(No Model.)

J. H. GOODFELLOW.

STORE SERVICE APPARATUS.

No. 568,440. Patented Sept. 29, 1896.

Fig. 2.

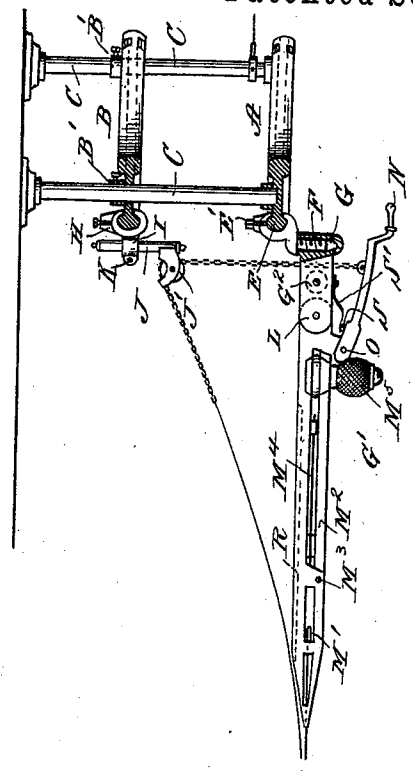
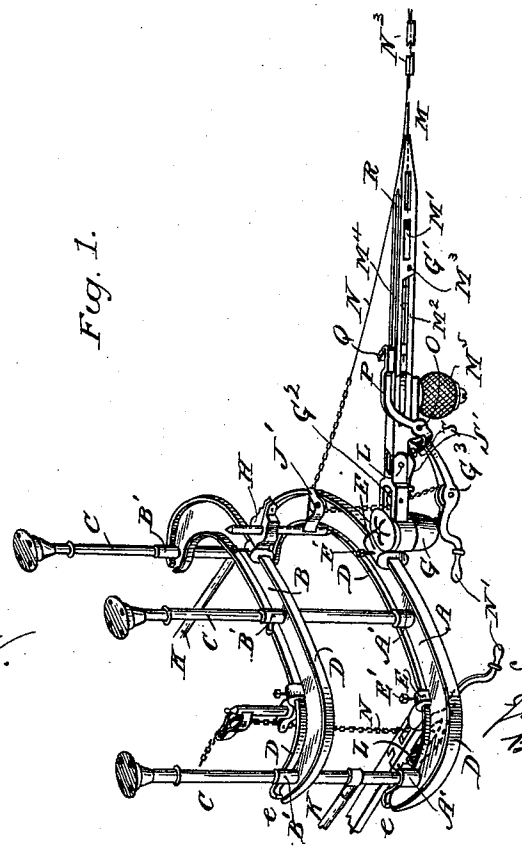


Fig. 1.



Witnessed.
L. H. Prow.
E. L. Harlow.

Inventor.
John H. Goodfellow
By E. C. Edmunds
J. H. Rush
Atty

UNITED STATES PATENT OFFICE.

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

STORE-SERVICE APPARATUS.

SPECIFICATION forming part of Letters Patent No. 568,440, dated September 29, 1896.

Application filed September 22, 1893. Serial No. 486,179. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. GOODFELLOW, of the city of Lowell, county of Middlesex, and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Store-Service Apparatus; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a new and useful improvement in store-service apparatus whereby a vertical and a lateral adjustment in any direction may be given to the way.

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

Figure 1 is a perspective view of my invention; and Fig. 2 is a side elevation thereof, showing a portion of the bracket in section.

The brackets A and B are supported, one above the other, by suitable hangers C, secured to the ceiling. The bracket A is provided with bosses A′, into which the lower ends of the hangers C are secured, and the bracket B is provided with similar bosses B′, through which said hangers C pass. The bosses B′ have set-screws, so that the bracket B can be adjusted in any desired position vertically upon the hangers C. Around the edges of the brackets on both sides there is provided a rib or flange D, the shape of which is optional so long as it is of a shape to fit into the clamps E and H, for which it is intended.

Upon the bracket B there are arranged the clamps H, which surround or grasp the rib D of the bracket and are provided with set-screws E′, by which they are secured firmly in place after being adjusted. The clamps E, secured to the lower bracket A, have a downwardly-projecting screw F, screwed into the bracket G. This screw connection between the clamps E of the bracket A and the bracket G permit any desired lateral adjustment of the way. By the term "way" is meant the track M and the horns G′, at opposite ends thereof.

Upon the bracket B, and directly above the clamp E on the bracket A, there is located a similar clamp H, which is provided with the clamp I, through which an adjustable support J, having a pulley J′, located on one end, passes. The vertical adjustment of this support J is effected by hand after loosening a set-screw K, located in said clamp, as shown, on the right hand. If it is desired to give a still greater vertical adjustment to this support, it may be arranged, as shown, on the left hand, with the pulley at the upper end. By increasing or decreasing the vertical distance between the adjustable support J and the bracket G a greater or less throw will be given to the carrier by the propelling-line N.

To the bracket G a horn G′ is pivotally secured at L. The track M passes through the end of the horn G′ and is secured in said horn by being bent upon itself, as shown, at M′. To the rear of this connection there is shown a strip M^2, pivoted at M^3, which yields to the pressure of the wheels as the carrier passes onto the horn. The springs M^4 also take up the momentum of the carrier, as well as the rubber cushion M^5.

The propelling-line N extends from the salesman's lever N′ up through the bracket G and over the pulley J′, and then downwardly toward the way, to which it is held in proximity by the sleeve N^3. It then extends upwardly again around the pulley J′, past the pulley G^2, around the pulley G^3 in the cashier's lever, and is secured in the bottom of the bracket G. The carrier is propelled from one end to the other by the operation of a lever N′, the propeller acting against the rear of the carrier and propelling it on toward the other end. The levers are pivoted to the horn G′ at O, and the lever at the cashier's end has an upward extension P, provided with a latch Q, which latch holds the carrier at the cashier's end and prevents the salesman from returning it to himself without the operation of the lever by the cashier.

The groove R in the upper side of the horn provides for the propeller-chain N when forced therein by the carrier as it passes onto the horn.

S represents a set-screw, which can be adjusted to prevent the lever striking the under

side of the bracket G. S′ represents a spring which bears against the adjustable set-screw S and thereby forces down the lever N′, so as to take up the slack of the propelling-wire after the carrier has been propelled toward the opposite end.

The propelling-line, track, horn, and means for increasing or decreasing the vertical distance between the horn and the propelling-line at each end of the way do not form the subject-matter of this application, but are described and claimed in another application, Serial No. 486,178, filed of even date herewith, and in which the latch Q, for retaining the carrier at the cashier's end, is also described and claimed.

By my present invention I provide both a lateral and a vertical adjustment of the way, as the pivot, formed by the screw F with the bracket G, permits a lateral adjustment of the way, and the pivot L between the horn G′ and the bracket G permits of a vertical adjustment of the way. The adjustable support I is so arranged in the clamp H that, in addition to being raised and lowered, it can be turned so that it and its pulley J′ will aline vertically with any lateral adjustment of the horn G′, and consequently the propeller-line N and the way M can always be kept in vertical alinement. The bracket B, by being made adjustable on the hangers C, permits an increase or decrease of the vertical distance between it and the lower bracket A, so that it assists in giving a greater or less throw to the propeller N by increasing or decreasing the vertical distance of the pulley J′ from the bracket G. The object of these adjustable connections, in the construction of store-service apparatus, is that such apparatus may be located over a desk or against a side wall and supported from the ceiling in any suitable manner and guyed to the side walls by suitable guy-rods, and the adjustable connections between the ways and the brackets may be located so as to admit of the ways radiating in any desired position from the brackets.

I do not limit myself to the exact arrangements and constructions shown, as the same may be varied without departing from the spirit of my invention.

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

1. In a store-service apparatus, hangers, brackets mounted on said hangers one above the other, a way connected to one of the brackets so as to be capable of lateral adjustment thereon, and a propeller connected to the other bracket so as to be capable of lateral adjustment thereon.

2. In a store-service apparatus, hangers, brackets mounted on said hangers one above the other, a way connected to one of the brackets so as to be capable of adjustment thereon and a propeller connected to the other bracket so as to be capable of adjustment.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 13th day of September, 1893.

JOHN H. GOODFELLOW.

Witnesses:
E. L. HARLON,
L. H. TROW.