(No Model.)

G. R. ELLIOTT.

STORE SERVICE SYSTEM.

No. 279,862. Patented June 19, 1883.

Fig. 1.

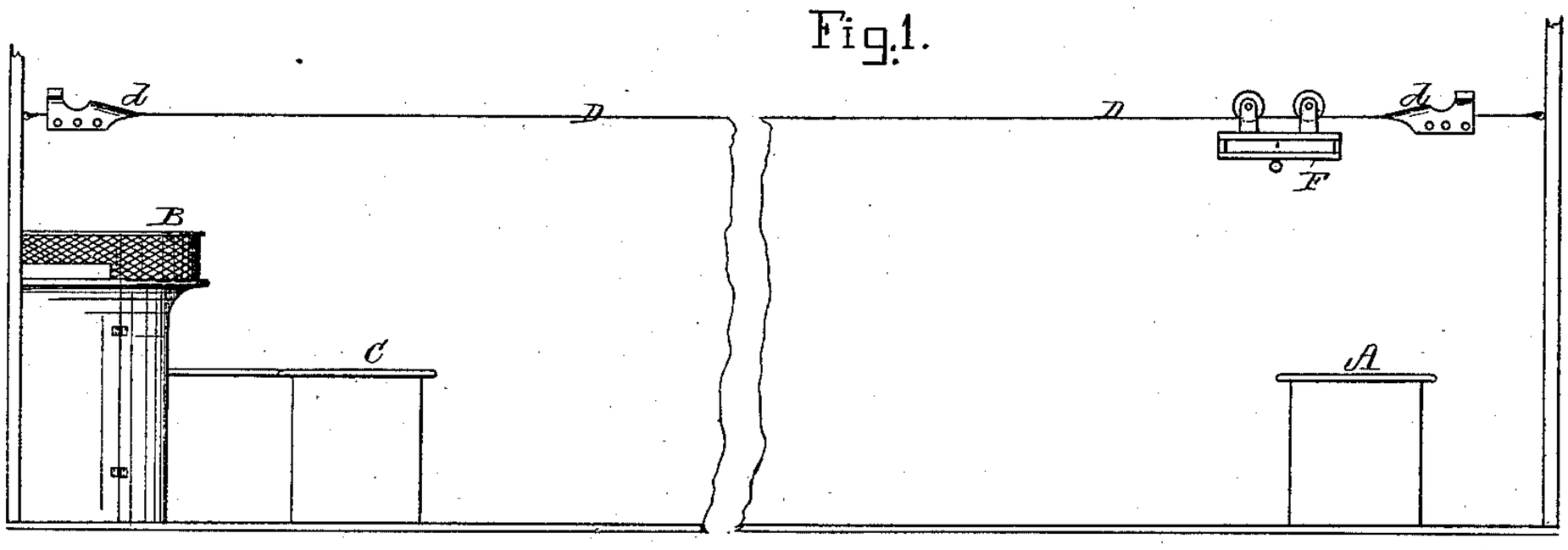
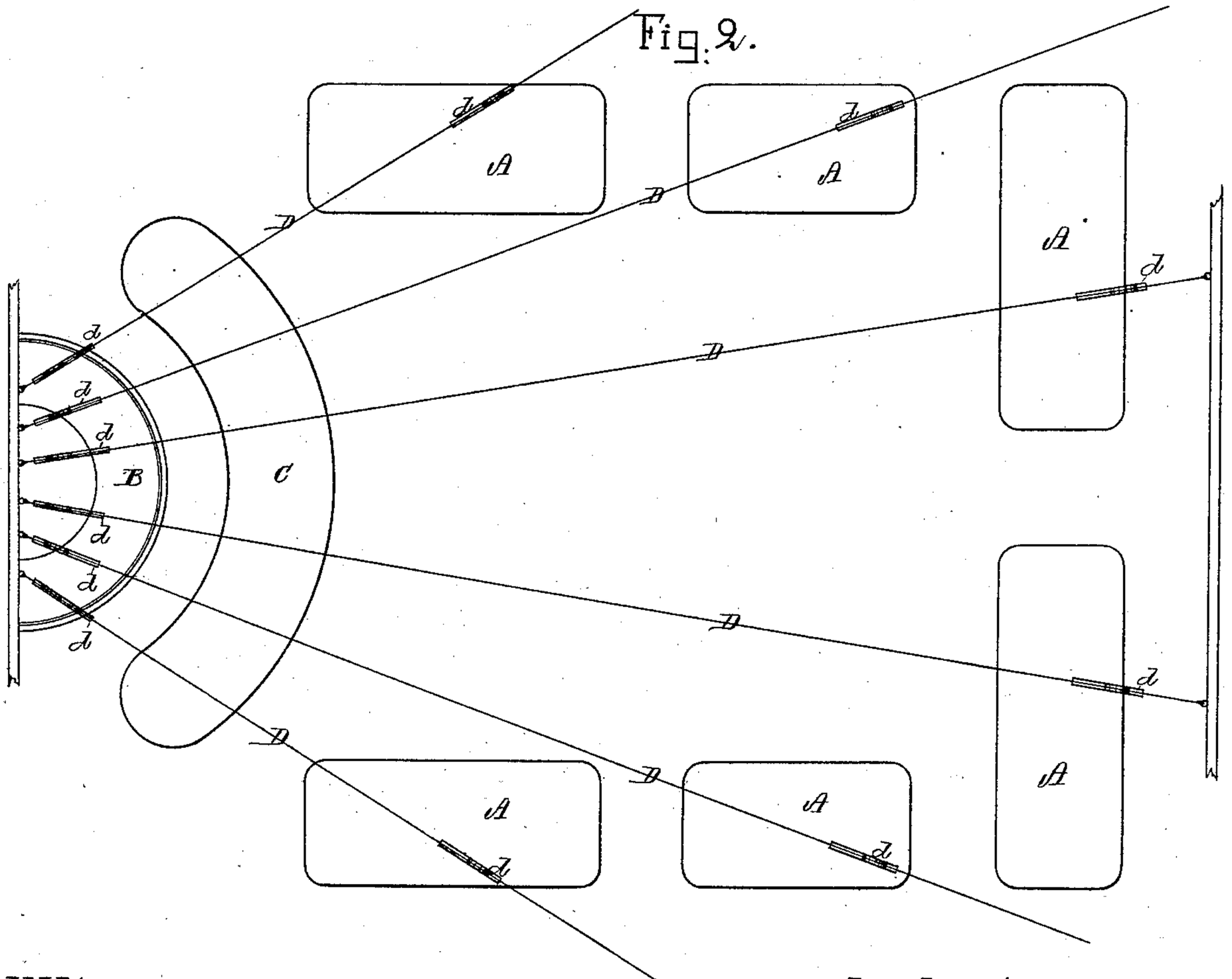


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

GILBERT R. ELLIOTT, OF BOSTON, MASSACHUSETTS.

STORE-SERVICE SYSTEM.

SPECIFICATION forming part of Letters Patent No. 279,862, dated June 19, 1883.

Application filed May 7, 1883. (No model.)

To all whom it may concern:

Be it known that I, GILBERT R. ELLIOTT, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Store-Service System, of which the following is a specification.

The object of my invention is to reduce the system of transporting cash, change, and ordinary packages between the salesmen, inspecting and packing clerks, and cashier to a basis simpler in every respect than any heretofore employed for this purpose.

My improved system consists in a series of wires, each stretched taut and level, extending from the salesman's counter to the cashier's desk, an easily-running car or carrier for each wire, and two devices for arresting the carrier—one near one end and the other near the other end of the wire.

Heretofore, so far as I am aware, the carriers in a store-service system have been propelled either by gravity or some mechanical devices. In the gravity systems double tracks, permanently inclined in opposite directions, or a single track adapted to be inclined in either direction, have been used. In the mechanical system the carriers have been propelled by endless ropes, by motors connected to the carriers, and by compressed air. My improved system is based on the discovery from numerous experiments that a properly-constructed carrier can be readily propelled on a level wire by a push of the hand, and in either direction, to a distance greater than that between a sales-counter and cashier's desk in the largest store. I have experimented on distances up to two hundred feet without experiencing the least difficulty in propelling the car or any failure of the car to reach its destination.

In the accompanying drawings I have illustrated my system as applied to a store having the cashier's desk and packing-counter at one end. This best shows the extremes to which the system can be subjected, since generally the desk and counters will be more conveniently located in relation to each other.

Figure 1 is an elevation showing a wire extending from a sales-counter to the cashier's desk, with the carrier and the arresting-stops; and Fig. 2 is a plan illustrating one arrangement of my system.

In Fig. 1, A is a salesman's counter. B is the cashier's desk, near which is located a counter, C, where the purchases are inspected and done up into bundles. D is a wire secured at one end above the counter A, and at the other end above the cashier's desk B. This wire is strained to a level by any of the well-known appliances, such as the ordinary turn-buckle attached near one end of the wire. By means of the straining device any slack of the wire from stretching may be readily taken up. Near each end of the wire D is secured an arresting-stop, *d*, and a car or carrier, F, is suspended from the wire. The stop *d* and car F may be such as are described in my Patent No. 276,529, April 24, 1883, or of any other suitable construction.

In Fig. 2 there are a number of sales-counters, each marked A, and the other letters refer to the parts similarly marked in Fig. 1. All of the wires are arranged and each provided with the stops and a car as above described.

In operation the salesman places the money, or the money and the goods sold, in the car, which he propels by a push of the hand to the inspector's counter. The force of the push is determined by the relative positions of the salesman and the inspector, and soon becomes from practice most accurately proportioned to the distance. The inspector receives the car, passes the money to the cashier and the goods to the packer, and returns the goods, when packed, together with the change, if any, to the car, which he propels to the proper salesman by a push, as above stated. Checks or slips inclosed for the purpose indicate the car to which the different parcels belong.

Among the many advantages arising from my improved system may be prominently mentioned the following: the simplicity of the system, no mechanism being required; the facility with which it may be applied by merely stretching wires; the small space taken up, the wires being scarcely visible, and the cars, in certain lights, seeming to travel through the air; the entire unobstruction to light, and the adaptability of my system to stores where the height of the ceiling and lack of room will not admit of the usual complicated systems.

The radiating system shown by Fig. 2 of the drawings is claimed in an application now pending before the office.

I claim as my invention—

The improved store-service system hereinbefore described, consisting of a horizontal wire stretched taut between fixed supports, and having two movable and adjustable stops, to move horizontally, secured to said wire, in combination with a carrier adapted to be propelled from one stop to the other in either direction on the same wire by a push of the hand, as set forth.

GILBERT R. ELLIOTT.

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