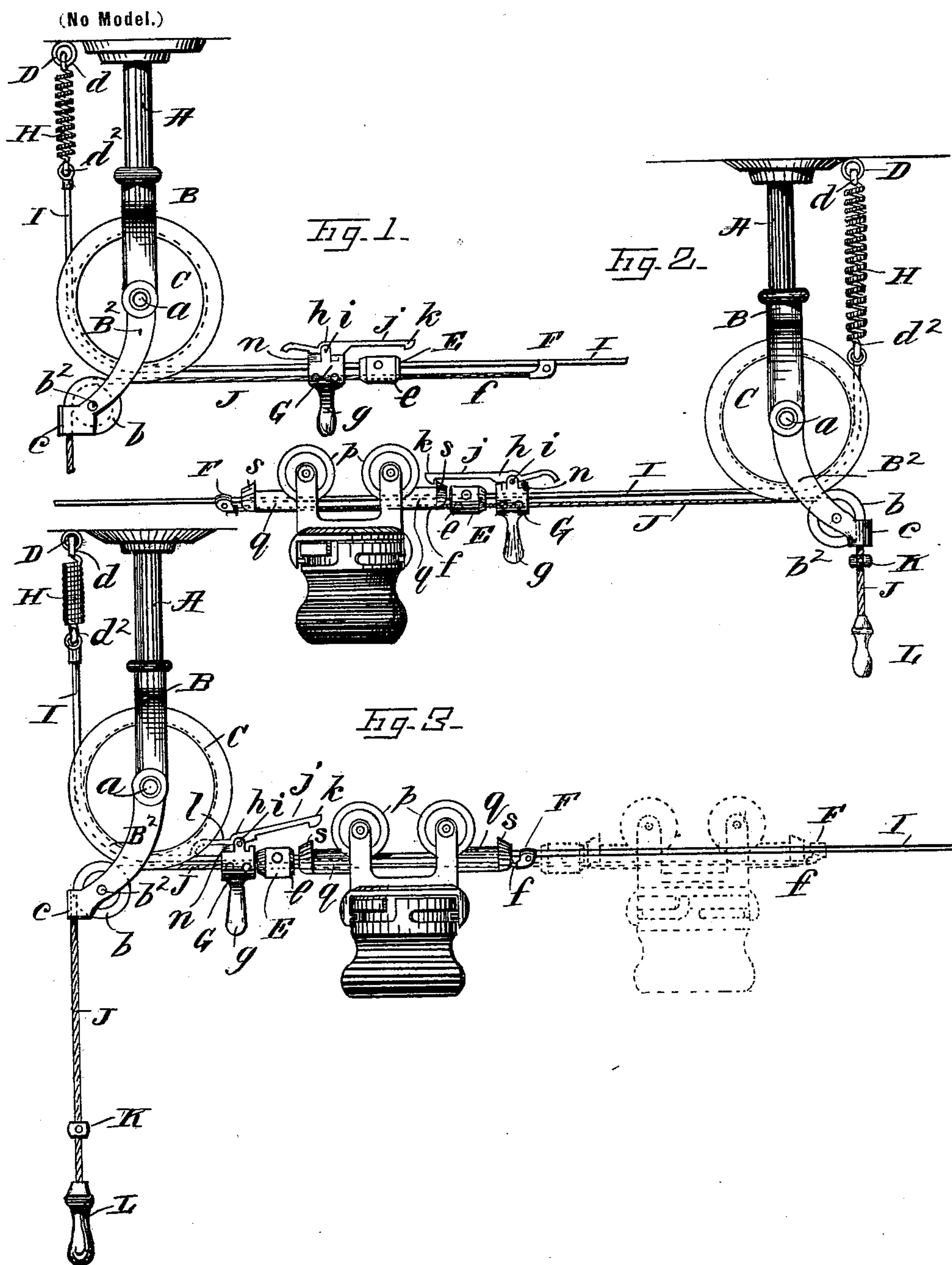


No. 631,367.

Patented Aug. 22, 1899.

J. H. GOODFELLOW.
STORE SERVICE APPARATUS.

(Application filed Nov. 23, 1896.)



WITNESSES:

A. L. Mason
J. B. Doane

INVENTOR

John H. Goodfellow
BY
Alvanus Rush
ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN H. GOODFELLOW, OF LOWELL, MASSACHUSETTS, ASSIGNOR TO THE
LAMSON CONSOLIDATED STORE SERVICE COMPANY, OF NEWARK, NEW
JERSEY.

STORE-SERVICE APPARATUS.

SPECIFICATION forming part of Letters Patent No. 631,367, dated August 22, 1899.

Application filed November 23, 1896. Serial No. 613,157. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. GOODFELLOW, a resident of the city of Lowell, in the county of Middlesex and State of Massachusetts, have
5 invented certain new and useful Improvements in Store-Service Apparatus, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to store-service apparatus of the character described in United States Letters Patent No. 582,785, dated May 18, 1897; and it has for its objects to provide means for impelling the carrier over the way between two stations, to arrest the carrier and
15 release it under power transmitted through the way, and to provide means connected to the way for returning the several devices to their normal positions.

My invention consists of certain novel features hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of one of the stations at one end of the way with the parts in their normal
25 positions. Fig. 2 is a side elevation of one of the stations at the opposite end of the way, showing the carrier arrested at said station. Fig. 3 is a side elevation illustrating the position of the various devices in the act of releasing the carrier to be propelled to the other
30 end of the way.

Like letters of reference refer to like parts throughout the several views.

A represents a suitable hanger from the ceiling at each end of the way, to which a bifurcated bracket B is secured and in which is mounted a suitable groove-pulley C upon a shaft *a*, below and rearward of which is a bifurcated bracket B². At the lower part is
40 mounted a small groove-pulley *b* on the shaft *b*², the tread of this pulley being slightly below the upper one. A casing *c* closes in the back of the small pulley and serves as a check or stop.

D is an eye-screw made fast in the ceiling, to which a strong coil-spring H is connected at *d* by a suitable eye. The opposite end of said spring has an eye *d*², to which one end of the track-wire I is secured and which passes
50 under the pulley C to the opposite end, where it is connected to a similar spring H.

E represents a contact-block permanently secured at a predetermined distance from each end of the way to regulate the desired impulse required according to the length of
55 the way to be traveled by the carrier, and it has a groove *e* formed in its bottom side.

F is a clip secured to the way in front of the block, and to it is secured one end of a light elastic or retracting spring *f*, which leads
60 rearward therefrom through the groove *e* and has its opposite end permanently connected to the latch-body G, to the opposite end of which the operating-cord J is secured and passes back over the pulley *b*, down through
65 the casing *c*, and has a suitable stop *k* secured thereon, and at its lower end is secured a handle L. The latch-body G is constructed with a suitable hole longitudinally through it to allow of its sliding on the way I between the
70 contact-block E and pulley C, and it has a counterbalance *g* to keep it upright on the way, and also a latch *h* mounted centrally by suitable pivots *i*. The forward end *j* is provided with a catch *k*, adapted to engage a
75 beveled catch *s* on the end of the carrier, and the end *j* is of sufficient length to reach over the contact-block *e*. (See Fig. 2.) The rear end *l* of the latch has its end curved downward, and a spring *n* is interposed between it
80 and the latch-body, which keeps it in normal position to cause the catch *k* to engage the beveled catch *s* on the carrier.

The carrier is of ordinary construction, having suitable wheels *p* to ride upon the wire-
85 way and clip F, and it has constructed on its ends in front of the wheel a hollow case *q*, through which the wireway I passes.

Assuming that the devices are in their normal positions, as seen in Fig. 1, with the carrier held by the latch *k*, a pull upon the handle L will draw the carrier back against the contact-block and stretch the spring H at the other end of the way, as seen in Fig. 2, and close the spring H at the end at which the carrier is located, as seen in Fig. 3. When
95 the way has been drawn sufficiently back, the curved arm *l* rides under the pulley C, which causes the catch *k* to release the carrier, which moves forward, as shown in dotted lines, Fig. 3, and the elastic *f* at the opposite end having been extended by the pulling of
100

the way toward one end, caused by pulling on the handle, recoils. The block E and way I having spent their force in one direction in line of travel bound back to balance or
5 become equal and assume the normal positions, as seen in Fig. 1. The carrier arriving at the opposite end contacts with the block, as shown in Fig. 2, and the catch *k* engages the catch *s* and holds the carrier.

10 Having thus ascertained the nature of my invention and set forth a construction embodying the same, what I claim as new, and desire to secure by Letters Patent of the United States, is—

15 1. In a store-service apparatus, a way, brackets at the opposite ends of said way, a pulley mounted in each bracket and having a groove in which the way is located, a carrier adapted to travel on said way, and a
20 spring connected to each end of the way beyond said pulleys and to a suitable bracket.

2. In a store-service apparatus, a way, a

bracket at each end of said way, a pulley mounted in each bracket and having a groove in which the way is located, a carrier adapted
25 to travel on said way, a contact-block permanently secured to the way in front of each pulley, a clip secured to the way in front of the contact-block, a traveling latch-body in the rear of the contact-block and having elas-
30 tic connection with the clip, an operating-cord connected to the other end of said latch-body, and a latch on the latch-body adapted to reach over the contact-block and arrest and
35 hold a carrier connected with said block.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 21st day of October, A. D. 1896.

JOHN H. GOODFELLOW.

Witnesses:

S. B. DOANE,
A. L. MESSER.