation one part of apparatus embodying our invention. Figs. 2 and 3 are respectively a partial plan and a partial side elevation on a larger scale. Fig. 4 is an end view of the car and carrier, showing the track or way in section; and Fig. 5 is a similar view of the car and carrier and in section on the line xx of the main track and movable track-support.

In the drawings, A represents a main track or way of a store-service apparatus, there being a series of these tracks or ways, each extending from a clerk's counter to a central station, where the goods and cash are received, and whence the goods and change are sent; but this main track has at one end (or in certain cases at both ends, as when the track is high at both ends) a support, B, the main portion of which is out of line with the track A, to make room for the terminal track. Practically it is better to make this terminal track partly of a strip of metal, a , and partly of a

cord, a' , as shown in Fig. 2, which illustrates the best form of our invention now known to us, and which we will now describe in detail. The support B is adapted to hold one end of the main track A, which, as shown, is a wire of sufficient strength, suitably secured to the support B. The metal strip a is hinged to the support B at one end, and its other end is fast to the cord a' . This cord passes over pulley a^2 and through the sheaves of the counter-weight a^3 , and its end is fast to the support B. The counter-weight a^3 also serves as a convenient means by which the bight of the cord may be lengthened, in order to raise that part of the cord and the metal strip a which forms the terminal track. The car D travels over the main track A, and passes from that onto the terminal track, when by allowing the end a' to render over the pulley a^2 the car and the terminal track are lowered to bring the car within convenient reach, and by causing the cord a' to render the other way over pulley a^2 the car and track are raised again, to enable the car to pass from the terminal track onto the main track.

It will be obvious that this part of our invention may be largely modified in form—as, for example, the terminal track may be a strip of metal long enough to receive the car, and mounted on a frame, which frame can be lowered and raised by means of a cord and pulley; or the counter-weight a^3 may be dispensed with, and a spring or friction device substituted in its stead, these being matters of detail and not of the essence of our invention.

In order to propel the car over the track, we have shown a cord or wire, F, having upon it a knob, f , which knob travels from end to end of the way A, and parallel with it, and by engaging with a projection, d , on the frame of the car D causes the car to travel also over the way A. The cord F may be moved in a variety of ways, one of which (clearly shown in Fig. 1) is by means of pulleys p p' , the larger pulley p being moved at pleasure by the cord p^2 , which is either an endless belt on pulleys p^3 p^4 or has one end fast to p^4 , and is wound several times around it, in either case motion

of the cord p^2 giving motion to p^4 , and that giving motion to p , which causes the cord F to travel over the way A, and thereby causes the knob f and the car D moved by it to travel 5 over the way; but the mechanism for causing the cord F and its knob to travel are immaterial so far as concerns this part of our invention, as any suitable means may be employed, for this part of our invention does not relate 10 to the means for causing cord F and its knob f to travel, but consists in the combination of the way, the car, and the cord with a knob upon it to engage the car when the projection on the car-frame is brought in the path of the 15 knob.

We have shown the track A as horizontal; but it will be obvious that the first part of our invention is applicable whether the track be horizontal or inclined, or be doubly inclined, 20 and that the second part of our invention is applicable to a horizontal track, and also applicable to a track permanently inclined, although it will be of little practical use, if any, in the latter case, except when the car is to be 25 propelled up the incline, and therefore it cannot be called applicable, strictly, to a doubly-inclined track.

We are aware that a way has been described with cars for transporting material arranged 30 to lower the car at one end, and we do not claim such devices.

Having thus described our invention, what we claim is—

1. In combination, a carrier and main track, and two terminal tracks operating alternately 35 to receive the carrier from and restore it to the main track, substantially as described.

2. In combination, a main track, two terminal tracks, and means, substantially as shown, for operating the terminal tracks, substantially 40 as described.

3. The combination, with a car adapted to be raised above and lowered beneath the main track A, of the main track, the cord F, and its knob f , arranged and operating substantially 45 as described.

4. The combination, with the main track, car D, the cord F, and its knob f , of means for actuating said cord in causing contact of its knob with the car, whereby the latter is 50 propelled, substantially as described.

5. The combination, with the main track, the terminal track, and the support sustaining one end of the main track, of the car D, and the means, substantially as herein described, 55 whereby said car is caused to move upon the main track.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

MILTON CLARK.
JAS. T. COWLEY.

Witnesses:

THOS. KELL BRADFORD,
HARRIS J. CHELTON.