(No Model.)

E. P. OSGOOD.

STORE SERVICE APPARATUS.

No. 312,753. Patented Feb. 24, 1885.

Fig. 1.

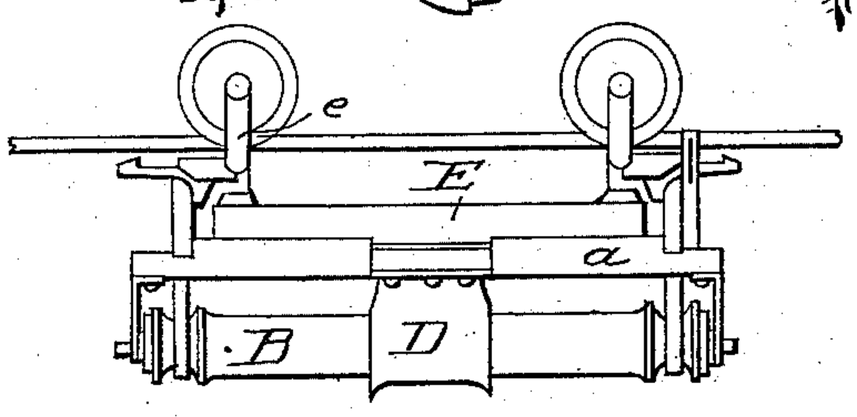


Fig. 2.

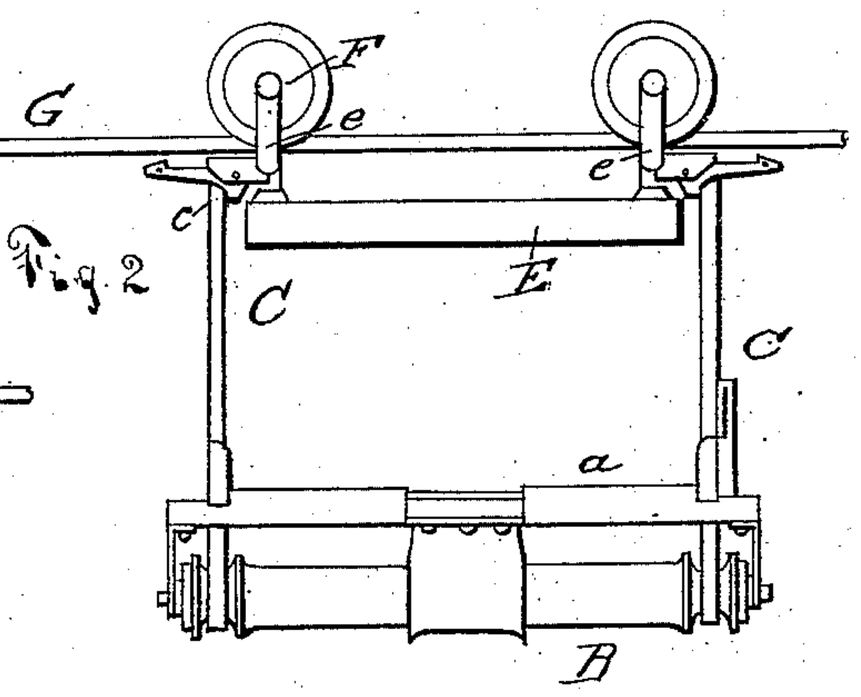


Fig. 3.

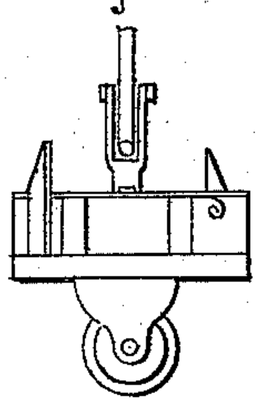


Fig. 5.

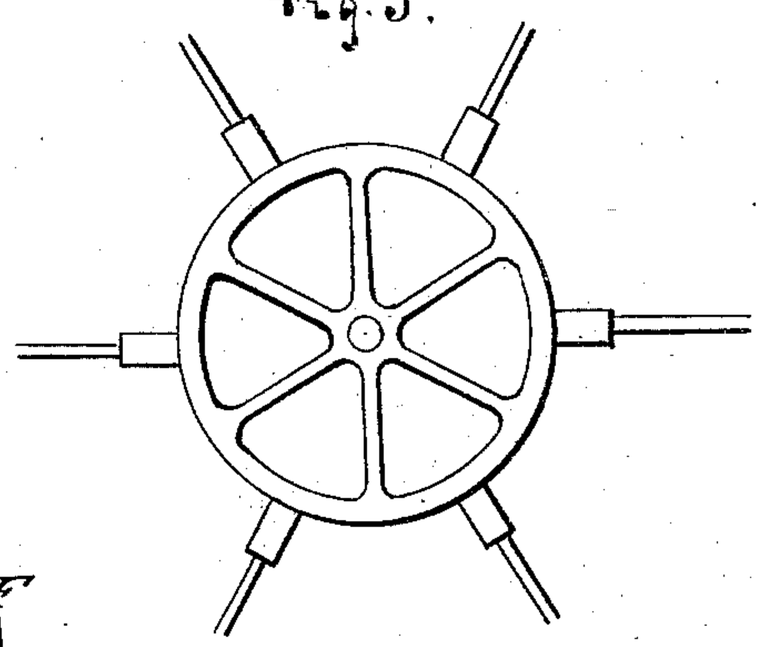


Fig. 4.

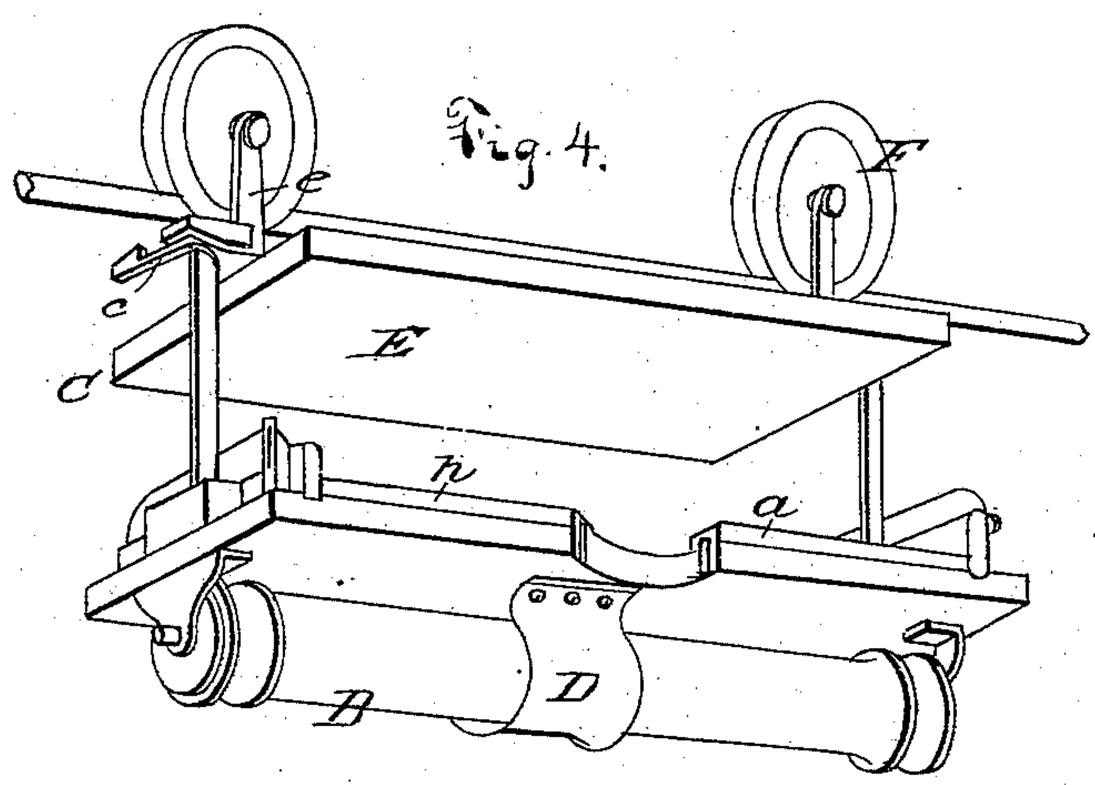


Fig. 6.

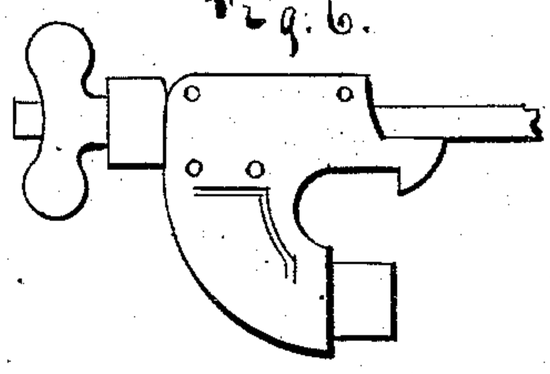
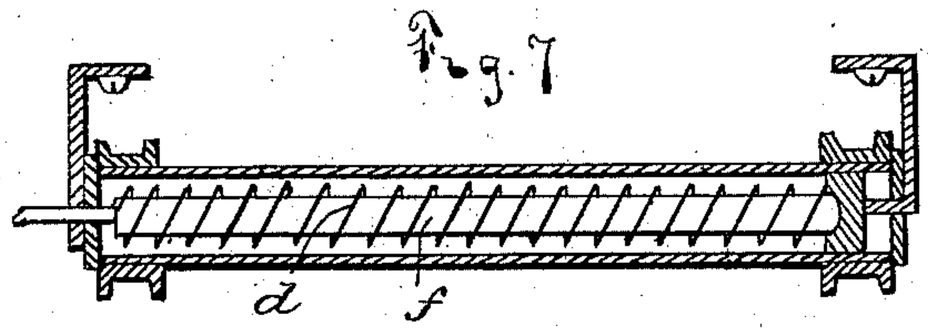


Fig. 7.



Witnesses.
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UNITED STATES PATENT OFFICE.

EDWIN P. OSGOOD, OF MALDEN, MASSACHUSETTS.

STORE-SERVICE APPARATUS.

SPECIFICATION forming part of Letters Patent No. 312,753, dated February 24, 1885.

Application filed July 20, 1883. (No model.)

To all whom it may concern.

Be it known that I, EDWIN P. OSGOOD, of Malden, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Cash-Cars; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to cash-car systems, and is an improvement upon the apparatus shown in the application filed by me on the 7th day of June last. In that apparatus a cash-car system consisted of a horizontal wire stretched between fixed supports, and having a car suspended upon tracks adapted to run upon the wire track, the car being simply a receptacle or box adapted to receive packages, change, memorandum-books, and the like. Inconvenience sometimes occurs in the use of such cars, arising from the elevated position of the wire, the car being out of the reach of some of the attendants. It is necessary that the wire or wires should be placed to a sufficiently elevated position so as not to be in the way.

The principal object of my present invention is to provide means whereby the car, or that part of it which receives the packages, change, &c., may be drawn down in order to receive such articles and then returned to its position; and my invention consists, principally, of a car adapted to run upon an elevated track, and to be drawn down to receive the articles to be conveyed, and then to return to its normal position in preparation for starting upon its movement on the track.

It also consists of some details of construction relating to the car and to the track, all of which are hereinafter explained, and indicated in the claims.

It will be understood that the apparatus is designed for use in stores and similar places.

In the accompanying drawings, Figure 1 is a side elevation of a car mounted upon its wire and closed in readiness for propulsion. Fig. 2 is a similar view with the car open. Fig. 3 is an end view. Fig. 4 is a perspective view. Fig. 5 is a plan view of a terminal station for the radial conductors. Fig. 6 is an enlarged detail view of the end of one of the conductors and its connections; Fig. 7, a sectional detail.

In these drawings, G represents a part of the wire track, which is suspended at the ends horizontally, when drawn taut by any suitable means. Upon the track is suspended a platform, E, by means of hangers *e* and wheels F. I have shown two wheels, this being the preferred number, but do not limit myself to this particular number. The hangers *e* are fixed at their lower ends in the platform E, and are preferably forked, as shown in Fig. 3, the wheels being placed between the forks, and being adapted to turn on their pivots, which pass through the upper ends of the prongs of the hangers. The wire G passes also between the hangers, and the wheels bear directly upon the wire. In this way the car is balanced accurately upon the wire, as the hangers are placed on the central longitudinal line of the platform, and the car is adapted to run freely in either direction by a push. The tray *a*, which receives the articles to be carried, is suspended underneath the platform E by means of straps C C. The principle of my invention requires that these straps shall be elastic, or shall be connected to some elastic mechanism, so that the straps or their connections will yield when the tray *a* is drawn down, and when the tray is released will automatically draw it up again to the platform E.

I have shown the straps C C as attached to arms *c c* on the standards just above the platform E; but they may be connected directly to the platform itself. They are rigidly attached at their upper ends, and, as herein shown, are composed of flat spring metal. They extend downward, as shown in Fig. 2, and pass through slots in the tray *a*, and are attached at their lower ends to grooved pulleys on the ends of a roller, B. (Shown in Figs. 1, 4, and 7.) The springs are made in a coiled form, so that when the tray is released after being drawn down the springs will coil themselves upon the roller and of their own force raise the tray and bring it up against the under side of the platform E. It will be understood, therefore, that these springs automatically coil upon the roller, and as the tray is pulled down they are uncoiled and extended; but I may also place within the roller a spring, *d*, and coil it about a shaft, *f*, in the same manner as the ordinary spring of a cur-

tain-roller is coiled and attached, so that the uncoiling of the spring *d* will turn the roller and wind up the strap, the spring being again coiled when the tray is drawn down. When this spring is used, the strips may be of any flexible material. It will be understood that the roller B is mounted in bearings attached to the bottom of the tray. The bearings, as shown in Fig. 7, consist in this case of brackets *g*, the upper ends of which are secured to the under side of the tray.

This tray may be grasped by the hand in any convenient place; but I have shown a strap or handle, D, fixed to the bottom of the tray and surrounding the roller. This affords a convenient handle.

The tray may be provided with a flange, *h*, extending either all around it or only upon one side and the ends. The latter construction is the more convenient, as the articles may be more conveniently removed when one side is left open; but in this respect my invention may be varied without departing from the spirit thereof.

The articles are held securely in place while the car is in motion, either by the flanges or by the pressure of the tray against the platform E.

I am aware that cash-cars have been heretofore known with expansible receptacles adapted to receive different sizes of bundles or bundles of irregular shape; and I wish to distinguish my invention from any such cash or parcel carrier, the purpose and result of mine being entirely different—that is to say, my apparatus is to provide a car which shall be adapted to run upon an elevated way, so as to pass above the heads of the persons in the store, and which shall yet be capable of being drawn down into convenient proximity to the salesman or cashier.

I therefore claim—

1. A car adapted to run upon an elevated wire way provided with a tray or lower part connected to the upper by spring mechanism and by strap-supports, and adapted to be drawn down within convenient proximity to the cashier or salesman and to return to its elevated position when released, substantially as described.

2. In a carrier for cash systems, the combination of a body, E, supporting-wheels F, a tray, *a*, roller B on the tray, and springs connecting the roller and tray to the body E, as described.

3. A carrier for store cash systems, consisting of a body and supporting-wheels, a platform connected to such body by extensible supports, and a spring-roller, all substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWIN P. OSGOOD.

Witnesses:
S. T. PENNEY,
C. L. FESSENDEN.