

July 12, 1938.

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2,123,394

DISPLAY CASE

Filed May 11, 1936

2 Sheets-Sheet 1

Fig. 1.

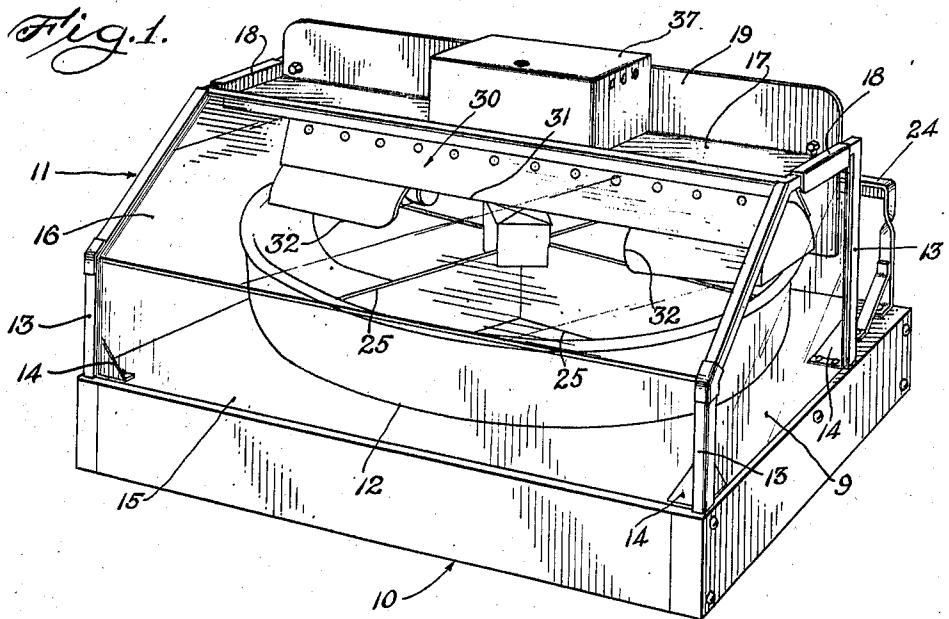
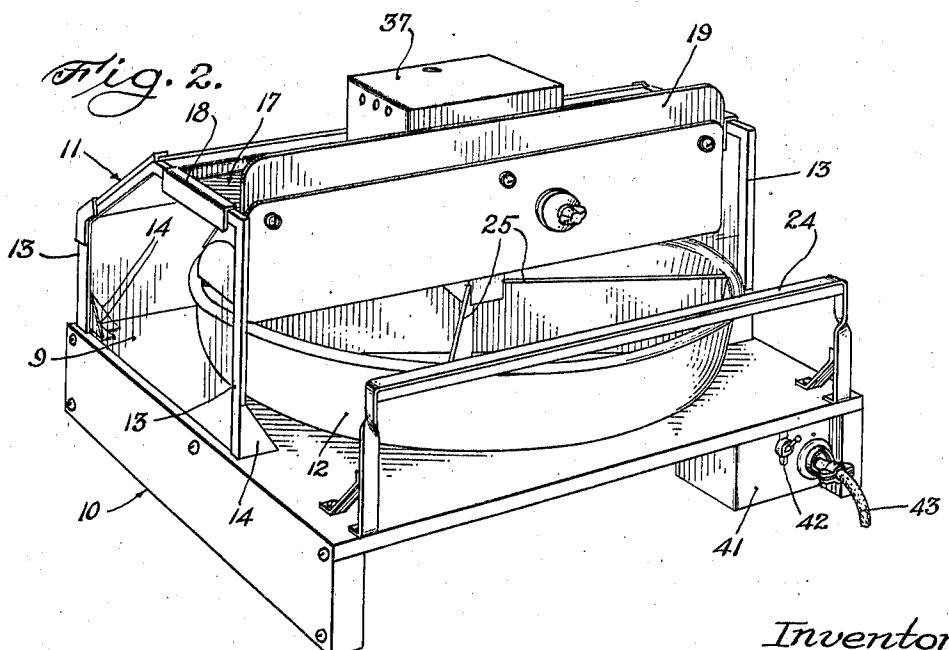


Fig. 2.



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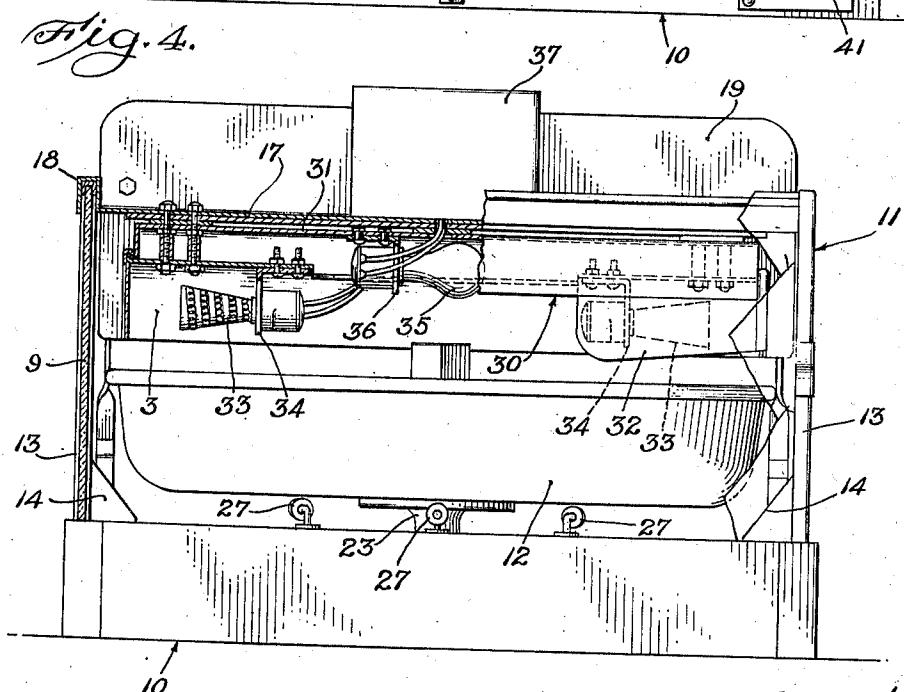
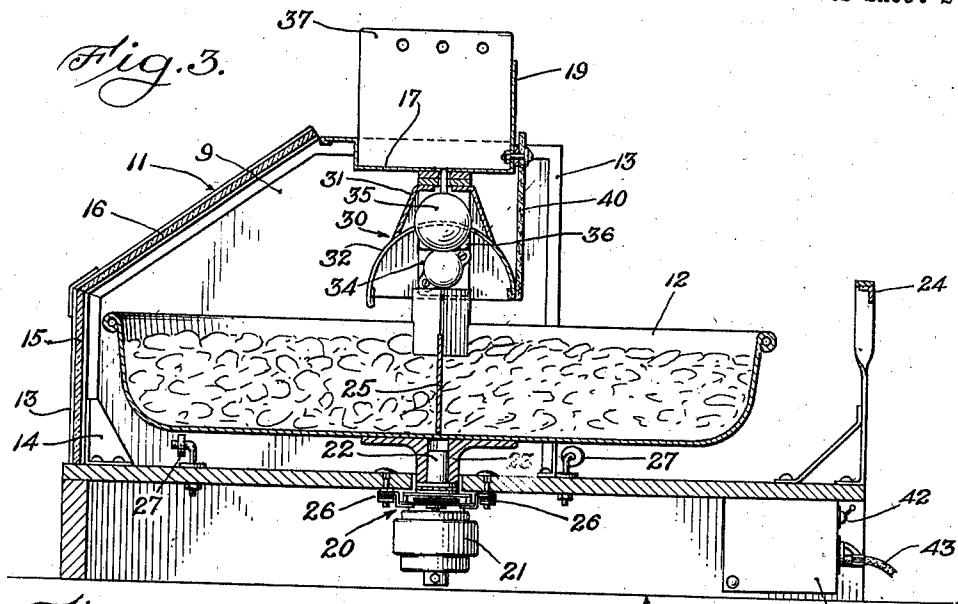
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DISPLAY CASE

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Application May 11, 1936, Serial No. 79,110

3 Claims. (Cl. 34—21)

The invention relates generally to display cases and more particularly to a case for displaying products such as nut meats in bulk for retail trade.

5 The general object of the invention is to provide a case of this character by which attention thereto is readily attracted, which provides for display of a number of different kinds of products at the same time, and in which the various 10 kinds of products are readily accessible for the sale thereof.

Another object is to provide a display case having a container, the parts of which move from a position where access thereto is readily had, to 15 a position where they are prominently displayed, the movement of the container attracting attention and thus successively bringing the various kinds of products to the attention of prospective purchasers.

20 It is also an object to provide, in a case of this character, a rotating container driven in such a manner that it may be readily stopped to permit removal of the contents, and the container being protected against tilting so that the driving 25 means will not be harmed.

A further object is to provide a case of this type, in which heating means is located so that products such as nut meats, which are preferably sold hot, may be uniformly heated during the 30 rotation of the container.

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

35 Figure 1 is a perspective view of the front of a display case embodying the features of the invention.

Fig. 2 is a perspective view of the rear of the display case shown in Fig. 1.

40 Fig. 3 is a vertical sectional view looking endwise of the case.

Fig. 4 is a front elevation partially broken away.

The preferred embodiment of the invention 45 comprises generally a base supporting a container within an enclosure. In the rear of the enclosure is an opening, and the container is of such size and is so positioned relative to the enclosure that it extends rearwardly from the enclosure so that access may readily be had thereto. The container is preferably rotatably mounted 50 so that all parts thereof may be moved into the accessible position, means being provided to protect the container so that an operator will not 55 unduly contact it when removing articles there-

from. The front and end walls of the enclosure are of glass so that the contents of the container may be readily seen. Within the enclosure is a heating means for heating the contents of the container, the heating means extending diametrically of the container and constructed to transmit a greater amount of heat adjacent the periphery of the container than at the center to compensate for the faster movement at the periphery upon rotation of the container.

10 In the present instance, the display case herein illustrated is designed particularly for the retail sale of nut meats. The container is preferably round and may have a plurality of radial dividers or partitions therein to provide spaces 15 for various kinds of nut meats. Thus, as the container rotates, the various spaces are successively accessible at the rear of the case and are successively brought to the attention of prospective purchasers when moving through the 20 fore part of the enclosure. Since nut meats are tastier and also have a more attractive appearance when hot, the heating means supplies heat for maintaining the nut meats in this condition.

25 As shown in the drawings, the preferred embodiment of the invention comprises a base 10 which is of substantial height and is hollow. Mounted on the base is an enclosure, indicated generally at 11, within which is positioned a container 12 preferably comprising a round, relatively shallow pan. The enclosure 11, in the present instance, is of substantially the same length as the diameter of the container, while its depth, front to rear, is somewhat less than the diameter 30 of the container so that the latter extends rearwardly therefrom, as may be seen in Figs. 2 and 3. Thus, the rear part of the container is readily accessible and, by rotating the container, all parts thereof may be successively moved to the 35 rear position.

40 The enclosure 11 is preferably constructed with glass front and end walls, the glass being supported by upstanding channel members 13 at the four corners of the enclosure and rigidly secured to the base 10 as by angle plates 14. The front 45 wall preferably comprises a lower vertical portion 15 extending substantially to the height of the top of the container, and an upper portion 16 slanting upwardly and rearwardly from the top edge of the lower portion 15. The upper portion 16 thus overlies the front part of the container and permits full view thereof and of its contents by prospective purchasers. The end walls, indicated at 9, are shaped to match the form of the 50 front wall.

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The top wall of the enclosure is preferably in the form of a tray 17 which may be advantageously employed to support packaged goods such as, in the present instance, small packages of nut meats. The tray 17 preferably is made of sheet metal and has a pair of downwardly opening channels 18 at its respective ends fitting over the upper edges of the end walls to support the tray. At its rear, the tray may have an upwardly extending back 19 to carry advertising placards or the like.

Since the container 12 is adapted for rotation so that the various parts thereof may be moved to the rear of the enclosure to permit access thereto, a driving means is provided for effecting the rotation. To this end, the driving means, indicated generally at 20 and including an electric motor 21, is mounted within the base 10. The driving means 20 preferably includes a drive shaft 22 extending upwardly from the base and adapted to provide a seat for a collar 23 rigid with the container. The latter is thus supported by the base through the driving means 20. The drive shaft 22 and collar 23 have a frictional driving engagement which is sufficient to rotate the container slowly when unimpeded but permits the operator to hold the container against rotation, as when removing nut meats therefrom, without placing an undue stress on the driving means.

As mentioned above, the container is preferably arranged to receive a plurality of kinds of nut meats. For this purpose, a plurality of dividers or partition 25 are placed in the container, preferably extending radially thereof. The partitions 25 thus provide spaces in which various kinds of nut meats may be kept separate, and the various spaces are moved into an accessible position at the rear of the enclosure by rotation of the container.

Since the container has a relatively large diameter and is supported at its center, it is desirable to prevent it from being accidentally tilted by the operator in case he should bear against it in removing nut meats therefrom. To this end, a guard rail 24 is positioned rearwardly of the container, which is secured on a rearwardly extending portion of the base 10. The guard rail 24 preferably is somewhat higher than the top of the container and extends substantially from end to end of the base. The guard rail prevents the operator from accidentally contacting the container and provides a place for the operator to rest his arm when removing nut meats from the container.

The driving means 20 is preferably resiliently attached to the base 10, rubber pads 26 or the like being employed for this purpose, so that, in case the container should be tilted slightly, the driving means can correspondingly tilt. If the container should accidentally be tilted, it is prevented from doing so to an excessive extent by means comprising, in the present instance, a plurality of rollers 27 fixed to the base under the container and adjacent the periphery thereof. The rollers 26 are spaced slightly below the container and are normally out of contact therewith to avoid adding any drag to the container, but, should the container be tilted, the rollers 26 support it at its periphery so that it cannot be tilted excessively.

One of the prominent features of the invention is the provision of means to heat the contents of the container. In the case of nut meats, heating thereof has both the function of making them tastier as well as of giving them a more appetiz-

ing appearance by virtue of the fact that the butter or the like, with which the nut meats are usually treated, is melted by the heat and gives the nut meats a shiny, appetizing appearance. Preferably the heating means, indicated at 30, is of the radiant type placed above the container and within the enclosure. In the present instance, the heating means is constructed to extend diametrically of the container at the rear of the enclosure so that it will not restrict a view of the container through the front wall of the enclosure.

The heating means is preferably supported by the tray 17 constituting the top wall of the enclosure and comprises a downwardly opening, trough-shaped, frame 31 bolted to the tray 17. Secured to the frame 31 are a pair of reflectors 32 of substantially semi-circular cross section and preferably placed adjacent the ends of the frame 31. Within the curve of the reflectors 32 are electrical heating elements 33 supported as by brackets 34 to extend longitudinally of the reflectors. The heating means, extending diametrically of the container, heats the entire contents thereof by virtue of the rotation of the container, and the faster movement of the container at its periphery than adjacent its center is compensated for by the fact that the heating elements are positioned adjacent the ends of the heating means and hence nearer the periphery of the container than its center. Thus, the contents of the container will be uniformly heated.

A light 35 may be supported, as by a bracket 36, within the trough-shaped frame 31 at the center thereof to illuminate the contents of the container, especially that part below the heating means, to attract attention thereto.

It also may be desirable to use a neon sign in connection with the display case, either externally or internally thereof. If so, a box-like structure 37 to house the necessary coils may be mounted preferably centrally of the tray 17.

At the rear of the enclosure 11 is a rear wall 40 which is preferably supported at its top by the tray 17 and extends downwardly substantially to the height of the container, thus leaving an opening at the lower part of the enclosure through which the container extends. The rear wall 40 is preferably made of asbestos board or the like in view of its proximity to the heating means 30.

Since the motor 21, heating elements 33, lamp 35 and neon sign are all electrically operated and are in use at the same time, the wiring therefor may extend from a junction box 41 and all be controlled by a single switch 42, a flexible cord 43 extending from the box for connection with an electrical socket.

In operation, the cord 43 is connected to a convenient electrical outlet. On throwing the switch 42, the motor 21 causes rotation of the container through the gearing 20 and the frictional connection thereof with the container, the gearing being such as to rotate the container at a relatively slow speed. Rotation of the container successively moves the various spaces thereof formed by the partitions 25 from the front part of the enclosure to the rear and outside thereof where the contents are readily accessible. During such rotation the contents are heated by the heat radiated downwardly from the heating means 30. Since the heating means extends diametrically of the container and the heating elements are positioned adjacent the periphery of the container, the contents are heated uniformly. As the contents move in the front part of the

case, they may be readily viewed through the upper portion 16 of the front wall, the movement of the container attracting the attention of prospective purchasers.

5 When some of the contents of the container are to be removed, the operator waits until the particular space in which these contents are contained rotates to the rearward position. He then merely grasps the container to hold it against rotation, the frictional driving connection between the shaft 22 and the collar 23 seated thereon permitting slippage thereof without placing an undue strain on the driving means. As soon as the operator has removed the desired contents, 10 he lets go of the container and the frictional driving connection again functions.

To protect the container during the removal of the contents thereof, the guard rail 24 not only prevents the operator from bumping into the container but also provides a rest for the operator's 20 arm so that he will not be apt to tilt the container. However, should he tilt it, the rubber cushions 26 between the driving means 20 and the base 10 permit the container to tilt without 25 damaging the driving means, and the rollers 27 then come into play to support the container at its periphery. Normally the rollers 27 are out of contact with the container so that they will not offer any resistance to the rotation thereof.

30 From the above description, it will be apparent that I have provided a novel display case for such products as nut meats. The container therefor is divided into spaces to receive various kinds of nut meats, and by rotation successively 35 brings them to the attention of prospective purchasers. The rotation of the container further moves the various spaces into a readily accessible position so that the contents thereof may be readily removed. During the rotation, the contents of the container are uniformly heated. The 40 container is freely driven and is protected from undue contact by the operator by the guard rail 24.

I claim as my invention:

45 1. A display case comprising, in combination,

a rectangular base, a container rotatably supported by said base, and an enclosure for the container of such size as to permit the container to extend rearwardly therefrom for accessibility, 5 said enclosure comprising end and front walls of glass, the front wall comprising a lower vertical portion extending substantially to the top of the container, and an upper portion slanting upwardly and rearwardly from the top edge of the lower portion and thereby providing a full view 10 of the part of the container thereunder.

2. A display case comprising, in combination, 15 a rectangular base, a container rotatably supported on said base, an enclosure mounted on the base and covering the major portion of the container with the rear portion of the container extending beyond the enclosure, said enclosure comprising end and front walls of glass, a heater for the contents of the container extending diametrically across the container at the rear part of the 20 enclosure so as not to obstruct a view of the contents, and means for rotating the container for bringing the contents thereof progressively under the heater and into an accessible position at the rear of the case. 25

3. A display case comprising, in combination, 30 a base, a container supported on said base, an enclosure mounted on the base over the container and including at the front thereof a wall of glass to provide a full view of the forepart of the container thereunder, said enclosure being constructed to provide access to the container at the rear thereof, a heater for the contents of the container extending diametrically across the container and located at the rear part of the enclosure 35 so as not to obstruct a view of the contents, and means for rotating the container for bringing the contents thereof progressively under the heater to uniformly heat the contents, into position where the contents may be viewed through 40 said glass wall, and into position where the contents in the various portions of the container are accessible at the rear of the enclosure.

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