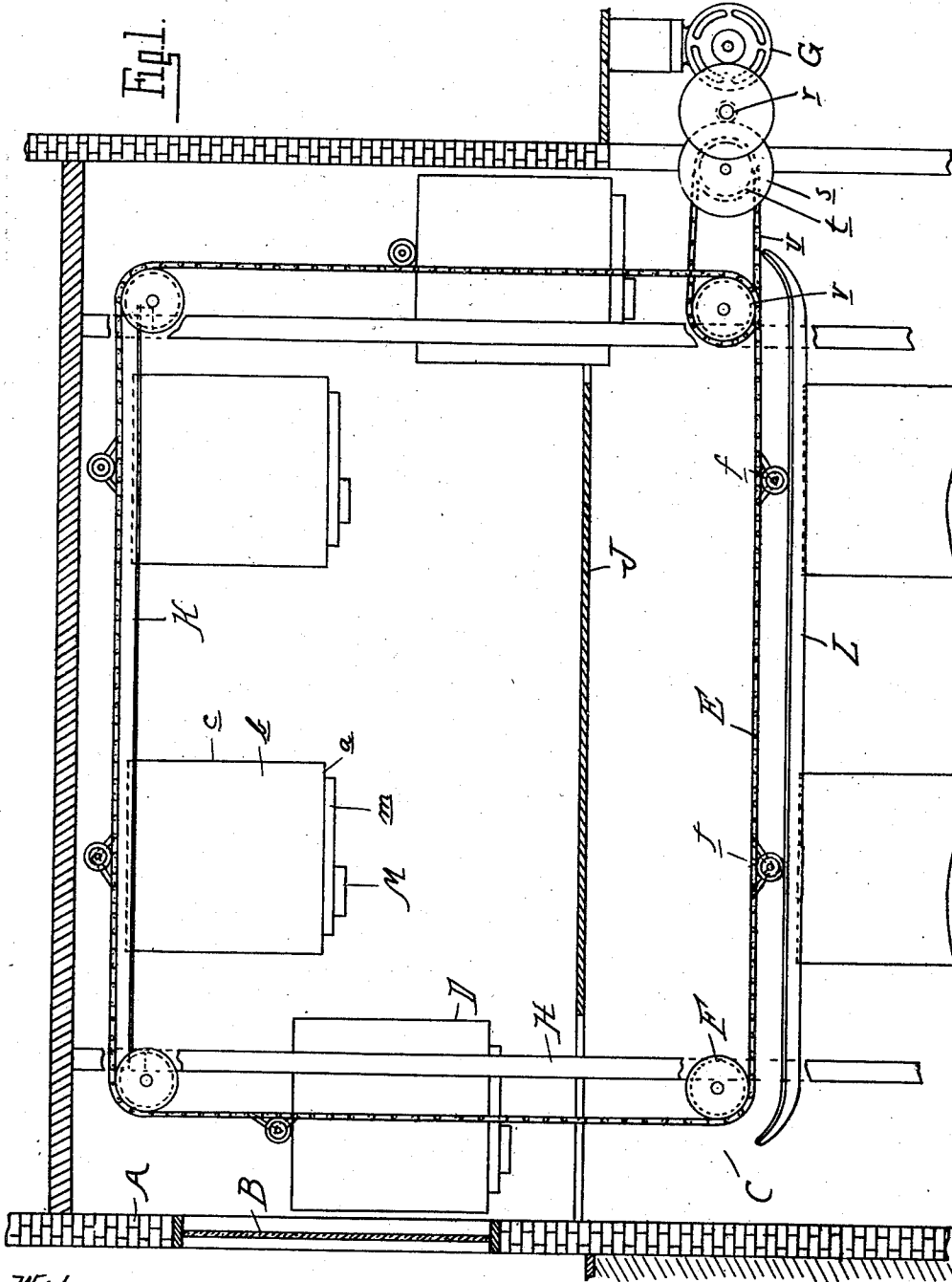


D. FULLER.  
WINDOW DISPLAY MECHANISM.  
APPLICATION FILED JUNE 15, 1910.

1,002,911.

Patented Sept. 12, 1911.

3 SHEETS—SHEET 1.



Witnesses  
*H. B. Ford*  
*C. B. Kemp*

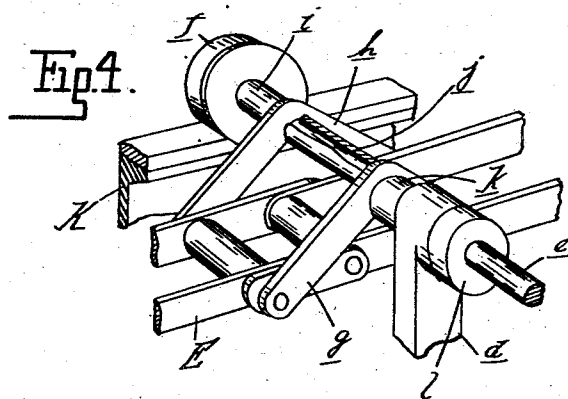
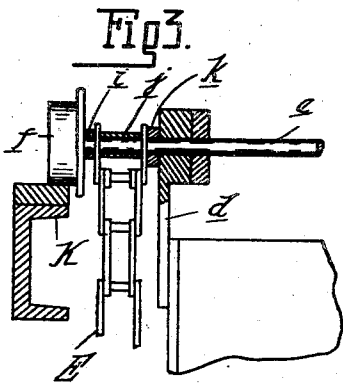
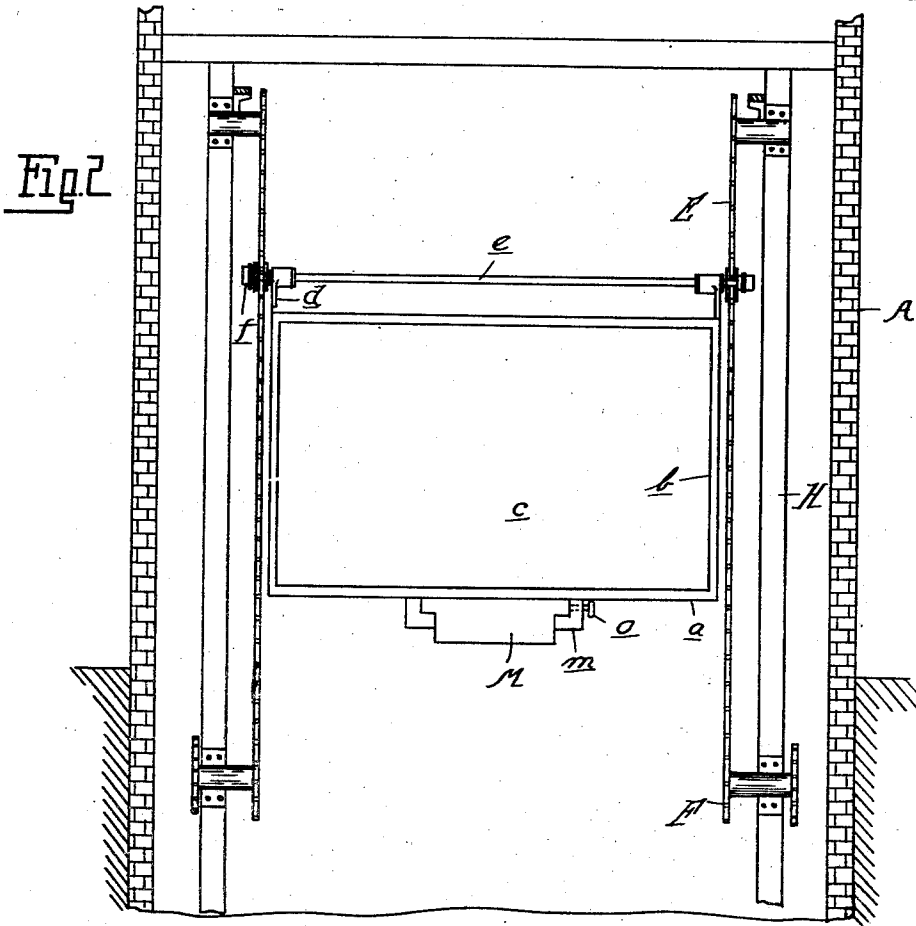
Inventor  
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3 SHEETS—SHEET 2.



Witnesses  
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*W. B. King*

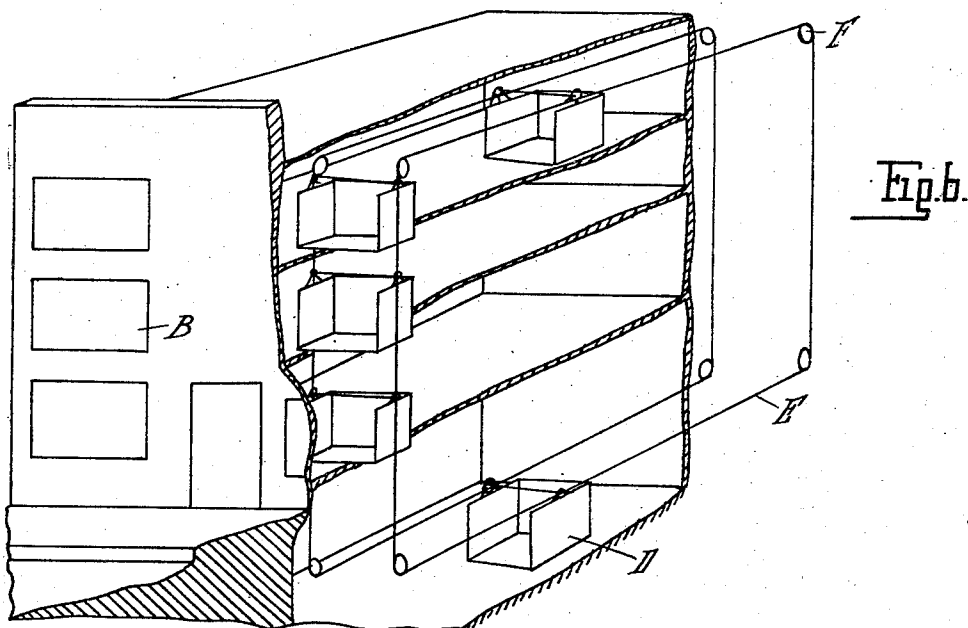
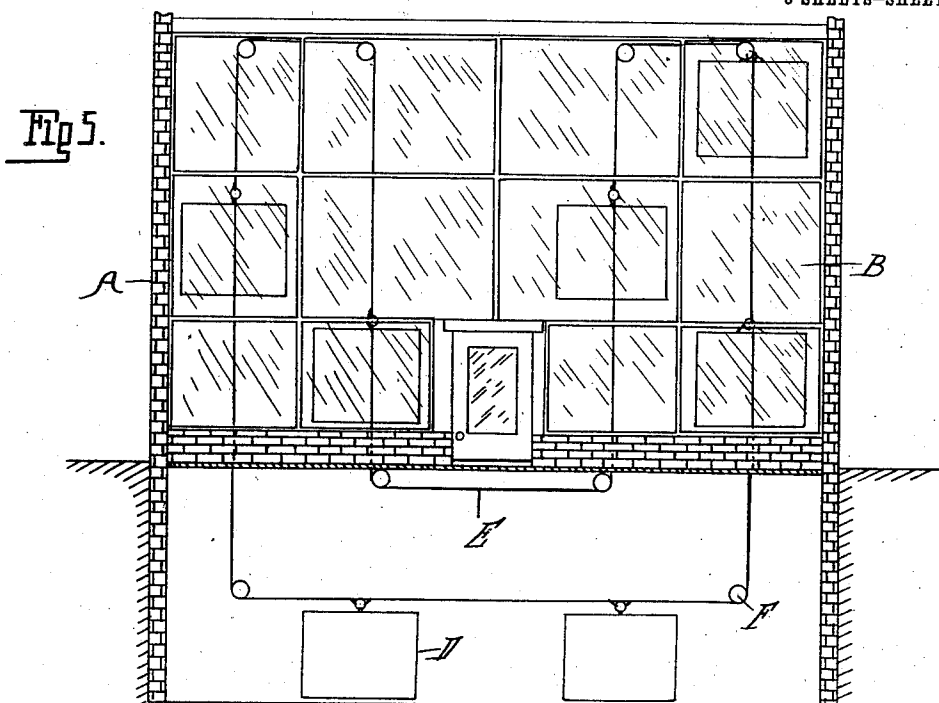
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3 SHEETS—SHEET 3.



Witnesses  
W. O. Ford  
W. B. Kemp

Inventor  
Donald Fuller  
By Whitterson Hulbert & Whitterson  
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# UNITED STATES PATENT OFFICE.

DONALD FULLER, OF DETROIT, MICHIGAN.

WINDOW-DISPLAY MECHANISM.

1,002,911.

Specification of Letters Patent. Patented Sept. 12, 1911.

Application filed June 15, 1910. Serial No. 567,047.

To all whom it may concern:

Be it known that I, DONALD FULLER, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Window-Display Mechanisms, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to an apparatus for dressing store windows, and particularly to a construction where substantially the entire window contents may be changed as frequently as desired without loss of time in removing and replacing goods or the use of the window for exhibition purposes.

The invention consists in the novel construction of the apparatus, in the peculiar arrangement and combination of parts, and further in various details of construction, as will be more fully hereinafter set forth and claimed.

In the drawings,—Figure 1 is a view in side elevation of apparatus embodying my invention; Fig. 2 is a front view thereof; Fig. 3 is an enlarged sectional elevation of a portion of the apparatus; Fig. 4 is a sectional perspective view of the mechanism illustrated in the preceding figure; and Figs. 5 and 6 are respectively views in front elevation and sectional perspective of modified forms of the apparatus.

In general, the mechanism includes a series of compartments, each of a size to contain substantially the entire contents or display of a show window, and means of suitable character for moving the compartments into registration with the window through which the display is to be viewed. In the preferred form presently to be described, an endless series of compartments are employed, and power operating mechanism used of such construction as to successively present the compartments before the window or windows. In Figs. 1 to 4 of the drawings I have shown the apparatus as designed for use in connection with a single window and in the remaining figures as adapted for a number of windows; the specific construction varying according to the size of the building and the amount of display desired.

With reference to the first mentioned fig-

ures, A represents the building in which the display is to be effected, B the window, and C the apparatus. In the preferred form, illustrated, it comprises a series of compartments as D, each mounted for oscillatory movement upon a pair of spaced sprocket chains, as E, running over sprocket gears F and driven by a suitable motor G. Proper supports, as H, are provided for the gears, and the latter are so positioned that the carrier chains and compartments carried thereby will travel in a vertical plane adjoining the window, rearwardly of the building along the ceiling thereof, then downwardly along the rear wall I below the flooring J, and returning beneath said flooring to the building front, thus performing a complete cycle of operation. As thus constructed, it will be readily apparent that substantially the entire window display may be varied as many times and with the frequency desired, depending upon the number of compartments in the series and the speed or travel of the carrier, and this without loss of the use of the window for exhibition purposes and without the necessity of the removal and replacement of goods, the compartments having been once dressed or furnished the exhibits being enabled to be run continuously for a considerable period of time, depending upon their number.

The size and detail construction of the compartment will of course be varied according to the exhibit that is to be displayed, but is designed in every instance as previously pointed out to contain substantially the entire window contents. In the form illustrated, each compartment is of substantially box-shape construction, having a flooring *a*, side walls *b*, and a backing *c*. If desired, the sides and rear of each compartment may be made of transparent material, so that the exhibits or window displays may be viewed from the interior of the building, as well as from the front thereof.

Each compartment is provided with a pair of hangers, as *d*, one upon each side thereof, and centrally disposed, which in turn are loosely mounted upon a transverse shaft *e* supported at its end portions upon the carrier chains E and carrying at its extremities rollers *f* adapted to travel on up-

per and lower tracks K and L respectively, these tracks serving to support the compartments and the contents thereof in their horizontal travel between the gears.

5 The carrier bearings for the shaft are formed preferably in each instance by a pair of links on each side of the sprocket, indicated by the reference-letters *g* and *h*, the links being spaced at their lower ends  
10 and having registering apertures at their upper ends through which the shaft end projects, as plainly shown in Figs. 1 and 4. Any play of the supporting shaft with respect to the carrier chains, as well as end-  
15 wise movement of the compartment, is prevented by sleeves, as *i*, intermediate the roller and the adjoining bearing links a similar sleeve *j* interposed between the pairs of bearing links and formed preferably integral  
20 with one thereof, a spacing collar *k* between the inner pair of links and the adjoining hanger *d*; and, finally, collars *l* fixed to the shaft one upon the inner side of each hanger, as shown.

25 The construction described, as will be obvious, permits each compartment to maintain its proper vertical position, irrespective of the direction of travel. In some instances, due to the character of the display  
30 and the arrangement thereof within the compartment, the latter may be caused to assume a position out of the desired vertical alinement. To overcome this, I have provided for each compartment a counter-  
35 balance M, in the form preferably of a weight mounted for adjustment in ways or guides *m*, suitable means—preferably a set-screw as O—being provided to retain the weight in its adjusted position.

40 The driving means may be of any preferred form, the motor of any suitable type. I have here shown a drive connection between the motor and the carrier, consisting  
45 of a pinion *p* upon the motor shaft, a large gear *q* meshing therewith, a gear pinion *r* meshing with a second large gear *s*, a sprocket gear *t* rotating with the gear *s*, and a sprocket chain *u* connecting the sprocket gear described with one of the carrier  
50 sprockets, as *v*.

In the modification illustrated in Fig. 6, the series of compartments are designed to register with a plurality of windows, in this particular instance a vertical series, and to  
55 return along the ceiling of the top floor to the rear of the building, downwardly along the rear wall thereof, and forwardly through preferably the cellar, so as to not occupy any space upon the ground floor.  
60 In this form, the several compartments are especially adapted to be viewed above the first floor from the building interior, and the construction is such that the compartments may be dressed each from the floor

containing goods in a particular department, as for instance the clothing department or boot and shoe department, as the case may be.

In Fig. 5 the compartments are designed to register with several vertical series of 70 windows, traveling up one series and down another, and through the cellar section of the building in opposite directions beneath the main doorway.

It will be obvious from the foregoing description that the invention is susceptible of 75 various modifications, and I therefore do not desire to be limited to the specific forms shown and described, although I deem the same preferable in use. 80

What I claim as my invention is,—

1. In a store building, having a display opening therein, a vertical way extending across the opening from floor to floor of the building, and a remotely located vertical 85 way, in combination with a plurality of connected movable window display compartments arranged to move upwardly and downwardly respectively in the said ways and adapted to be located back of the said 90 window display opening, each of said compartments representing complete window display compartments, and means for moving said compartments to and from the said opening to cause the same to move up one 95 of said ways, and down the other, substantially as described.

2. In a store building having a window display opening therein and a vertical way extending from floor to floor and across said 100 opening, a vertical way separated from said other way and extending from floor to floor of said building, an endless carrier moving in said ways, means for driving the carrier and a plurality of window display compartments 105 secured on the carrier and representing respectively complete display compartments for the window opening whereby the said display compartments can be transported to the window opening and from 110 floor to floor of the building for the purpose of expediting the trimming or arrangement of displays in the said compartments.

3. The combination with a store building having a display opening therein, a way located in the rear of the opening, an endless 115 traveler passing up the way a series of window display compartments carried by the carrier, a horizontally disposed track, rollers carried by the carrier adapted to move upon said track as the carrier passes 120 along the same, and means for driving the carrier.

4. In a store building, the combination with a store structure having a display opening therein and a vertical way in the rear of the opening, a remotely located vertical way, an endless carrier passing through 125

the said ways, and a series of display compartments mounted on the carrier, each of which is provided with transversely arranged supporting cleats, a weight slidably supported in said cleats, and means for securing the weight in different positions of adjustment.

In testimony whereof I affix my signature in presence of two witnesses.

DONALD FULLER.

Witnesses:

JAMES P. BARRY,

W. J. BELKNAP.