

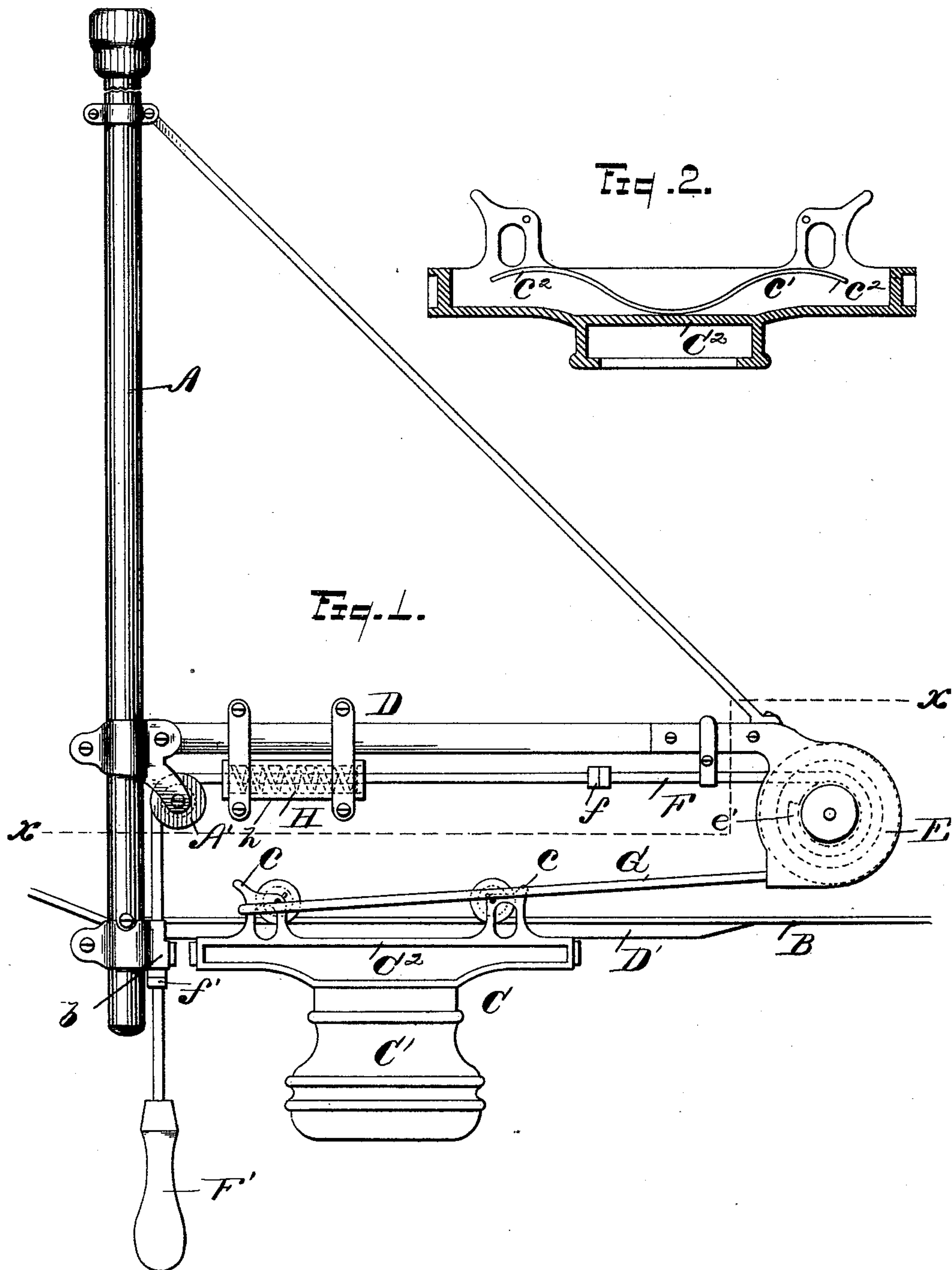
(No Model.)

2 Sheets—Sheet 1.

J. M. CAILLE.
STORE SERVICE APPARATUS.

No. 415,406.

Patented Nov. 19, 1889.



WITNESSES
W. H. Chamberlain
L. A. Doeltz

INVENTOR
Joseph M. Caille
By Wells W. Leggett & Co.
Attorneys

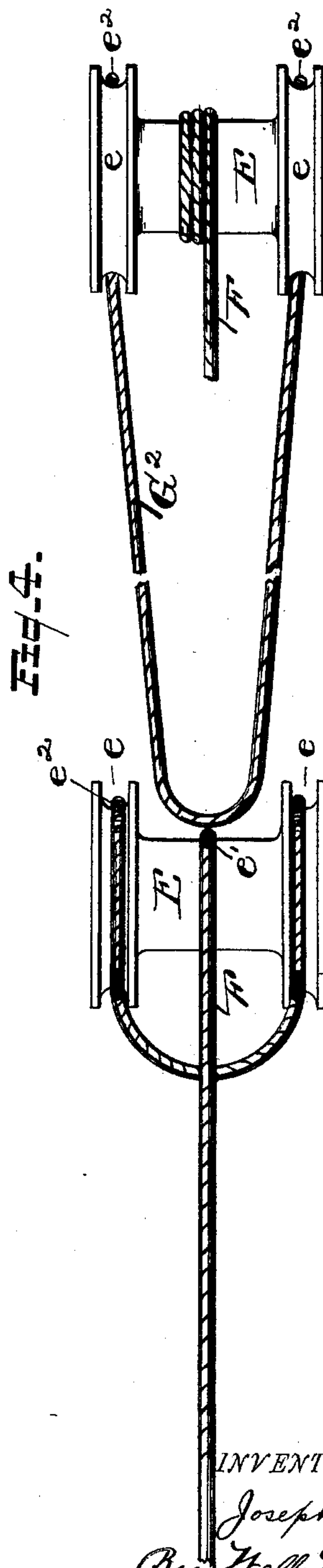
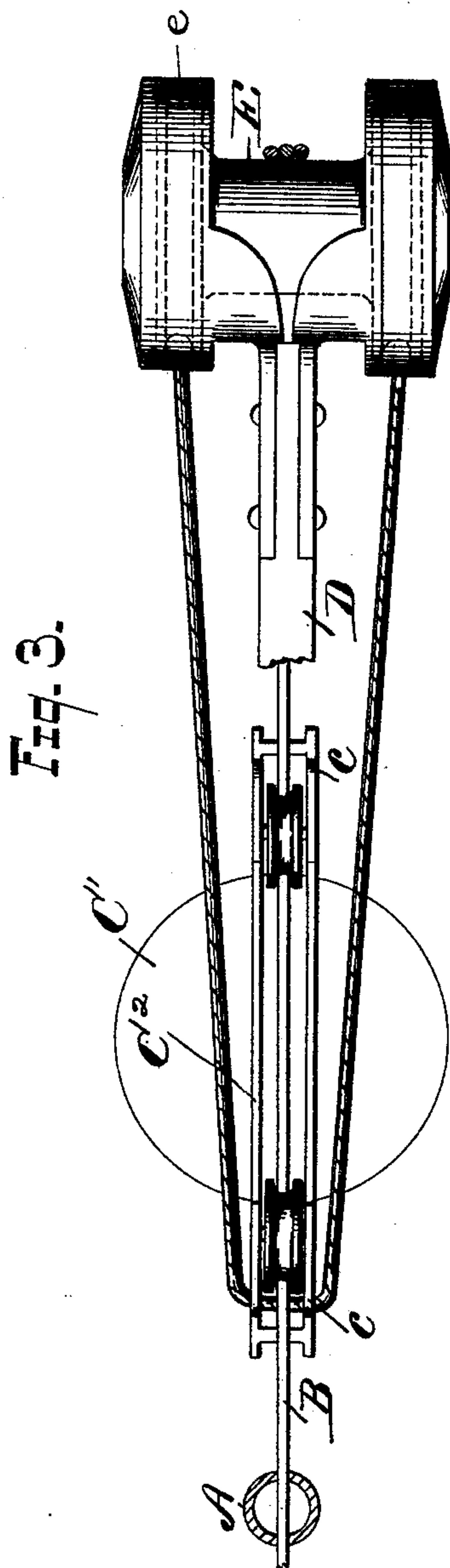
(No Model.)

2 Sheets—Sheet 2.

J. M. CAILLE.
STORE SERVICE APPARATUS.

No. 415,406.

Patented Nov. 19, 1889.



WITNESSES

M. V. Chamberlin
L. A. Dwyer

INVENTOR

Joseph M. Caille
By Hells W. Leggett & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

JOSEPH MATHIAS CAILLE, OF EAST SAGINAW, MICHIGAN, ASSIGNOR TO THE UNION STORE SERVICE COMPANY, OF SAME PLACE.

STORE-SERVICE APPARATUS.

SPECIFICATION forming part of Letters Patent No. 415,406, dated November 19, 1889.

Application filed January 31, 1889. Serial No. 298,264. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH MATHIAS CAILLE, a citizen of the United States, residing at East Saginaw, county of Saginaw, State of Michigan, have invented a certain new and useful Improvement in Store-Service Apparatus; and I 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to that class of store-service apparatus wherein a car is adapted to travel over a taut wire stretched from station to station; and it consists of a combination of devices hereinafter described and claimed.

In the drawings, Figure 1 represents a side elevation of the devices at one station of my improved apparatus. Fig. 2 is a sectional view through the bed-plate of the car. Fig. 3 is a plan view of the apparatus on the line $x x$ of Fig. 1. Fig. 4 represents views in detail of the actuating spool or drum.

In carrying out my invention, A represents the usual standard, and B the taut wire usual in this style of store-service apparatus.

C is the car, provided with any suitable cup or receptacle C' .

D is an arm extending horizontally from the standard above the wire and properly braced to hold it rigid. Journaled on the outer end of this arm is a spool or drum E. The ends of this spool or drum are enlarged and the peripheries preferably grooved, as shown at e .

F is an actuating strap or cord engaged to the spool or drum, as at e' , and adapted to be wound thereon. This cord or strap extends back over pulley A' and down within reach of the operator, where it is provided with a suitable handle F'.

G is another strap or cord, the ends of which are engaged to the enlarged ends of the spool or drum, as at e^2 . Thus when the strap or cord G is wound on the spool or drum a loop will be suspended above the wire. The bed-plate C^2 of the car may be provided with upwardly-projecting projections or hooks c .

c' is a leaf-spring having its center engaged to the bed-plate of the car and so formed that its ends c^2 will, when in their normal positions, be slightly underneath and adjacent to the wheels of the car.

D' is an arm extending out from the standard underneath and adjacent to the wire, and is preferably engaged to the wire at its outer end.

The operation of the device will be readily understood. The car remains at rest at one end with the spring c' bearing against the arm D' and holding the car steady. The strap or cord G is unwound from the spool or drum, the ends, however, being engaged thereto and the loop part of the cord engaged to the projection or hook c on the bed-plate of the car. A portion of the strap or cord F is wound upon the center of the spool or drum. The operator grasps the handle and gives a pull, thus revolving the spool or drum, and by so doing the strap or cord G is wound on the ends of the spool or drum and the car carried forward and projected over the wire. There being a certain amount of friction between the spring c' and the arm B', it will take a strong pull on the strap F to release the car, but when released it will be projected rapidly over the wire. When the car leaves the station, the strap or cord G is left wound upon the drum with the loop above the wire. It thus remains until the incoming car picks up the loop and unwinds the strap or cord, at the same time winding the actuating cord or strap F thereon.

The office of the spring c' is threefold: first, by bearing upon the arm B' it acts as a brake on the incoming carriage; second, it holds the car steadily in position until the mechanism is operated to project it, and, third, by having its ends underneath the wheels and adjacent to the wire it serves as a guard when the car is traveling over the wire and prevents the former from jumping from the wire.

H is a cylinder engaged beneath the arm D, through which the actuating cord or strap passes.

h is a spring located in the cylinder, and f is a suitable stop located on the actuating cord or strap, and adapted when the actuating

cord or strap has been sufficiently unwound from the drum to enter the cylinder and bear against the spring, and thus lessen the shock incident to the car having been released.

5 f' is another suitable stop located on the actuating cord or strap and adapted to limit the play of the latter by striking the projection b on the standard.

10 Of course I do not limit myself to the specific form of the spool or drum shown; nor do I limit myself to the specific means for actuating the same, since any form of spool or drum on which the looped cord or strap could be wound would be contemplated by my invention.

15 What I claim is—

1. In a store-service apparatus, the combination, with the taut wire and the car adapted to travel thereon, of a spool or drum located 20 above the wire, a cord or strap engaged to said drum and adapted to be wound thereon, said car having a projection for engaging the loop of said cord or strap, and a cord for revolving the spool or drum, the construction 25 being such that when the spool or drum is revolved the cord or strap will be wound upon the drum and the car be projected over the wire, substantially as described.

30 2. In a store-service apparatus, the combination, with the taut wire and the car adapted to travel thereon, of a spool or drum located

above the wire, a cord or strap adapted to be wound thereon, said car having a projection for engaging said cord or strap, and an actuating cord or strap engaged to said spool or drum and adapted to revolve the same, substantially as described. 35

3. In a store-service apparatus, the combination, with the car, of the single spool or drum E, located above the wire, the actuating-cord F, adapted to be wound thereon, and the looped cord or strap G, also wound thereon and adapted to engage a hook projection on the car, substantially as described. 40

4. In a store-service apparatus, the combination, with the standard, the taut wire, and the car adapted to travel thereon, of an arm extending from said standard above the wire, a spool or drum journaled in said arm, a cord or strap having its ends engaged to said spool or drum and adapted to be wound thereon, said car having a projection for engaging the loop of said cord or strap, and an actuating cord or strap for revolving said spool or drum, substantially as described. 50

55 In testimony whereof I sign this specification in the presence of two witnesses.

JOSEPH MATHIAS CAILLE.

Witnesses:

JOHN J. WHEELER,

ROBERT B. MCKNIGHT.