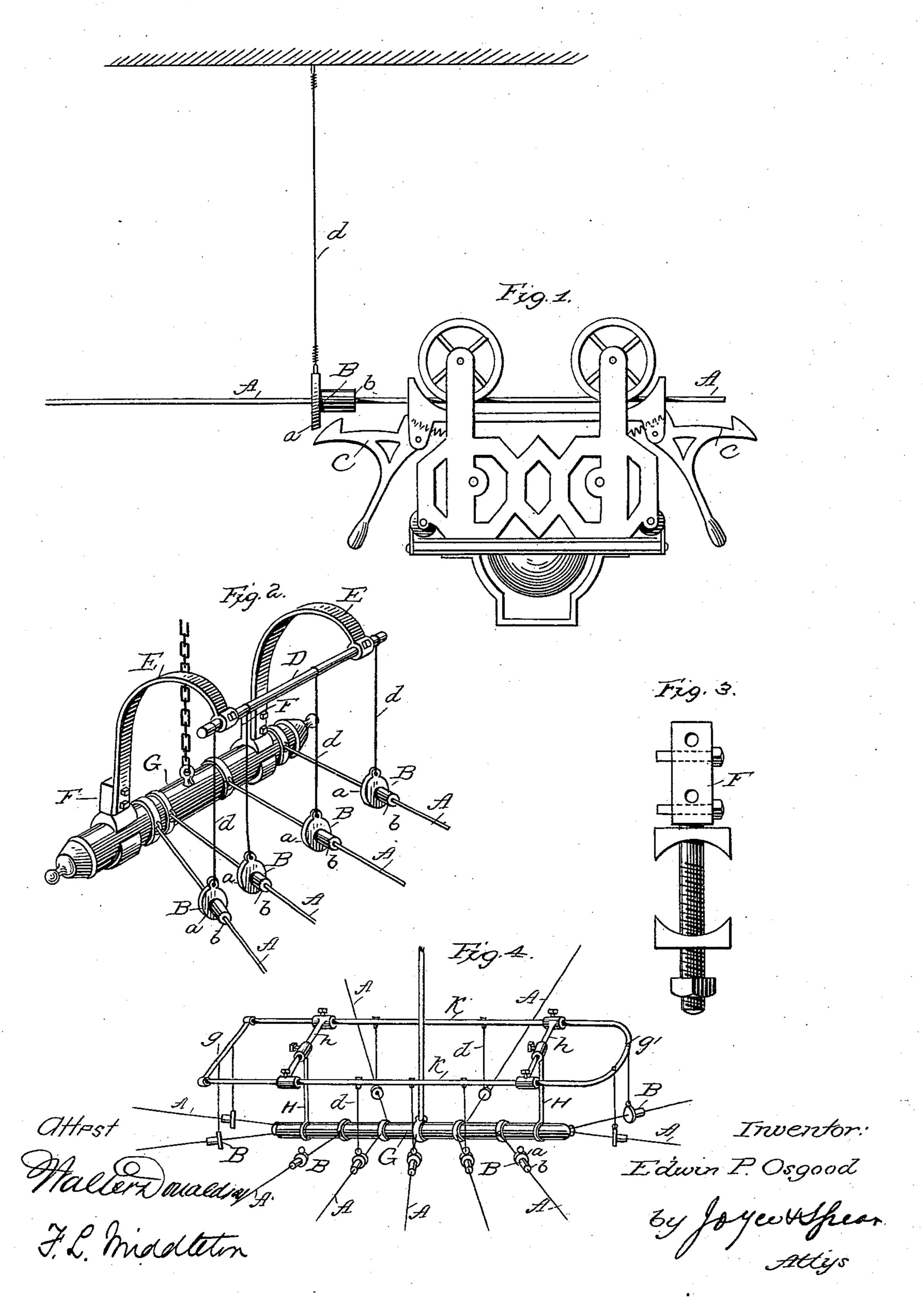
## E. P. 0SG00D.

## STOP FOR STORE SERVICE APPARATUS.

No. 354,805.

Patented Dec. 21, 1886.



## United States Patent Office.

EDWIN P. OSGOOD, OF MALDEN, MASSACHUSETTS.

## STOP FOR STORE-SERVICE APPARATUS.

SPECIFICATION forming part of Letters Patent No. 354,805, dated December 21, 1886.

Application filed May 7, 1886. Serial No. 201,465. (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 Stops for Store-Service Apparatus; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to cash - carriers or store-service systems; and it consists of an improved stop mechanism for arresting the cars at the end of the way.

The objects sought in this invention are simplicity of construction, freedom from liability to derangement, and effectual operation in the

gradual arresting of the car.

The invention consists of a stop, a retaining-flange mounted upon the way so as to slide freely thereon, and limited by a cord or wire attached to said stop or retaining device; and in connection with this, it consists of certain details of construction for suspending the stops and holding the wireways.

In the accompanying drawings, Figure 1 shows a side elevation of the track or way with a suspended stop and the catch of the carrier. Fig. 2 is a perspective view of the series of ways for the device for holding or adjusting the suspended stops. Fig. 3 shows a detail construction. Fig. 4 shows in perspective a modified form of the suspending or adjusting device.

In the drawings, A represents a wire track on which the car or bundle-carrier runs.

B is a stop or buffer placed upon the wire track surrounding and moving freely on the same, which stop or buffer, as represented, consists of a sleeve, b, having a flange, a, with which the catch C engages. The motion of the stop or buffer and the distance which it travels or moves upon the wire track A is governed by a wire or cord, one end of which is attached to the stop or buffer B, and the other end of said wire or cord is attached to any desirable point, thus giving the stop a free and easy motion, besides gradually stopping and retaining the car at the end of the way.

In Fig. 1 the stop is represented as suspended from the ceiling, and in Fig. 2 several are shown on a series of wires suspended from

the bar D; but I do not wish to confine myself to these particular supports, as shown in Figs. 1 and 2, for one end of the wire or cord being connected to the stop the other end may be connected to any desirable point with the same 55 effect. In Fig. 2 the bar D is supported on brackets E, which are attached to squareheaded bolts F, connected to the main supporting-bar G, to which the several wires of the ways are attached. These square-headed 60 bolts are made as shown in Fig. 3, and may be provided with clamps, whereby they are firmly secured to the bar G. These bars may hold one or more of the brackets, as shown in Fig. 2. The carrier impinges against the stop 65 and forces it back, and, as it is restrained by the wire or cord d, the main-wire track A, being flexible, is raised slightly, and by this gradual yielding motion it arrests the carrier gradully without a shock. The stop also re- 70 acts on the rebound of the carrier with a light yielding elastic motion.

In Fig. 4 is shown a modified form of the bracket or supporting device. This consists of a frame, K, having side bars and an end bar, 75 g, or a curved end, g', formed by bending the bars that form the side piece. The frame K is supported upon standards H, which are clamped by cross-pieces h by means of setscrews passing through sleeves, as shown in 80 the figure. The wireways A are connected to the main bar G, which is suspended from the ceiling or any suitable support in the same manner as shown in Fig. 2. These stops on the wire A are suspended from the frame in 85

the same manner.

I claim as my invention—

1. The combination, with a way of a store-service apparatus, of a stop having a retaining-flange surrounding the way and moving 90 freely thereon, and a wire or cord connected to the said stop at one end and extending at right angles to the way to a fixed point of support, whereby the movement of the stop is limited by binding upon the wire of the way, 95 substantially as described.

2. In combination, a way or series of ways, a bracket or brackets supported on a bar to which the way or ways are attached, stops surrounding the wires of the ways, and suspend- 100

ing wires or cords connected to the stops at one end and to the brackets at the other end, whereby the movement of the stop is limited by binding upon the wire of the way, substantially as described.

3. In combination with the bar G and the wireways attached thereto, the square-headed bolt, and the bracket connected to the bolt, the said bolt being clamped to the bar G, sub-

10 stantially as described.

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

E. P. OSGOOD.

Witnesses:

ROBERT B. SMITH, Jr., E. O. HOWARD.