

Feb. 4, 1941.

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2,230,460

DISPLAY AND SALES CASE

Filed Jan. 20, 1938

2 Sheets-Sheet 1

Fig. 1.

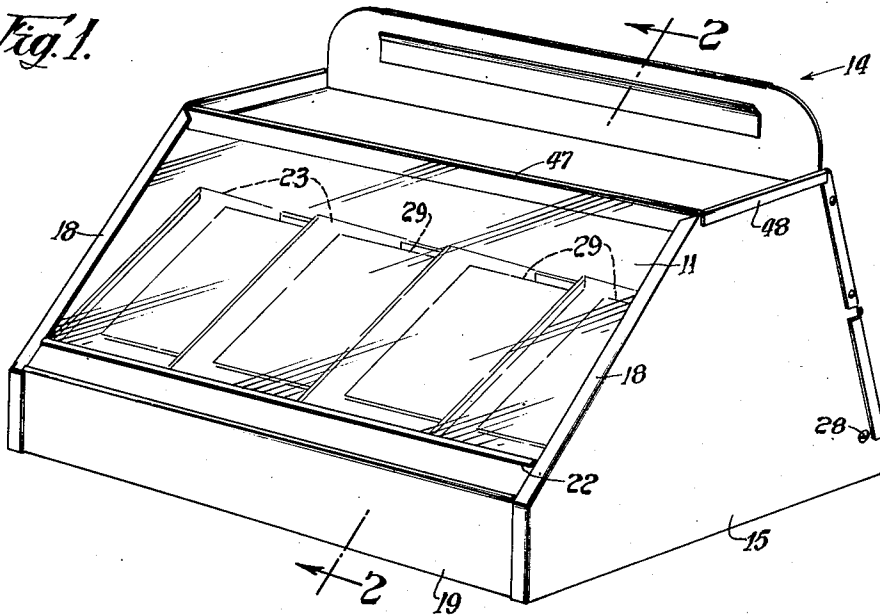


Fig. 2.

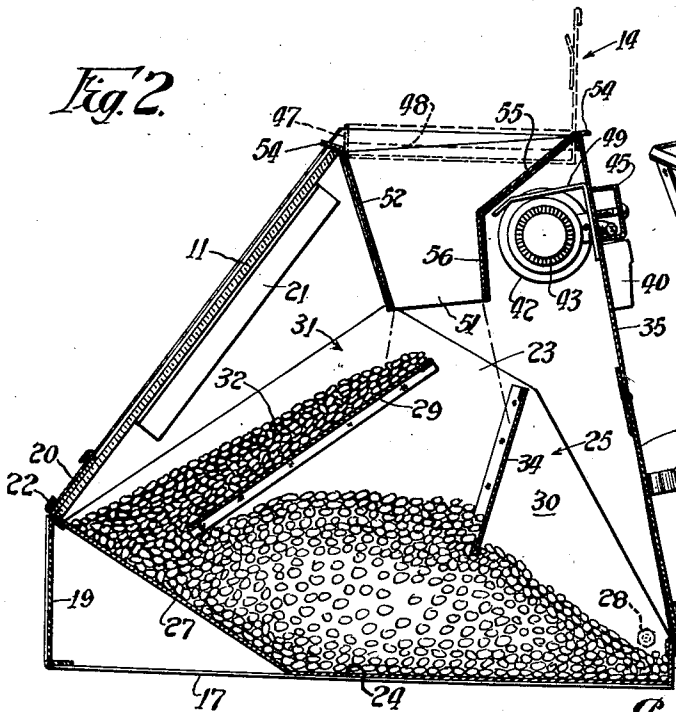


Fig. 3.

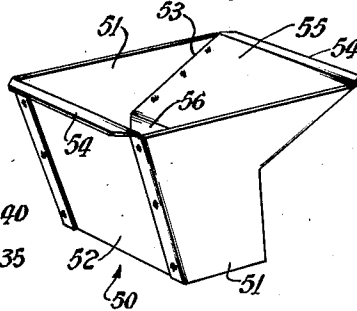
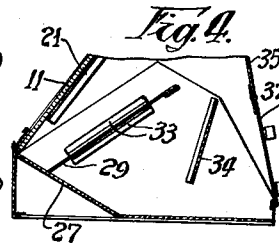


Fig. 4.



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2 Sheets-Sheet 2

Fig. 5.

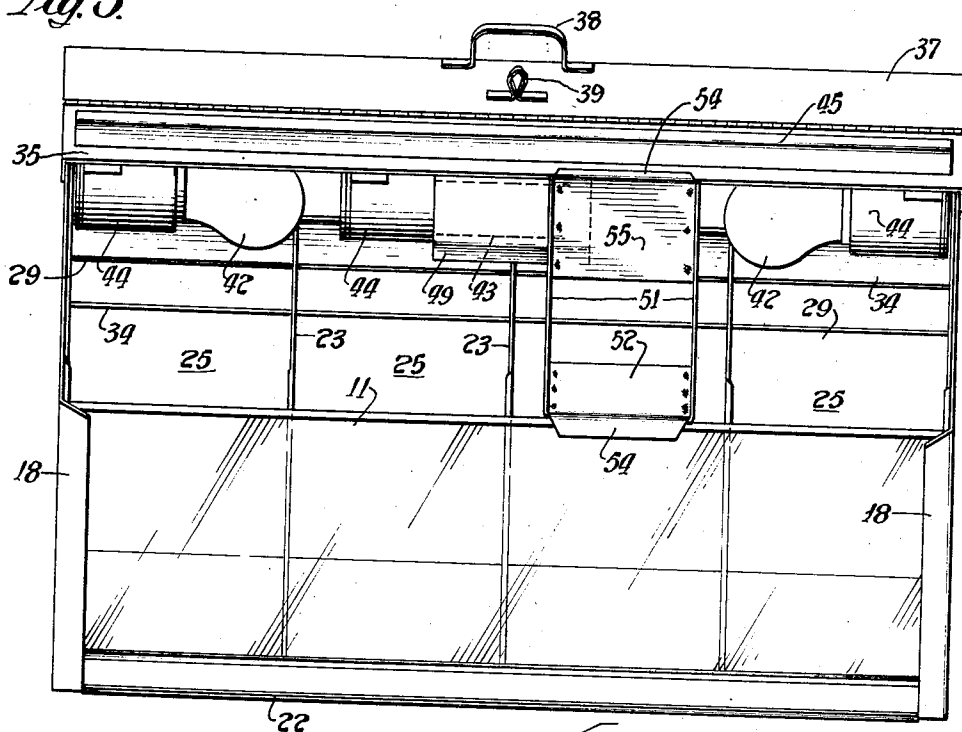
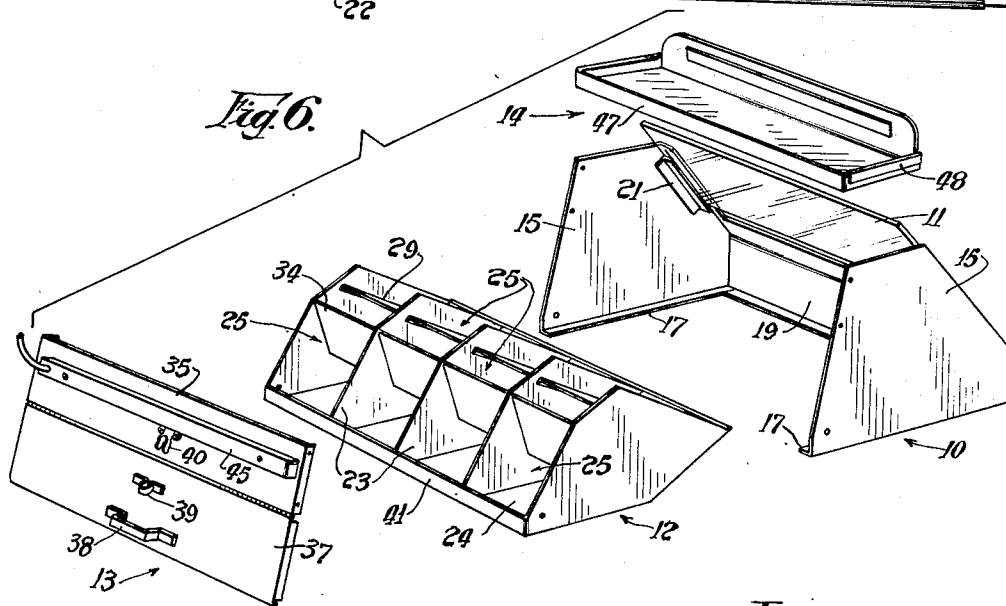


Fig. 6.



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UNITED STATES PATENT OFFICE

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DISPLAY AND SALES CASE

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6 Claims. (Cl. 312-121)

This invention relates to improvements in display and sales cases, and particularly to such cases adapted for use where, although counter and display space may be at a premium or the sales demand small, it is desirable to have several varieties of bulk merchandise attractively and appealingly displayed for sale.

One object of the invention is to provide a case of this character which is simple and economical to construct, which is of unusually sturdy and compact structure and adapted for ready portability, and which is highly efficient for the purpose of advantageously displaying for sale in small space separated quantities of bulk merchandise such as nut meats which will be maintained therein under conditions that are most favorable to their sales appeal and palatability.

Another object of the invention is to provide a display and sales case for bulk merchandise wherein a small saleable portion of the merchandise is maintained as a nonfluctuating display in the front of the case until the major portion of the merchandise, which is concealed thereby, has been withdrawn from behind the display, whereupon the display may be released for withdrawal from the case.

Another object resides in the provision of a case of this kind in which the portion of the merchandise on display is supported out of contact with the front window of the case and in such an inclined plane that no support is required in front of the display, but when it is desired to remove the display the merchandise therein will easily slide into position for withdrawal from the rear of the case.

Another object is to provide a novel display and sales case in which there are a plurality of separate compartments for bulk merchandise, each including a display section for receiving a small portion of the fill and a vending section behind the display section for receiving the remainder of the fill; and in which novel filling means properly directs the selected merchandise into any chosen compartment, simultaneously depositing the correct proportions in the display and in the vending sections without scattering into adjoining compartments.

Another object resides in the provision of a display and sales case including an inner compartment section for receiving the bulk merchandise and serving as the bottom of the case, and an outer shell or section providing enclosing walls about said inner section, the sections being united rigidly into a compact unit in an improved simplified manner which facilitates assembly of the case.

Other objects and advantages will become apparent in the following description and from the accompanying drawings in which:

Figure 1 is a perspective view of a case embodying the invention.

Fig. 2 is a sectional elevational view taken substantially along line 2-2 of Fig. 1, with the top of the case removed for filling the merchandise compartments.

Fig. 3 is a perspective view of a special filling device for the case.

Fig. 4 is a sectional elevational view taken in substantially the same plane as Fig. 2, but on a reduced scale, showing a modified form of the invention.

Fig. 5 is a plan view of the case with the top closure removed.

Fig. 6 is a view showing the several preformed parts which are assembled to produce the case.

While the invention is susceptible of various modifications and alternative constructions, I have shown in the drawings and will herein describe in detail, the preferred embodiment, but it is to be understood that I do not thereby intend to limit the invention to the specific form disclosed, but intend to cover all modifications and alternative constructions falling within the spirit and scope of the invention as expressed in the appended claims.

In a display and sales case constructed according to the present invention, several varieties of bulk merchandise such as confections, nut meats, etc., may be displayed to equal advantage in juxtaposition within one enclosure, a portion of each variety being supported to form an attractive display spaced out of contact with the display window of the case and serving as a mask for the major portion of the merchandise behind the display. A novel arrangement of illuminating and heating means has the double function of acting upon the display as well as upon the sales merchandise behind the display. Yet when the top closure of the case is removed, such illuminating and heating means will not obstruct convenient and efficient filling of the individual compartments. The special means for filling the compartments is constructed to deposit substantially correct proportions of merchandise simultaneously into both the display and sales sections of any selected compartment without scattering or spilling over into the adjoining compartments.

The case as a whole is constructed of simple preformed units which fit together so compactly and closely as to require only a few screws, bolts or equivalent connecting means to hold the case in fixed assembled relation.

Moreover, the structure is free of elaborations or parts which cannot be produced by ordinary, simple tools, whereby the case may be manufactured inexpensively by quantity production methods.

An exemplary form of the invention is shown in the drawings wherein, generally speaking and

with special reference to Fig. 6, the case comprises an outer preformed casing or shell 10 which supports a removable front glass window pane 11, a preformed inner or compartment unit 12 which fits within the shell 10, a rear closure 13 which is secured to the outer shell 10 after the unit 12 has been assembled therein, and a top closure 14 which may be removed from the case when bulk merchandise is to be placed in the compartment unit 12.

Preferably, the outer shell 10 is formed of sheet metal parts secured permanently together as by welding. It includes a pair of spaced, parallel side walls 15 each of which has an inward turned base flange 17 along the lower edge and an inward turned front flange 18 (Figs. 1 and 5) along the forward edge. The flanges 18 extend up substantially vertically for a limited distance and then throughout their major extent slant rearwardly at an angle which will facilitate inspection of the interior of the case through the window 11 by a person standing before the case.

Between the vertical portions of the flanges 18 is a connecting front wall panel 19, which, in the present instance, has a narrow upper portion 20 lying in a slanting plane which follows the major or slanting portions of the flanges 18. Together the upper slanting panel portion 20 (Fig. 2) and the flanges 18 define a large window opening which is closed by the window pane 11, the latter being received slidably between the flanges 18 and angle strip guides 21 which are secured to the inner faces of the side walls 15. A card-holding strip 22, having its upper and lower edges reversely folded, may be secured to the outer face of the slanting front panel portion 20.

One feature of the preformed compartment unit 12 is that it coacts with the outer shell 10 in a manner which facilitates assembly and requires only very simple fastening means. To this end, the compartment unit is preferably made of sheet metal parts welded together and includes a plurality of spaced, parallel partitions 23 which are mounted upon a base plate 24 to provide a plurality of compartments, generally designated 25, for receiving loose bulk merchandise. In its principal area the base plate 24 is horizontal, but a substantial front portion 27 thereof is turned up to slant forwardly.

When the unit 12 is assembled with the outer shell 10, the horizontal portion of the base 24 rests upon the base flanges 17 to form the bottom wall of the case, and the forward edge of the slanting front portion 27 fits into the angle formed between the vertical and slanting portions of the front wall plate 19. The assembled relationship is maintained by a pair of bolts 28, one of which passes through the rear lower portion of each of the side walls 15 and the corresponding portion of the respective adjacent end partition plates 23 of the compartment unit. As a result, the unit 12 is held in position within the outer shell 10 at the front by engagement thereof within the angle of the front wall and at the back by the bolts 28. Through this arrangement, moreover, the forward edge of the compartment unit will provide an abutment for the lower edge of the window pane 11.

An important feature of the invention resides in the construction whereby a small portion of the saleable merchandise filling each of the compartments 25 is retained at the front of the compartment as a display. Such display remains substantially unchanged to conceal the changing level of the major portion of the fill until the

latter has been substantially removed, whereupon the display may be released for removal through the rear of the case. To this end, each compartment is divided by a wall or plate 29 into a rear or sales section 30 and a front or display section 31 (Fig. 2). The plate 29 is located in a plane spaced from the window pane 11 and substantially rearwardly of the forward edges of the supporting partitions 23, and slanting upwardly and rearwardly from an intermediate point of the upturned bottom wall portion 27. The angle of the plate 29 is preferably less than 45° to the horizontal so that bulk goods, such as nut meats, poured upon the plate from the upper edge thereof and held against passage below the lower edge thereof will build up into a shallow, substantially uniform display layer 32 covering the plate to a substantially uniform depth within the pocket formed between the partition plates. Such display requires no additional support to maintain the same substantially unvarying, and will appear through the window 11 as the side of a pyramid of merchandise within the compartment.

The relative angles of and the spacing between the window 11 and the plate 29 are such that the display layer 32 will remain out of contact with the window, thereby avoiding smearing or clouding of the window as occurs where the merchandise directly contacts the window. Desirably, the forward edges of the partitions 23 are formed on a slant substantially parallel with the plate 29 for the sake of appearance and to avoid obstructing a view of all of the displays by a person approaching the case from either side.

By mounting the plate 29 with the lower edge thereof spaced a predetermined distance from the slanting bottom wall portion 27, a gap will be provided through which the bulk goods placed upon the plate 29 will normally tend to escape by sliding down the supporting inclines to the horizontal portion of the bottom wall 24. However, when the compartment has a fill of merchandise sufficient to block the gap, the display layer 32 will remain as has already been described. When the mass of goods in the sales section 30 has been depleted to the extent that the gap is no longer effectively blocked, the display layer 32 will automatically slide from the display section into the sales section and thus prepare the display section to receive a refill. In this manner there will be a turnover of all of the merchandise within the compartment and the display layer 32 will indicate the true character of the goods on sale.

In another form of the invention, as illustrated in Fig. 4, the plate 29 may be slidably supported between suitable guides 33 to engage at its lower edge with the slanting bottom wall portion 27. In this manner the display will be held until released by pulling the plate 29 up in the guides so that the display merchandise may slide into the sales section 30, similarly as occurs in the construction shown in Fig. 2 after the display clearing gap of the latter is unblocked.

In order to facilitate dispensing the merchandise from the sales section 30 by means of a scoop (not shown) such as is commonly used for the purpose, a plate 34 may be secured between the partitions 23 of each compartment spaced rearwardly from the display supporting plate 29 to form therewith a sort of hopper. The hopper plate 34 may be shorter than the display plate 29 and extends upwardly in spaced relation to the horizontal portion of the bottom wall 24 so

that the bulk merchandise contained in the hopper will pass below the lower edge thereof rearwardly in a controlled layer onto the rear portion of the bottom wall for ready access from the rear of the case.

After the compartment unit 12 has been assembled with the outer shell 10, the rear closure 13 may be incorporated with the assembly by securing the same to the rear edges of the side walls 15 to form the rear wall of the case. Preferably, the rear closure is formed of an upper section 35 and a hinged lower door section 37. The upper section is preferably secured permanently to the side walls, and the lower or door section is swingable to open position for access to the interior of the case. The door section 37 is provided with a handle 38. A catch, comprising a detent 39 on the door section 37 and a detent receiving spring clip 40 on the upper section, serves to hold the door open when desired. The free edge of the door section engages with a curb 41 on the rear edge of the bottom wall 24.

Novel means is provided for maintaining the merchandise within the case in an attractive condition; and butter toasted nut meats in particular, in an appealing and savory condition of aroma and palatability. Herein this means comprises electric lamps 42 and a heater 43 which are mounted in sockets 44 supported near the top of the upper rear wall section 35 in a position to act with substantially equal efficiency upon the surface of the display layer 32 in each compartment and upon the merchandise within the sales section 30 of each compartment. In this manner, the butter on the nut meats in the display layer 32 will be softened by the heat from the heater 43 and the lamps 42 and will be caused to glisten attractively by the illumination from the lamps. Moreover, the nuts within the sales section 30 of the compartments will be maintained in a warm, aromatic and palatable condition and will be illuminated for the benefit of the sales person.

To support the electric wires for the lamps 42 and the heater 43, an elongated, channel-shaped duct 45 is secured to the outer face of the upper rear wall section 35 in line with and back of the outlet sockets 44.

The top closure 14 is preferably constructed as a tray upon which packaged merchandise may be supported. The tray has upturned flanges 47 and is dimensioned to fit within the space between the upper edges of the side walls 15, the window pane 11 and the rear wall section 35, to close the top of the case and to approach the lamps 42 rather closely. At the ends of the tray the flanges are in the form of channels 48 to engage the upper edges of the side walls 15 to hold the top closure in place. Through this arrangement the bottom face of the top closure provides a reflector to throw the light from the lamps 42 downwardly upon the contents of the case. A reflector shield 49 between the top closure tray and the heater 43 avoids overheating of the top closure.

To facilitate filling of the compartments 25 of the case individually without spilling over into adjoining compartments, and also to avoid overloading the display section 31, the invention contemplates the provision of filling means 50. Herein this means is in the form of a substantially funnel-shaped device especially designed for this particular purpose and including identical side walls 51, a front wall 52 and a rear wall 53 (Figs. 2, 3 and 5). The upper edges of the front and

rear walls are each provided with an outstanding lip 54 for engagement with the upper edge of the window 11 and the upper edge of the rear wall section 35, respectively, to support the device above the chosen compartment.

The front wall 52 and the rear wall 53 of the filling device are so constructed and related that together with the side walls 51 they provide a large receiving mouth at the top of the device and a substantially restricted discharge throat and outlet directed in such a manner that bulk merchandise poured into the mouth will flow from the outlet in substantially the correct proportions simultaneously into the sales section 30 and the display section 31 of the chosen compartment. To this end, considering the device in the filling position shown in Figs. 2 and 5, the front wall 52 is located to extend in a plane slanting downwardly and rearwardly from the upper edge of the window 11 toward the uppermost portion of the display plate 29. The rear wall 53 is shaped to provide an upper section 55 which extends downwardly from the top of the rear wall section 35 on a slant to avoid the lamps 42 and the shield 49, and a lower section 56 which projects downwardly toward the hopper plate 34.

Through this arrangement the discharge end of the filling device 50 will project downwardly and somewhat rearwardly partially over each section of the underlying compartment 25. Thus, it will be seen in Fig. 2 that as the fill discharges from the device it will fall substantially within the range indicated roughly by the dot and dash lines. That is, it will fall in the larger proportion into the sales section 30 and in a smaller proportion into the display section 31. In the case construction shown, about twenty-five percent of the complete fill will be in the display section 31 and the remaining seventy-five percent will be in the sales section 30. As each compartment is filled, the filling device 50 may be slid into position over another compartment.

From the foregoing it will be apparent that the present invention provides a unique display and sales case in which several varieties of loose bulk merchandise may be effectively and attractively displayed and maintained in the most desirable saleable condition. Rather than having a false display of the merchandise within the several compartments, the present construction provides for maintaining a display of the actual merchandise being sold, the display being eventually commingled for sale with the remaining merchandise in the compartment. High efficiency and uniformity in filling the several compartments is attained by the special filling device of the case. By the unusual arrangement for illuminating and heating the merchandise, and in particular shelled nut meats, substantial advantage is secured by this invention through enhanced sales appeal and satisfaction of customers. Moreover, the simple and compact arrangement of parts provides a case which may be very economically produced.

I claim as my invention:

1. In combination in a display and sales case of the character described, an outer shell comprising front and side walls, said front wall comprising a narrow substantially vertical lower portion and a major rearwardly slanting upper portion having a large window opening, guides at opposite sides of said opening, a glass window pane slidably mounted in said guides and closing said opening, said side walls having intumed lateral flanges, along the lower edges thereof, a bulk merchan-

dise unit within said outer shell including a bottom wall having the side margins of its bottom face engaging said intumed flanges, the forward portion of said unit fitting in the angle between the vertical and slanting portions of said front wall and providing an abutment for the lower edge of said window pane, means for securing said unit and outer shell fixedly together, means engaging said side walls for closing the rear of the assembly and constructed to permit access to said unit for removal of merchandise, and a top closure for the assembly adapted to be opened for filling said unit with bulk merchandise.

2. In combination in a display and sales case of the character described, an outer shell comprising front and side walls, said front wall including a vertical lower portion and a slanting upper portion, a merchandise unit including a generally horizontal bottom wall having an upturned forward portion, means on said side walls for slidably receiving the horizontal portion of said bottom wall, the forward edge of said upturned portion fitting in the angle between the vertical and slanting portions of said front wall to hold the assembled unit and outer shell against relative vertical movement at the front of the case, and means for securing said unit against rearward movement out of said outer shell and for holding the assembly against relative vertical movement at the rear of the case.

3. A display and sales case for bulk merchandise comprising, in combination, side walls, a front wall having a window, a rear wall having an opening in the lower part thereof, a bottom wall including a portion slanting upwardly and forwardly toward said front wall, and a plate mounted in an upwardly and rearwardly slanting plane between said side walls in spaced relation to said front and rear walls to provide a limited forward display section space and a relatively large rearward sales section space accessible through said opening, the plane of said plate being at such an angle less than 45° to the horizontal that bulk material poured thereon will tend to build up a display layer thereon to be viewed through said window, and said plate plane intersecting the plane of said slanting portion intermediate the ends of the latter so that on moving down from said plate the display material will be directed rearwardly toward said sales space but the material in said sales space will block movement of the display material thereinto until the sales material is removed to a level below the lower edge of said plate.

4. A display and sales case for bulk merchandise comprising, in combination, side walls, a front wall having a window, a rear wall having an access opening in the lower part thereof, a bottom wall including a portion slanting upwardly and forwardly toward said front wall, a plurality of horizontally spaced vertical partitions extending in spaced front to rear planes and having the front edges thereof slanting rearwardly in spaced relation to said window and dividing the interior of the case into a plurality of compartments, and a display plate in each of said compartments mounted in an upwardly and rearwardly slanting plane facing toward and in spaced relation to said window and the said edges of said partitions and dividing the respective compartment into a limited forward display section and a relatively large rearward sales section accessible through said rear wall opening, the plane of each of said plates being at such an angle less than 45° to the horizontal that bulk

material poured thereon from above will tend to build up a display layer thereon laterally confined by the forward margins of the partitions and adapted to be viewed through said window, and said display plate plane generally intersecting the plane of said slanting portion of the bottom wall and effecting a cooperative relationship with said slanting portion so that bulk material in said sales space will block movement of the display material into the sales space until the bulk material therein is removed to a level below the lower edge of the display plate and on moving down from the display plate the display material will be directed rearwardly into the sales space.

5. A display and sales case for bulk merchandise comprising, in combination, side walls, a front wall having a window, a rear wall having an opening in the lower part thereof, a bottom wall including a portion slanting upwardly and forwardly toward said front wall, a display plate mounted in an upwardly and rearwardly slanting plane between said side walls in spaced relation to said front and rear walls to provide a limited forward display space and a relatively large rearward sales space accessible through said rear wall opening, and a second plate facing toward but rearwardly spaced from said display plate and dividing said sales space into a hopper section to receive a fill of bulk material and a scoop section, the lower edge of said hopper plate being spaced from said bottom wall to permit controlled rearward flow of a shallow layer of material from the hopper section into the scoop section, the plane of said display plate being at such an angle less than 45° to the horizontal that bulk material poured thereon from above will tend to build up a display layer thereon spaced from said window, the lower edge of said display plate being so related to the lower edge of said hopper plate and to said slanting bottom wall portion that as long as the bulk material within said hopper section is higher than the lower edge of the display plate rearward movement of the display material is blocked but upon removal of the sales fill from the blocking relation the display material will be directed rearwardly by said slanting portion into the hopper and scoop sections.

6. A display and sales case for bulk merchandise comprising, in combination, side walls, a front wall having a window, a rear wall having an access opening in the lower part thereof, a bottom wall including a portion slanting upwardly and forwardly toward said front wall, a plate mounted in an upwardly and rearwardly slanting plane between said side walls in spaced relation to said front and rear walls to provide a limited forward display section space and a relatively large rearward sales section space accessible through said access opening, the plane of said plate being at such an angle less than 45° that bulk material poured thereon will tend to build up a display layer thereon to be viewed through said window, said plate plane intersecting the plane of said slanting portion so that on moving down from said plate the display material will be directed rearwardly toward said sales space but the material in said sales space will block movement of the display material thereinto until the sales material is removed to a level below the lower edge of said plate, and means for simultaneously filling both said display space and said sales space in proper proportion from the top of the case.