(No Model.)

G. R. ELLIOTT.

STORE SERVICE SYSTEM.

No. 283,088. Patented Aug. 14, 1883.

Fig. 1.

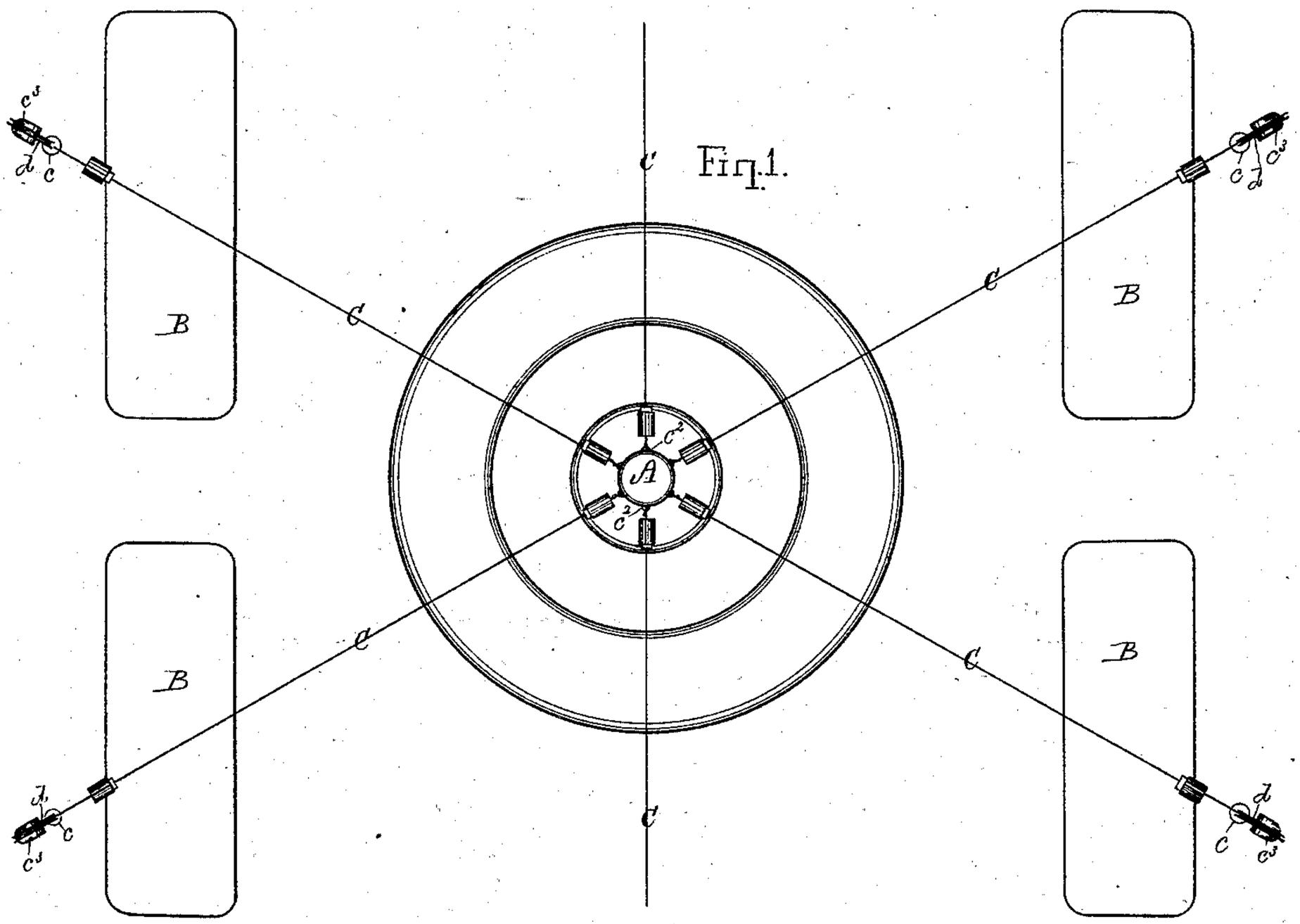
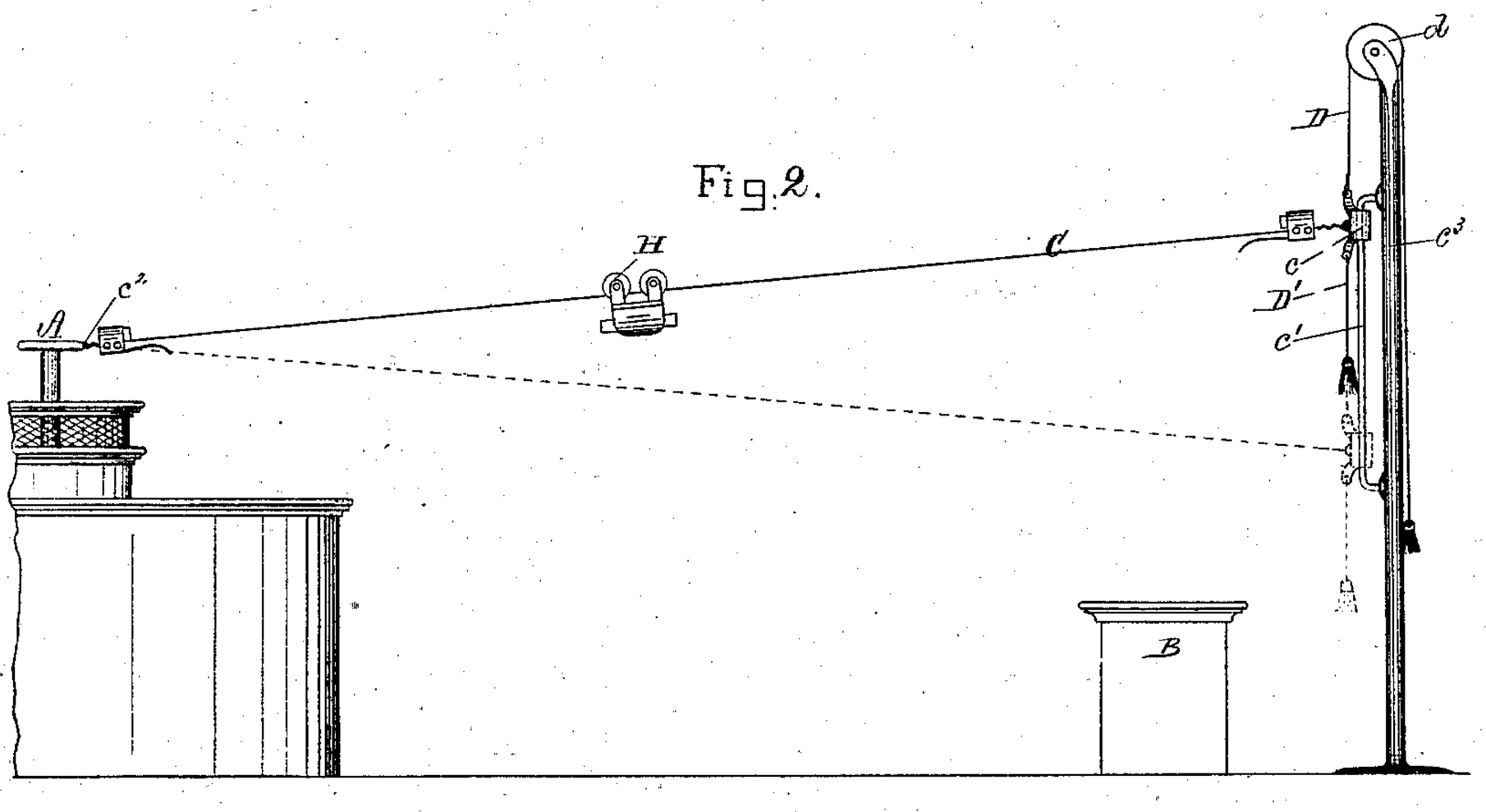


Fig. 2.



Witnesses.
Edward C. Ellis
D. F. Morrell

Inventor.
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per O. E. Duffy Atty.

UNITED STATES PATENT OFFICE.

GILBERT R. ELLIOTT, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO MILTON CLARK, OF SAME PLACE.

STORE-SERVICE SYSTEM.

SPECIFICATION forming part of Letters Patent No. 283,088, dated August 14, 1883.

Application filed June 12, 1883. (No model.)

To all whom it may concern:

Be it known that I, GILBERT R. ELLIOTT, a subject of the Queen of Great Britain, residing in Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Store-Service Systems, of which the following is a specification.

My invention relates to improvements in store-service systems in which cash and parcels are conveyed back and forth between the salesman and the cashier, inspecting and packing clerks.

The object of my invention is to provide facilities by means of which a salesman can cause a suitable car for carrying the article to be conveyed to traverse a taut wire in either direction at pleasure.

To attain this object my improved system consists in one or more wires radiating from a point to which all the articles and cash have to be sent to one or more salesmen in different parts of a store, to whom the articles and change have to be returned, the wires having their ends nearest the point to which they all tend secured to a fixed support, and their ends nearest the different salesmen secured to slides mounted in ways or on rods, so as to be readily moved up or down, according to the direction in which the car is to travel, by means of suitable cords or the like, as hereinafter fully described.

In the accompanying drawings, Figure 1 is a plan showing my improved system as applied to a store, and Fig. 2 is a side elevation, showing the arrangement of one of the wires of the system and the means for properly adjusting the one movable end to cause the car to travel in either direction.

A represents the point to which all cash and goods sold must be sent, and B the salesmen's counters, to which the goods and change must be returned.

Wires C are stretched taut between slides *c*, mounted in ways, or in a guide, *c'*, near each salesman's counter, and a fixed support, c^2, near the point A, and each wire has its own car, H, and suitable arresting-stops, *h*, near each end.

The fixed support c^2 may be arranged to suit circumstances—that is, it will be secured to a bracket fixed to the wall or other suitable support when the point A is at one end of a store, or it will be secured to an arm secured to and extending down from the ceiling when the point A is not near the wall.

Each wire C is secured at its end, near the salesman-counter, to a slide, *c*, movable up and down on a guide, *c'*, which is fastened to a suitable support, c^3. The guides, when the wire is comparatively short, are curved to a radius equal to the length of the wire.

The slides may be provided with a friction-spring to hold them at any point on the guides; or they may be provided with catches to retain them at the highest and lowest points of the guides; or they may be so mounted as to fall by gravity when left free, so as to keep the wire normally in the position to cause the car to run by gravity to the salesman-counter.

A cord, D, passing over a pulley, *d*, is attached to the slide *c*, by means of which the salesman can raise the slide at pleasure and cause the car to run by gravity to the point A. A cord, D', is suspended from the slide *c*, and enables the salesman to lower the slide, and thereby reverse the incline of the wire and cause the car to travel by gravity to his counter.

The advantages arising from my improved arrangement of wires in a store-service system are that the least possible space is taken up by the tracks; each salesman has his car entirely under his own control; the incline of the wire can be regulated from his end only, and the cashier or inspector is relieved from all care and trouble in returning the car and its contents to the salesman.

I am aware that two tracks inclined in opposite directions have been employed in stores; but this, besides occupying double the space, necessitated the shifting of the car from one track to the other. I am also aware that a wire-rope way has been used in which a car was made to travel either way by gravity by inclining the way in the proper direction by simultaneously moving both ends in opposite directions. I therefore disclaim all inclined ways in which two tracks are used, and in

which both ends of the track must be moved in opposite directions.

In practice the guide c' is most frequently secured to the wall, instead of to a standard, c^3, as shown.

I claim as my invention—

The improved store-service system hereinbefore described, consisting of one or more wires extending from a cashier's desk to one or more salesmen's counters, each having one of its ends fixed and its other end adapted to be raised and lowered, in combination with a car adapted to travel by gravity, and arresting-stops, one near each end of each wire, substantially as set forth.

GILBERT RUGGLES ELLIOTT.

Witnesses:
G. B. MAYNADIER,
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