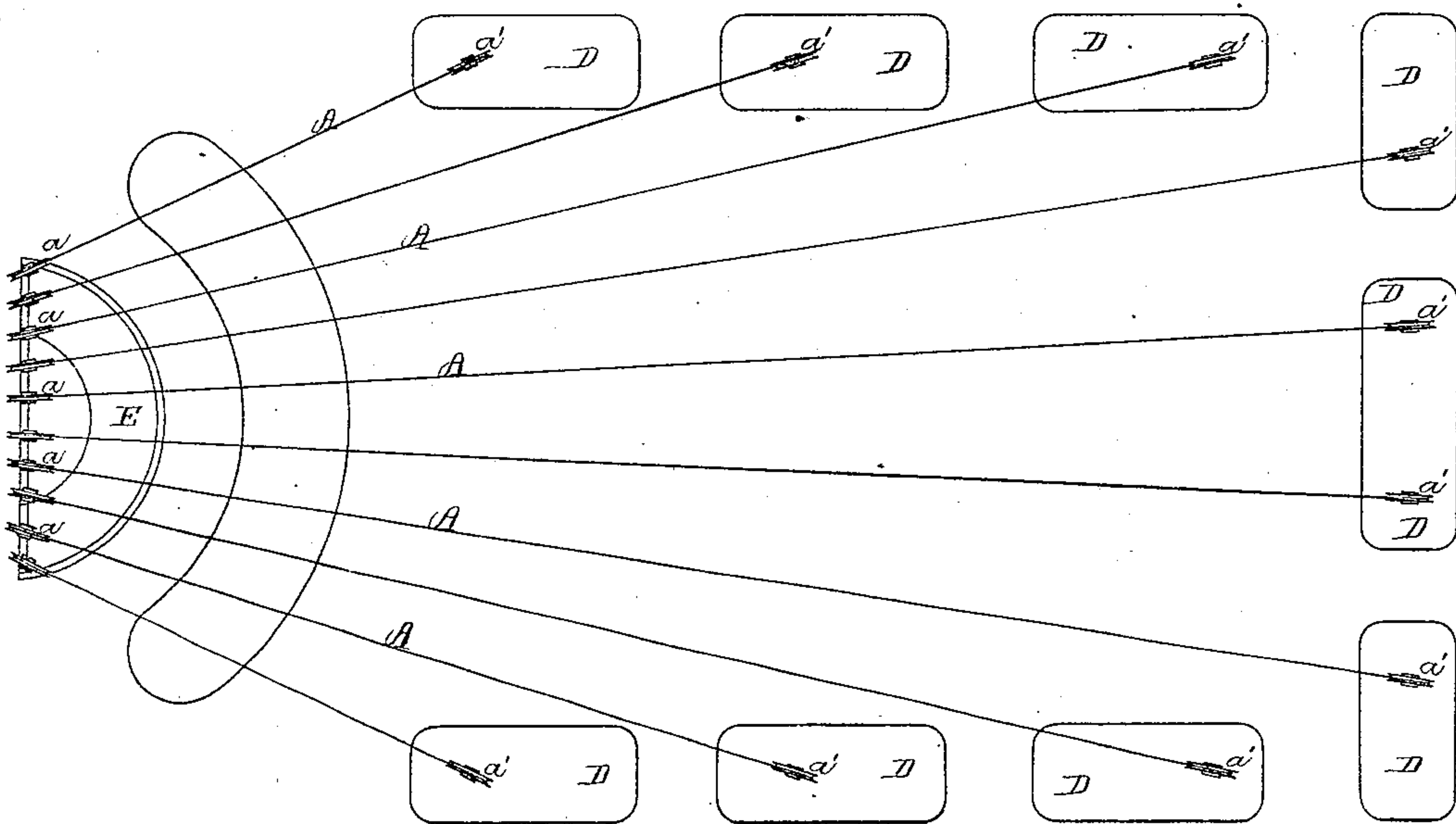
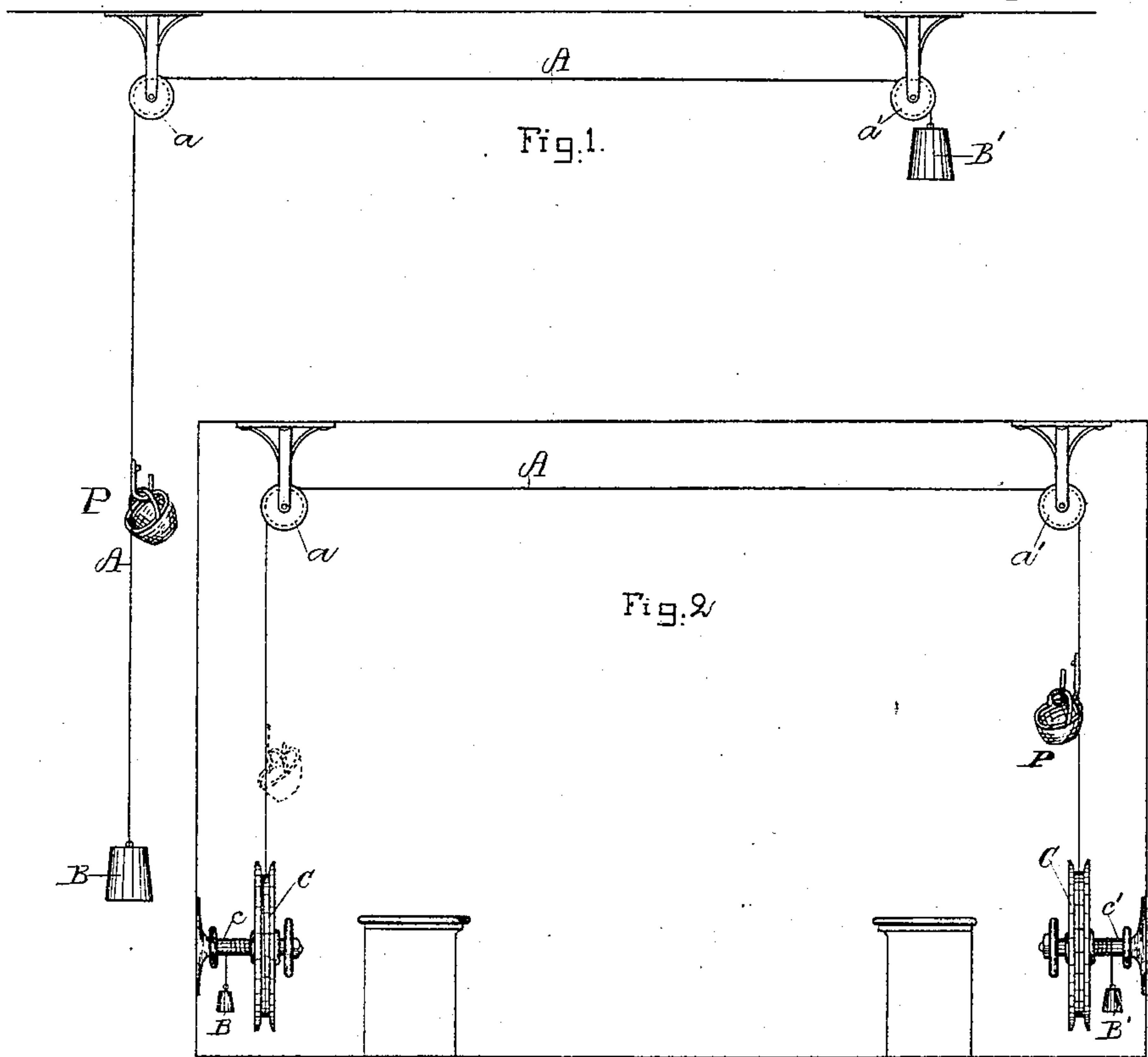


(No Model.)

G. R. ELLIOTT.  
CARRYING SYSTEM FOR STORES.

No. 284,953.

Patented Sept. 11, 1883.



Witnesses.

David H. Mead  
Edward E. Ellis

Fig. 3.

Inventor.

Gilbert R. Elliott  
per O. E. Duff  
Atty.

# UNITED STATES PATENT OFFICE.

GILBERT RUGGLES ELLIOTT, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE  
CONTINENTAL CASH CAR COMPANY, OF BALTIMORE, MARYLAND.

## CARRYING SYSTEM FOR STORES.

SPECIFICATION forming part of Letters Patent No. 284,953, dated September 11, 1883.

Application filed August 18, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, GILBERT RUGGLES ELLIOTT, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain  
5 new and useful Improvements in Carrying Systems for Stores, of which the following is a specification.

My invention relates to improvements in the systems for carrying, in stores, in which  
10 an elevated wire or cord is used for supporting and conveying parcels.

The object of my invention is to simplify the mechanism for imparting the requisite motion to the wire or cord for conveying a parcel  
15 suspended from or attached to it in either direction between two stations—as, for instance, from a sales-counter to the cashier's desk or packing-counter and back again.

My invention consists in the combination,  
20 with an elevated flexible way, of pulleys for supporting the way, and weights attached to the ends of the flexible way, whereby when the weight at a station near one end is raised the weight at the other end will descend and  
25 draw the flexible way and the parcel attached to it to a station near which it is located, substantially as hereinafter fully described.

In the accompanying drawings, which illustrate my improved system of carrying parcels, Figure 1 shows a simple device which  
30 may be used when the distance is short and there is room for the fall of the weights. Fig. 2 shows the flexible way and the weights connected by a wheel and axle, so as to enable a  
35 slight rise and fall of the weights to produce the desired movement of the flexible way; and Fig. 3 shows the arrangement in a store of a number of ways radiating from a central station to various sales-counters.

In Fig. 1, A is a wire or cord passing over pulleys *a a'*, suspended from the ceiling, or otherwise suitably supported. Weights B B' are  
40 attached to the ends of the cord A. The parcel P to be carried is attached to the cord A by means of hooks secured to the cord, or by being inclosed in a carrier adapted to be suspended from the cord. It is evident that with  
45 suitable weights, by raising one weight the other will descend and pull the cord and the  
50 attached parcel toward it, so that by having

the weights one near one station and one near another station articles may be carried in either direction between these stations by either raising one weight or pulling down the other. It is also evident that while this arrangement is the simplest for carrying out my  
55 invention it requires the weights to move vertically as far as the parcel is carried horizontally. It is seldom that the requisite fall can be obtained for such an arrangement, and for  
60 this reason some device is desirable by means of which a slight rise and fall of the weights will produce the desired movement of the cord.

In Fig. 2 I have shown a well-known mechanical device for accomplishing this, known  
65 as the "wheel and axle." The cord A in this instance is secured at its ends to wheels C C', while the weights B B' are attached to the  
70 axles *c c'* of the wheels C C'. These wheels C C' are located either under the counters or near to and parallel with the walls behind the counters, so as to occupy the least possible  
75 room. The diameters of the wheels and axles and the weight required are readily determined by the available fall and the distance between the stations. The wheels C C' are  
80 preferably made with heavy rims, so that they may acquire sufficient momentum when set in motion to unwind and wind the cord A to the  
85 extent requisite to convey a parcel from one station to the other. Motion may be imparted to the wheels C C' by means of projecting pins or handles, as in a steering-wheel, or by means of any of the well-known clutch devices  
90 which grip the rim of the wheel only when moved one way, and which may be operated by a handle or by a treadle. One or two impulses are sufficient to impart the desired momentum to the wheels to carry a parcel as far  
95 as ever required in ordinary stores. For stations so far apart that the weights will not prevent undue sagging of the cord, when loaded, supporting-pulleys may be mounted on brackets (in the usual manner of wireways) suspended from the ceiling between the two end  
100 pulleys, *a a'*.

In Fig. 3 a number of sales-counters, D, are shown, each with its own way, leading to a central station, E, by means of which parcels  
100



can be sent from any counter to be inspected and packed at the counter at station E and be returned to the proper counter D.

5 In my improved system above described the carrying-cord can be propelled in either direction and from either end, while the machinery required to operate it, even in the most unfavorable locations, is of so simple a character that it can be readily managed by  
10 any one. Its advantages over the usual endless-rope system and its complicated and expensive mechanism will readily be seen.

I claim as my invention—

In a carrying system for stores, the combination of a flexible way and its supporting pulleys with weights connected to the ends of the flexible way, so that by raising or lowering either weight a parcel attached to the flexible way will be carried toward the lowered weight, substantially as set forth.

GILBERT RUGGLES ELLIOTT.

Witnesses:

G. B. MAYNADIER,

J. R. SNOW.