

No. 721,320.

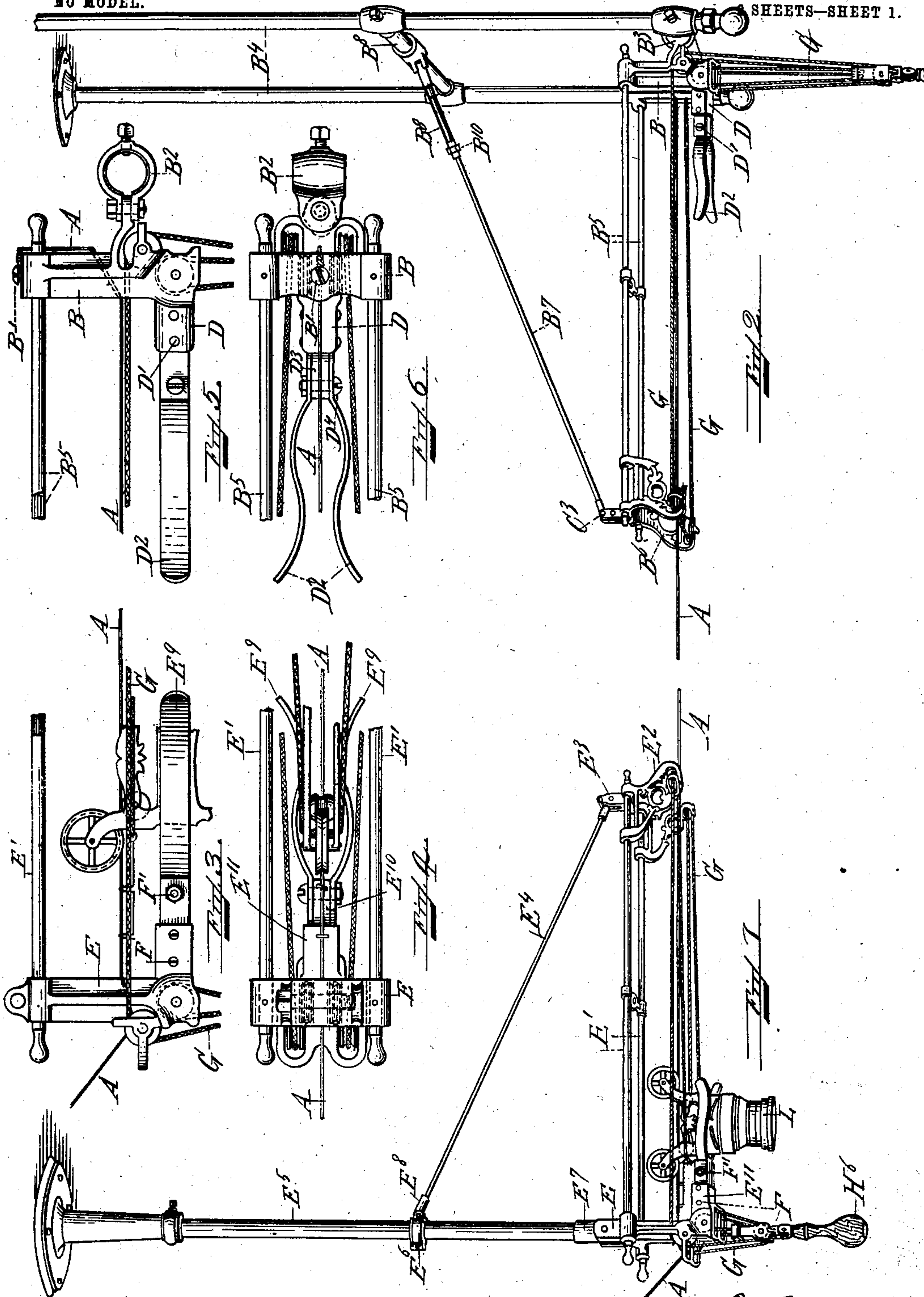
PATENTED FEB. 24, 1903.

C. W. McCORMICK.
STORE SERVICE APPARATUS.

APPLICATION FILED AUG. 12, 1901.

NO MODEL.

SHEETS—SHEET 1.



Witnesses: C. A. Stewart Ad Kinn

Inventor: Charles H. McCormick
By E.C. Lilwa
+ J.S. King

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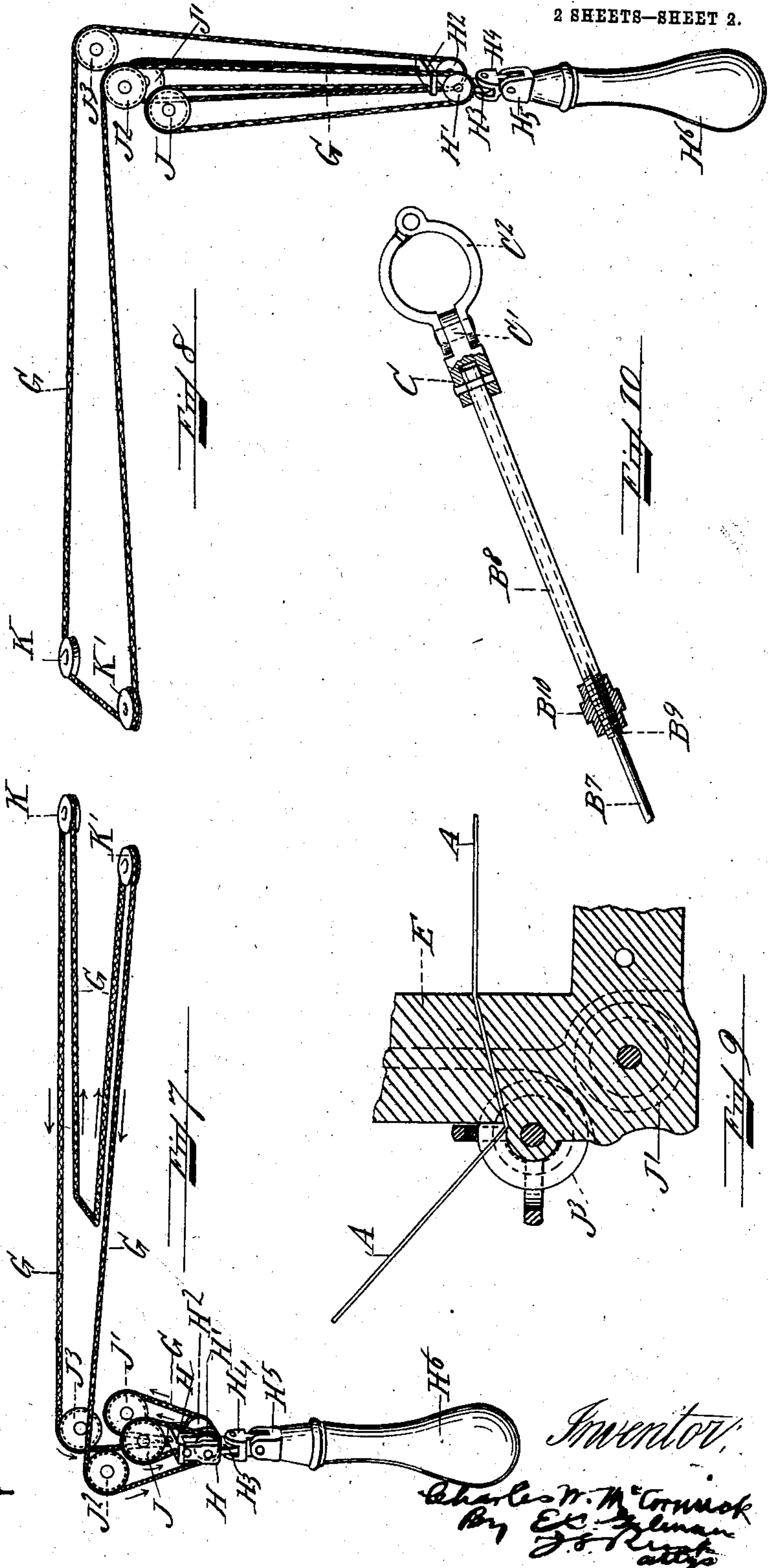
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2 SHEETS—SHEET 2.



UNITED STATES PATENT OFFICE.

CHARLES W. MCCORMICK, OF EMPORIA, KANSAS, ASSIGNOR TO LAMSON CONSOLIDATED STORE SERVICE COMPANY, OF NEWARK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

STORE-SERVICE APPARATUS.

SPECIFICATION forming part of Letters Patent No. 721,320, dated February 24, 1903.

Application filed August 12, 1901. Serial No. 71,798. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. MCCORMICK, of Emporia, in the county of Lyon and State of Kansas, have invented certain new and useful Improvements in Store-Service Apparatus, of which the following is a specification.

My invention relates to new and useful improvements in store-service apparatus, especially to cash-carrier apparatus in which the carriers are propelled by the impulse given by the propelling-cord.

My invention consists of certain novel features hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, which illustrate a construction embodying my invention, Figure 1 is a partly-perspective view of the salesman's end of a cash-carrier apparatus. Fig. 2 is a partly-perspective view of the cashier's end of a cash-carrier device. Figs. 3 and 4 are respectively side and top plan views of the salesman's end. Figs. 5 and 6 are respectively side and top plan views of the cashier's end. Fig. 7 is a perspective view of the position of the propelling-cord prior to its operation in propelling the carrier. Fig. 8 is a perspective view showing the position of the propelling-cord after the carrier has been despatched by the cord. Fig. 9 is a detail sectional view showing the manner of securing the track-wire at the salesman's end. Fig. 10 is a detail view of a brace-rod for adjusting the cashier's propelling-fixtures.

Like letters of reference refer to like parts throughout the several views.

Referring to Fig. 2, A represents the usual track-wire, which extends through the bracket B diagonally, as shown in Fig. 5, at the cashier's end, and upwardly and secured to the top of the bracket B by a set-screw B'. Pivoted to the bracket B is a coupling B², within which is located the cross-bar B³, connecting the depending hangers B⁴. Extending forward from the top of the bracket B are two fixed rods B⁵, supporting at their outer ends the bracket B⁶, and to the upper end of said bracket there is pivoted at C³ the rod B⁷, over the upper end of which is telescoped the hollow rod B⁸, provided at its lower end,

around the rod B⁷, with one or more slots B⁹, so that when rods B⁷ B⁸ are adjusted with relation to one another to vary the position of the propelling-fixtures at the cashier's end, as desired, the nut B¹⁰ is screwed up and the slots allow of sufficient compression of the rod B⁸ to hold the parts firmly together. To the upper end of the hollow rod B⁸ there is fixed, by means of a suitable pin, the lug C, to which is pivoted at C' the coupling C², adapted to fit around the cross-bar B⁹, suitably secured to the hangers B⁴ and coöperating with the cross-bar B³ to hold said hangers firmly in position. From the lower end of the bracket B extends outwardly the hollow lug D, into which projects the inner ends of the springs D² for receiving and retaining the carrier, and between said inner ends is located the rubber strip D³, all of which are secured together by means of the pins D' and bolt D⁴, Fig. 6.

Referring to Fig. 1, this figure represents the salesman's station. The track-wire A extends through the bracket E in a downward diagonal course, as shown in Fig. 9, and then diagonally upward and is secured to the ceiling. From the upper end of the bracket E extend forward the fixed rods E', which support on their forward ends the bracket E², to which is pivoted at E³ the brace-rod E⁴, which extends upwardly and is secured by the clamp E⁶ to the hanger E⁵ and can be adjusted to vary the position of the propelling-fixtures at the salesman's end. The lower end of the hanger E⁵ is screwed into the lug E⁷, pivotally secured to the upper end of the bracket E. This clamp E⁶ has an eye E⁸, which screw-threads upon the upper end of the brace-rod E⁴, so that the location of the propelling-fixture can be adjusted by means of this clamp E⁶. Extending forward from the lower end of the bracket E is a hollow lug E¹¹, into which extend the inner ends of the springs E⁹ to receive and retain the carrier, and between the inner ends of said springs and in the hollow lug E¹¹ is located the rubber strip E¹⁰, and said inner ends and strip are secured together by the pins F and bolt F'. The propelling-cord G is similarly arranged for both stations, and the pulleys

through which said cords pass are also similarly arranged in the bracket B, B⁶, E², and E, and the positions thereof are illustrated in Figs. 7 and 8, Fig. 7 showing the position of the propelling-cord before propulsion and Fig. 8 after the carrier has been propelled. The ends of the cords are secured in the block H, containing the pulleys H' H², and to the bottom of said block there is pivoted securely to the lug H³ the link H⁴, pivoted at its lower end to the fork H⁵ of the handle H⁶. This arrangement of a pivoted link H⁴ with the fork H⁵ forms a universal joint, so that no matter whether the hand of the operator pulls the cord otherwise than straight downward such motion is not imparted to the propelling-cord G, as the joint yields to the motion of the hand without giving the same motion to the propelling-cord. It is highly disadvantageous to allow a twisted or sidewise motion to be imparted to the propelling-cord, as this will give an oscillating motion to the carrier, thus retarding its progress. It will be seen that if the handle and pulley-block shown in Fig. 7 and 8 were made solid instead of the universal joint the lateral inclination of the handle would take up more cord on one side than on the other, thus giving a side motion to the carrier as it receives its impulse, thus causing the aforesaid undesirable oscillating motion. By my construction no oscillating motion is given to the cord by the handle being given a sidewise or twisted motion in the propulsion of the carrier. The cord G extends around the pulleys J J' J² J³ in the brackets B and E and around the pulleys K and K' in the brackets E² and B⁶. This propelling-cord G has a multiple motion by being passed around the pulleys, as described, and the force of the cord is increased three times in the same space by means of this multiplication.

Heretofore, as far as I am aware, a set-screw has been provided to secure the track-wire in its position through the salesman's station. (Shown in Fig. 9.) In my invention it will be noticed that the wire goes through the bracket E at the salesman's end on an incline, which after tension has been applied to the line-wire gives sufficient rigidity to do away with the set-screw. In the usual construction the set-screws used for holding and tightening up the track-wire are detrimental, as they often cause breakage of the wires at that point.

In practice to obtain the best results it is found necessary to make the handle H⁶ of sufficient weight to overhaul all cord around the several pulleys—that is, in order to prevent the cord from being deranged by the in-

coming car there must be sufficient weight in the handle to make the cord take its course without becoming entangled or buckled.

I do not limit myself to the arrangement and construction shown, as the same may be varied without departing from the spirit of my invention.

Having thus described the nature of my invention and set forth a construction embodying the same, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a store-service apparatus, a track, a support at each end of the track, a bracket carried by each support, a second bracket, means secured to the first bracket for supporting the second bracket, and telescopic means for adjusting the position of the second bracket consisting of a solid rod and a hollow rod having slots on its lower end and a nut for compressing said slotted end to secure the said rods together.

2. In a store-service apparatus, a track, a support at each end of the track, a bracket carried by each support, a second bracket, means secured to the first bracket for supporting the second bracket, telescopic means for adjusting the position of the second bracket consisting of a solid rod and a hollow rod having slots on its lower end, and means for securing said telescopic means firmly in position.

3. In a store-service apparatus, a track, a support at each end of the track, a bracket carried by each support, a propelling-cord, pulleys around which said propelling-cord is arranged, a movable pulley-block, and a handle for operating said cord connected to said pulley-block by a universal joint.

4. In a store-service apparatus, a track, a support at each end of the track, a bracket carried by each support, a second bracket, means secured to the first bracket for supporting the second bracket, telescopic means for adjusting the position of the second bracket, means for securing said telescopic means firmly in position, pulleys located in both of said brackets, a propelling-cord located around said pulleys, a pulley-block to which the ends of the propelling-cord are connected, and a handle connected to said pulley-block by a universal joint.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 1st day of August, A. D. 1901.

CHARLES W. MCCORMICK.

Witnesses:

A. L. MESSER,

C. A. STEWART.