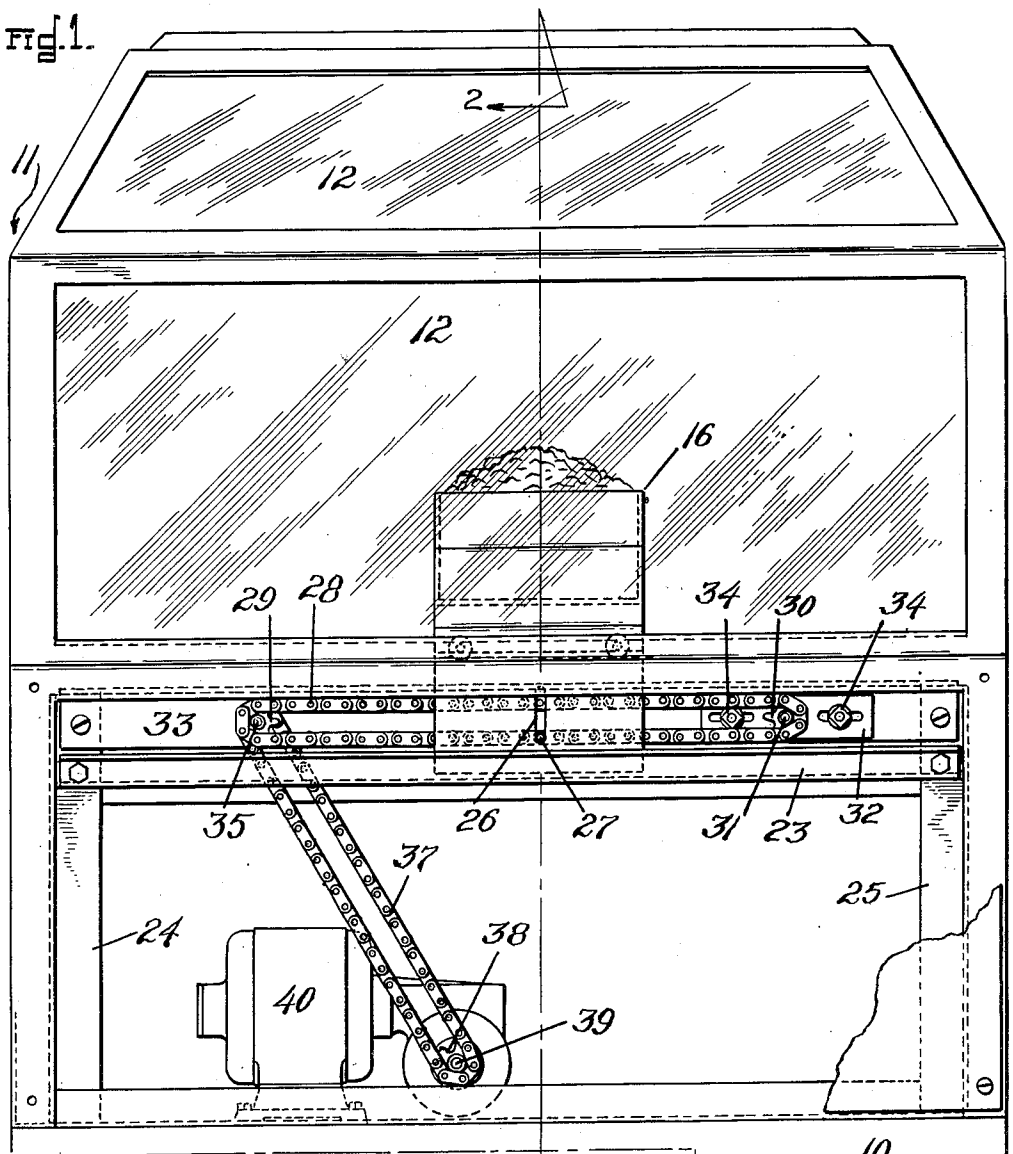
March 20, 1951 J. E. GAUVREAU 2,545,575

DISPLAY CABINET

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Fig. 1.



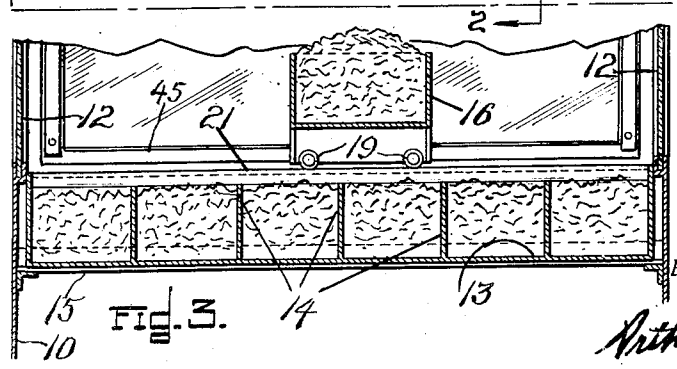


Fig. 3.

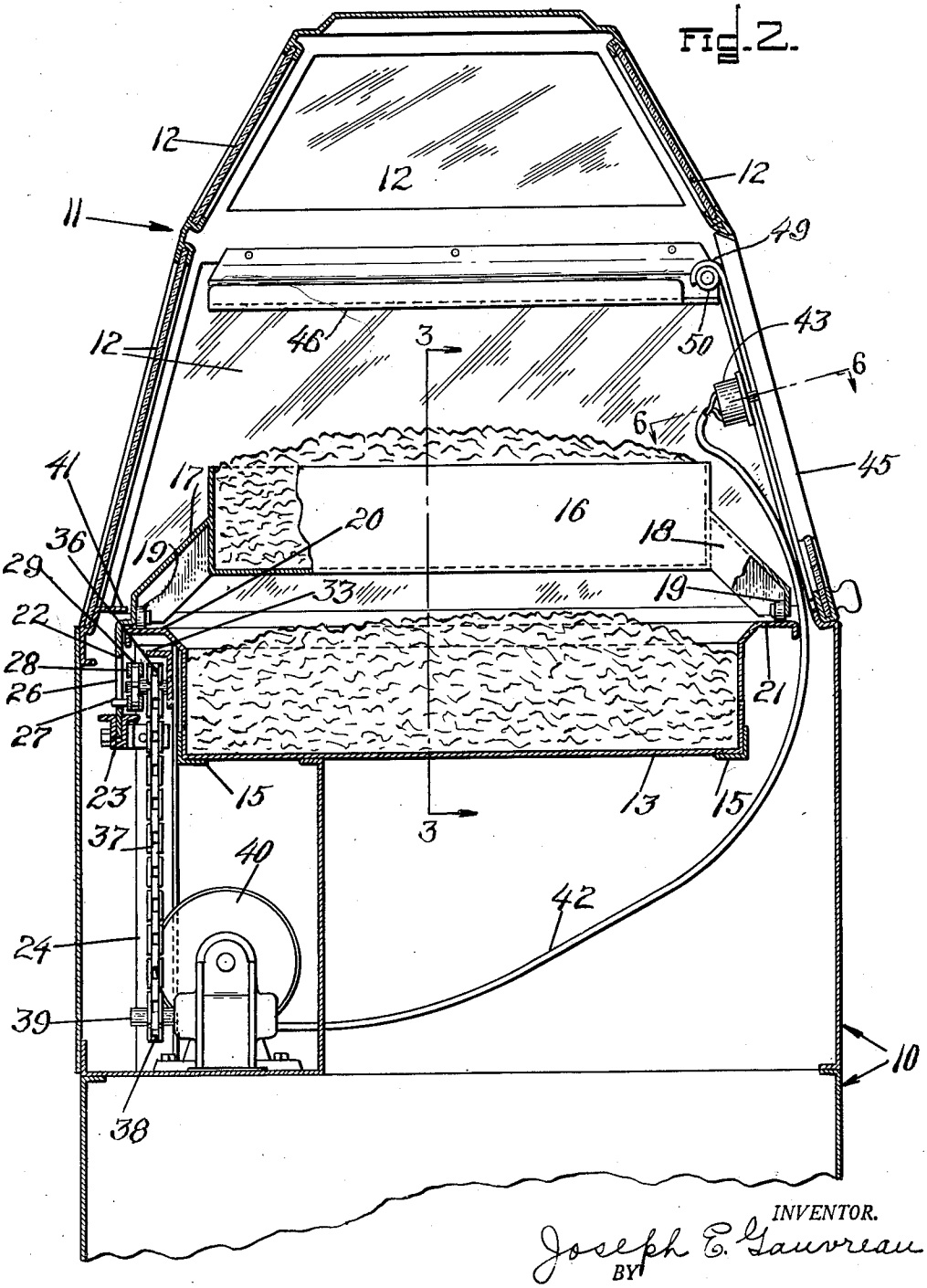
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DISPLAY CABINET

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Fig. 2.



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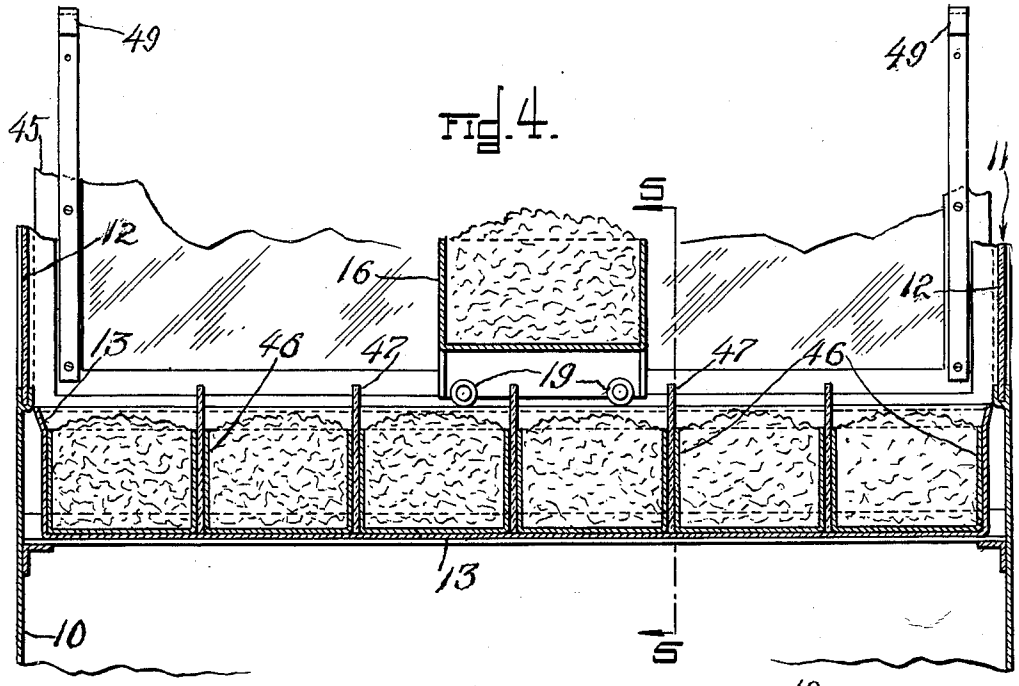


Fig. 4.

Fig. 5.

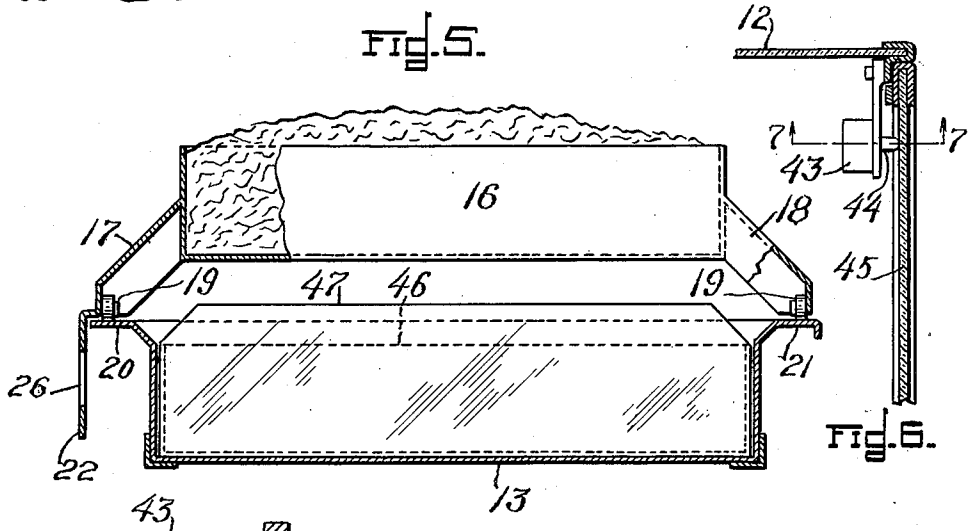


Fig. 6.

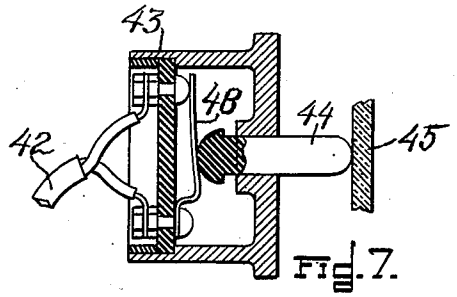


Fig. 7.

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DISPLAY CABINET

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Application November 6, 1946, Serial No. 708,098

7 Claims. (Cl. 312—223)

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This invention relates to display cabinets for the storage, display and dispensing of merchandise, particularly nuts, and it has for its object to provide an improved cabinet of this class.

To this end I have provided a display cabinet of the class described whose contents are attractively displayed to view and contained within two receptacles whereof one is disposed directly above the other, the lower receptacle being relatively large and occupying a fixed position within the cabinet and the upper receptacle being relatively small and continuously reciprocated back and forth on a rectilinear path above the lower receptacle, while the cabinet is in its normal condition, thereby to attract the attention of customers.

In the preferred form of this invention the cabinet comprises a housing or casing by which said two receptacles are normally inclosed, said housing being provided with a normally closed door or closure member that is adjustable into an open position to render the contents of the receptacles accessible and which, when opened, automatically stops the reciprocatory movements of the upper receptacle. Also, in the preferred form of the invention the upper receptacle is driven by an electric motor whose circuit includes a switch that is normally maintained closed by the door or closure member while the latter occupies its closed position, but which is automatically opened when the door or member is opened so that said upper receptacle is motionless while the door or closure member is open thereby avoiding interference with the removal of merchandise from the receptacles in making a delivery to a customer.

As an additional feature the preferred embodiment of the invention may provide for manual operation of the circuit of the motor while the door or closure member occupies its open position so that the upper receptacle can be shifted about under the control of the operator as sometimes may be necessary in making a delivery of merchandise.

Other features and objects of the invention will be hereinafter pointed out.

In the accompanying drawings—

Figure 1 is a front elevation of my improved cabinet, a front panel of the base portion of the housing being broken away to expose the interior thereof.

Figure 2 is a section on line 2—2 of Fig. 1.

Figure 3 is a section on line 3—3 of Fig. 2.

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Figure 4 is a sectional view like that of Fig. 3 but illustrating an alternative construction.

Figure 5 is a partial section on line 5—5 of Fig. 4.

Figure 6 is a sectional detail on line 6—6 of Fig. 2.

Figure 7 is a sectional detail on line 7—7 of Fig. 6.

The housing of the cabinet herein illustrated comprises a base portion 10 made mostly from sheet metal and an upper portion, or superstructure, 11 at the top of said base portion made up of panels 12 of glass or other suitable transparent sheet material held in place by a metallic framework that is an extension of the base portion 10.

Within base portion 10, and at the top thereof, there is fixed a relatively large open receptacle in the form of a tray 13 which, as shown in Fig. 3, extends from one end wall of the housing to the opposite end wall and is interiorly divided by transverse partitions 14 into a plurality of compartments to be filled with different kinds of merchandise. This tray 13 rests upon and is supported by longitudinal angle bars 15 fixed at their opposite ends to the end walls of the housing so that said tray is fixedly supported.

Directly above the fixed tray 13 there is provided a smaller open receptacle in the form of a tray 16 provided at its opposite ends with legs 17 and 18, each of which is equipped with a pair of spaced apart trucks or rolls 19 which rest upon a pair of longitudinal rails 20 and 21 which, as shown, may be horizontal flanges provided at the tops of the front and rear walls of fixed tray 13. As will be clear, this construction provides for back and forth movement of upper tray 16 longitudinally on the rails 20 and 21.

The leg 17 of tray 16 is provided at its lower end with a skirt extension 22 which is completely hidden from view within the base portion 10 of the housing, and whose lower marginal portion occupies a guide channel provided by the interior of a cross-bar 23 that is U-shaped in cross-section, said cross-bar being rigidly fastened at its opposite ends to uprights 24 and 25 (Fig. 1) which, in turn, are rigidly connected with the base portion 10 of the housing.

The skirt 22 is made with a vertical slot 26 that is occupied by a stud 27 projecting from an endless chain 28 which is supported in a horizontal position by two sprockets 29 and 30. Sprocket 30 is rotatably supported by a stud shaft or pintle 31 projecting from a plate 32 that is adjustably fixed in position upon a cross-bar 33

by two screws 34 occupying slots formed in said plate, said screws engaging tapped holes formed in cross-bar 33. This provision for adjustment of sprocket 30 enables the chain 28 to be maintained tight at all times.

The sprocket 29 is loosely mounted upon a stud shaft 35 projecting from cross-bar 33 and is also compounded with another sprocket 36 connected by an endless chain 37 with a fourth sprocket 38 fast on a shaft 39. Shaft 39 is driven through reducing gearing by the armature shaft of an electric motor 40 fixed in position within base portion 10.

While motor 40 is operating it acts through the connections described to continuously actuate chain 28 in one direction, the stud 27 of chain 28 acting against the opposite sides of slot 26 to reciprocate the upper tray 16 whose motion is effective to attract the attention of customers to the contents of the cabinet.

At the front side of the base portion 10 the latter is made at its top with a longitudinal inturned flange 41 whose inner edge occupies a position close to the path of the outer end of leg 17 with the result that the means for actuating the upper tray 16 is completely hidden from view by said flange 41 and track 20, and this is a highly desirable feature.

One of the line wires of the electric circuit supplying current to motor 40 is extended by a cable 42 (Fig. 2) whose wires are connected with the terminals of a pushbutton switch 43 fixed in position upon the inside of the metal frame of the superstructure 11 alongside of a door or closure member 45 which normally occupies a position closing a doorway provided upon the rear side of the superstructure 11. While the door occupies its closed position it holds the pushbutton 44 of switch 43 in position to maintain said switch closed so that motor 40 operates continuously to reciprocate tray 16 so long as the door remains closed. When, however, the door 45 is swung upwardly toward its open position its pressure on pushbutton 44 is relieved thus permitting the usual spring contact 48 of the switch to shift the pushbutton into a position where the switch is opened thereby stopping the motor 40 and tray 16.

The door 45 is swung upwardly and when it reaches a horizontal position it may be slid edgewise into position upon brackets provided at the opposite ends of the superstructure upon the inner sides thereof. One of the brackets is shown at 46 in Fig. 2. These brackets serve to hold the door in its fully opened elevated position while delivery is being made from the cabinet and it will be clear that if the tray 16 is stopped in a position above a compartment of tray 13 from which it is desired to make a delivery, then the switch 43 is accessible for manual operation to shift the tray out of the way.

Figs. 4 and 5 illustrate an alternative construction of fixed receptacle wherein the partitions 14 of Fig. 3 are omitted to adapt the tray 13 to receive within it a plurality of individually removable oblong bin units 46 disposed transversely with respect to the path of the reciprocating receptacle or tray 16, each of said bin units being adapted to hold and display a quantity of merchandise. Between adjoining bin units 46 are provided individually removable partition inserts 47 that are higher than the bins and preferably made from transparent glass or other suitable and rigid sheet material. As will be clear each bin unit may be loaded with a different kind of merchandise, such as nuts.

As shown in Figs. 2 and 4 the door 45 is equipped with two hooks 49 disposed upon the inner side thereof adjacent to the opposite ends thereof. These hooks are also disposed near the top of the door and each co-operates with a roll 50 mounted upon the proximate bracket 46 in position to provide a pivot on which the door may be swung up and down and on which the door is free to ride as it is moved horizontally while occupying its uppermost position. Rolls 50 also serve as stops to limit the outward movement of the door as it is removed from the bracket 46. Any other type of closure member may be substituted for the door 45 so long as it controls access to contents of the cabinet.

What I claim is:

1. A cabinet of the class described comprising a housing having transparent side wall panels through which the interior thereof is exposed to view; a relatively large receptacle fixed within said housing for holding and displaying merchandise; a relatively small receptacle movably supported by said relatively large receptacle and disposed directly above the latter also adapted to hold and display merchandise; a motor within said housing, and mechanism through which said motor acts to reciprocate said relatively small receptacle horizontally back and forth above said fixed receptacle to attract attention to the display.

2. A display cabinet comprising a housing including a base portion and an upper portion, said upper portion having transparent side wall panels through which the interior of said upper portion is exposed to view; a relatively large receptacle fixed in position within the cabinet adjacent to the junction of said upper portion with said base portion and adapted to hold and display merchandise; a pair of longitudinally disposed rails occupying fixed positions within said cabinet adjacent to the top of said fixed receptacle; a relatively small receptacle for holding and displaying merchandise, said small receptacle being supported by said rails for reciprocatory movement back and forth above said fixed receptacle, and means within said housing for automatically reciprocating said relatively small receptacle.

3. A display cabinet according to claim 2 wherein the upper portion of said housing is made with a normally closed adjustable door controlling a doorway through which the interior of the housing is accessible when said door is opened; wherein means is provided on the upper portion of said housing by which said door is adjustably supported adjacent to its top so that it can be swung outwardly and upwardly into a horizontal position and then moved edgewise into said upper portion where it is supported in said horizontal position above said two receptacles; and wherein means is also provided through which said door acts when opened to stop the movement of said relatively small receptacle.

4. A display cabinet according to claim 2 wherein said housing is made with a normally closed adjustable door controlling a doorway through which the interior of the housing is accessible when said door is opened; wherein means is provided on the upper portion of said housing by which said door is adjustably supported adjacent to its top so that it can be swung outwardly and upwardly into a horizontal position and then moved edgewise into said upper portion where it is supported in said horizontal position above said two receptacles; wherein the

said means for automatically reciprocating said relatively small receptacle comprises an electric motor and transmission mechanism connecting said motor with said relatively small receptacle, and wherein a switch is arranged in the circuit of said motor which is automatically maintained closed by said door while the latter occupies its closed position and which is automatically opened to stop the motor when said door is opened.

5. A display cabinet according to claim 2 wherein said housing is made with a normally closed adjustable door controlling a doorway through which the interior of said housing is accessible when said door is opened; wherein means is provided on the upper portion of said housing by which said door is adjustably supported adjacent to its top so that it can be swung outwardly and upwardly into a horizontal position and then moved edgewise into said upper portion where it is supported in said horizontal position above said two receptacles; wherein the said means for automatically reciprocating said relatively small receptacle comprises an electric motor and transmission mechanism connecting said motor with said relatively small receptacle, and wherein a switch is provided within the housing that is arranged in the circuit of said motor and automatically maintained closed by said door while the latter occupies its closed position and automatically opened to stop the motor when said door is opened, said switch being accessible for manual operation while said door occupies its open position.

6. A display cabinet comprising a housing including a base portion and an upper portion, said upper portion being made with transparent panels through which the contents of said upper portion are exposed to view; a relatively large tray for holding and displaying merchandise, said tray being fixed in position within the housing adjacent to the junction of said upper portion with said base portion, the front and rear walls of said fixed tray having longitudinal relatively parallel horizontal flanges; a relatively small tray for holding and displaying other merchandise, said small tray being supported by said flanges for horizontal reciprocatory movement back and forth above said fixed tray; means hidden from view within the base portion of said housing for automatically reciprocating said relatively small tray, and means for guiding said relatively small tray in its back and forth movements.

7. A display cabinet according to claim 2, wherein said small receptacle is provided at one end thereof with a depending extension formed with a vertical slot and wherein said last-mentioned means of claim 2 includes a pair of sprocket wheels rotatably supported alongside of said relatively large receptacle, an endless chain supported by said sprockets and provided with a laterally projecting stud occupying the slot of said extension, and an electric motor for driving said chain.

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