July 10, 1934. M. L. MELTON 1,965,850

DISPLAY FIXTURE

Filed July 3, 1931

Fig. 1.

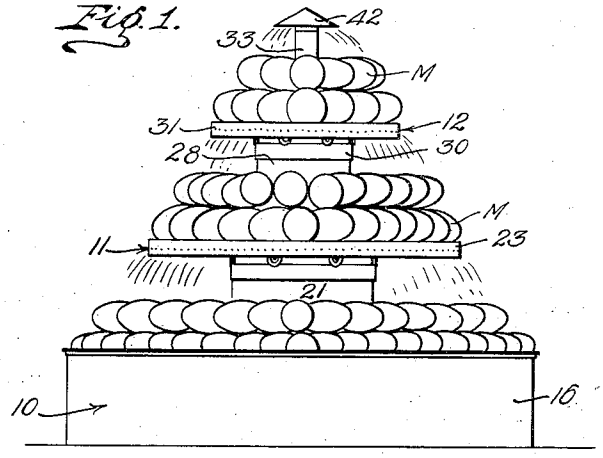


Fig. 3.

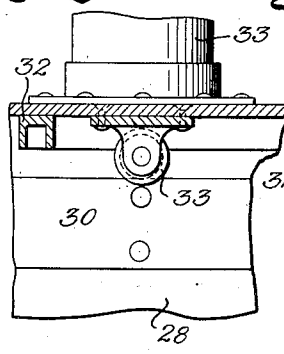


Fig. 2.

Fig. 4.

Inventor
Martin L. Melton
By V. Hollowell
His Attorney.

Patented July 10, 1934 1,965,850

UNITED STATES PATENT OFFICE

1,965,850

DISPLAY FIXTURE

Martin L. Melton, Los Angeles, Calif.

Application July 3, 1931, Serial No. 548,536

5 Claims. (Cl. 211—127)

This invention relates to a display fixture and relates more particularly to a fixture for displaying garden or farm products, such as melons, etc. It is a general object of the invention to provide a fixture for effectively and attractively displaying melons, or the like, and for chilling or cooling the same while being displayed.

When certain products, such as watermelons, are displayed in markets in the usual manner, they shrink and lose considerable weight through evaporation, and are not maintained at low temperatures so as to be readily saleable. Further, as watermelons are usually comparatively large and heavy, it has been found difficult to display them openly so that they are easily accessible to the merchant and purchaser.

An object of the present invention is to provide a fixture or device for displaying watermelons, or the like, that prevents undesirable shrinkage and loss of weight of the melons through evaporation and that maintains the melons at comparatively low temperatures.

Another object of the invention is to provide a display fixture that carries and attractively displays the melons, or produce, so as to be readily visible and accessible to the customer and merchant.

Another object of the invention is to provide a display fixture of the character mentioned in which the melons are prevented from shrinking and are maintained at low temperature by a constant circulation of water over and about them. The water, in constantly flowing about and circulating over the melons, keeps them moist and evaporates to materially lower their temperature.

Another object of the invention is to provide a display device of the character mentioned that resembles an ornamental fountain, and includes a plurality of vertically spaced platforms for carrying the melons and a water discharge at its upper end from which water constantly flows or issues to fall upon and circulate over the several platforms and their contents.

Another object of the invention is to provide an ornamental display fixture of the character mentioned that is entirely self-contained. The device provided by the present invention includes a reservoir for holding a supply of water and for receiving the water after its passage over the platforms, and a pump for continually drawing water from the reservoir and discharging it from the upper end of the fixture.

Another object of the invention is to provide a display fixture of the character mentioned in which one or more of the platforms is continually rotated to attract the attention and interest of the public.

A further object of the invention is to provide an ornamental display fixture of the character mentioned that is simple and inexpensive of manufacture and that is commercially practical.

Other objects and features of my invention will be best and more fully understood from the following detailed description of a typical form and application of the invention, throughout which description reference will be had to the accompanying drawing, in which:

Fig. 1 is a side elevation of the fixture provided by this invention, showing melons arranged on its base and platforms. Fig. 2 is an enlarged central vertical detailed sectional view of the fixture with the melons removed. Fig. 3 is an enlarged vertical detailed sectional view as indicated by line 3—3 on Fig. 2, illustrating the rotatable mounting of the upper platform, and Fig. 4 is an enlarged vertical detailed sectional view of a portion of the fixture illustrating the mounting of the lower platform and a portion of the means for rotating the lower platform.

The device provided by this invention is capable of embodiment in forms for handling and displaying various articles. It is particularly adapted to display watermelons, and the like, and throughout the following detailed disclosure the invention will be described as embodied in a form primarily intended to display watermelons. It is to be understood that the invention is not to be construed as limited or restricted to the specific form or application about to be described, but that it is to be taken as including all features or modifications that may fall in the scope of the claims.

The fixture includes, generally, a reservoir and base 10, a plurality of vertically spaced rotatable platforms 11 and 12 above the base 10 adapted to carry the melons M, means 13 for drawing water upwardly from the base 10 and for discharging it downwardly onto the platforms 11 and 12 and the base 10, and means 14 for rotating one of the platforms.

The base 10 is provided to hold a supply of water for circulation over the platforms and to support or carry the various other parts of the fixture. In accordance with the broader aspects of the invention, the base 10 may be of any suitable shape and construction. In the simple preferred embodiment of the invention illustrated in the drawing, the base 10 is round in plan elevation and is formed of sheet metal. The bottom 15 of the base is flat so as to be effectively

mounted on a horizontal support, while the sides 16 of the base are vertical. The base 10 is hollow to contain the water and may be open-topped or may be covered with a removable top 17. When the base 10 is used without a top or cover, its interior provides a storage space for melons M, as well as a reservoir for the water. The melons may be submerged or partially submerged directly in the water in the base. In the drawing I have illustrated a cover 17 for the base consisting of a plurality of segmental sections supported on brackets 17a. It is to be understood that the invention is not to be restricted to the use of the top 17, as the upper end of the base may be left open as described above.

The top 17 of the base is adapted to support a plurality of stacked melons M, and the brackets 17a support the outer edge of the top sections below the upper edge of the sides 16 so that an upwardly projecting lip or flange 18 is provided along the outer edge of the top 17 to aid in retaining the melons on the top and to prevent the overflow of water from the upper end of the base. In the preferred construction, the top 17 is pitched downwardly and outwardly toward its periphery, and openings 19 are provided in it adjacent its outer edge to pass water downwardly into the base. The openings 19 may be provided with suitable straining screens 20.

The fixture may be provided with any desired number of vertically spaced platforms for carrying and displaying the melons M. In the particular fixture illustrated in the drawing, there are two vertically spaced platforms 11 and 12 arranged above the base 10. The platform 11, which is the lower platform of the fixture, is rotatably mounted on the upper end of a housing 21. The housing 21 projects upwardly from the center of the bottom 15 and is preferably hollow to house the circulating means 13 and the platform rotating means 14. As illustrated in the drawing, the housing 21 may be annular and may be formed of sheet metal, or the like. A circular track 22 is provided on the upper edge of the housing 21 to rotatably carry the platform 11.

The lower platform 11 is horizontal and is rotatably supported at the upper end of the housing 21. The platform 11 may be formed of sheet metal, or the like, and may be of any desired configuration in plan elevation. In the present instance, where the base 10 is circular, the platform 11 may be annular in its plan elevation as illustrated in the drawing. It is preferred to make the platform 11 of considerably less diameter than the base 10. An upwardly projecting lip or flange 23 is provided at the outer edge or periphery of the platform 11, while an upwardly projecting flange 24 is provided along the inner edge of the platform. The flanges 23 and 24 are provided to maintain a layer or body of water on the upper surface of the platform 11 and to aid in retaining the melons M on the platform. The water is adapted to overflow from the upper edge of the flange 23 to fall upon the melons M supported on the top 17; and, if found desirable, spaced perforations or openings 25 may be provided in the platform 11 and flange 23 to discharge water downwardly onto the base 10. A plurality of spaced rollers or wheels 26 are provided on the under-side of the platform 11 to support the platform on the track 22 for movement around the upper end of the housing. The wheels 26 are rotatably mounted in suitable brackets or bearings 27 and have grooved peripheries that operate over the upper edge of the track. Members 25a of channel-shaped cross section may be mounted on the under-side of the platform 11 to strengthen and reinforce the platform.

The platform 12, which is the uppermost platform of the fixture, is mounted upon the upper end of a housing extension or upper housing 28 to be a considerable distance above the lower platform 11. The upper housing 28 projects upwardly from the center of the lower housing 21 and is preferably hollow. The housing 28 is supported on the housing 21 by suitable brackets 29 and is annular in horizontal cross section to conform to the configuration of the housing 21 and base 10. In accordance with the preferred construction, the upper housing 28 is of considerably less diameter than the lower housing 21 and passes the flange 24 with suitable clearance. A circular track 30 is provided along the upper edge of the tubular housing 28 to carry the upper platform 12.

The upper platform 12 is horizontally disposed at the upper end of the housing 28 and is mounted for rotation on the housing. In the present instance, the upper platform 12 is a circular member and is of considerably less diameter than the lower platform 11. An upwardly projecting lip 31 is provided along the outer edge of the platform 12. The lip 31 is provided to retain a body of water on the upper surface of the platform and also acts to aid in preventing displacement of the melons M from the platform. Spaced perforations 31a may be provided in the platform 12 and the lip 31 to spray or discharge water downwardly onto the melons supported on the lower platform 11. Suitable channel-shaped brace members 32 may be mounted on the under-side of the platform 12 to strengthen and reinforce it. A plurality of spaced rollers or wheels 33 are provided on the under-side of the platform 12 to operate over the circular track 30. The melons M may be stacked one upon the other on the platform 12, and an ornamental tube 33 projects upwardly from the center of the platform 12 to project above the stacked melons. From the above description of the base 10, the graduated and vertically spaced platforms 11 and 12 and their housings or supports 21 and 28, it will be apparent that the fixture has the general appearance or outline of an ornamental fountain and that the top 17 and the platforms 11 and 12 are adapted to support the melons M in an orderly and attractive manner for effective display.

The means 13 operates to continually draw or pump water out of the reservoir base 10 and to discharge it from the upper end of the tube 33 so as to fall down upon the platforms 12 and 11 and the top 17 and the melons M supported thereon. The circulating means 13 includes a pump 34 mounted on a horizontal web or support 80 within the housing 21. The pump 34 may be any suitable type of pump, e. g., it may be a centrifugal pump and may be centrally positioned in the housing 21. An electric motor 35 is mounted on the support 80 to operate the pump 34. In the particular case illustrated in the drawing, the motor 35 is directly connected with the pump 34. The intake conduit 36 of the pump extends downwardly from the pump to have its lower end adjacent the bottom 15 of the base. A strainer cap 37 may be provided on the lower end of the conduit 36 to prevent foreign matter from being drawn through the pump. A vertical discharge pipe 38 extends upwardly from the pump 34 through the housings 21 and 28 and through the

tube 33 to extend above the upper end of the tube. A suitable cap 39 closes the upper end of the tube 34 and a packing device 40 is carried by the cap to seal about the discharge pipe 33. A jet or nozzle 41 is provided on the upper end of the discharge pipe 38. A conical baffle 42 is provided above the nozzle 41 to direct the water downwardly onto the uppermost platform 12. The baffle 42 may be supported on the cap 39 by legs 43. It will be apparent how the water continually discharging from the nozzle 41 is directed downwardly onto the melons on the upper platform 12 and then passes from the platform 12 downwardly onto the melons carried by the platform 11 and finally passes from the platform 11 to the melons supported on the top 17 before passing through the openings 19 back into the reservoir of the base.

The means 14 may be constructed to rotate either one or both of the platforms 11 and 12. In the embodiment of the invention disclosed in the drawing, the means 14 operates to rotate the lower platform 11. A vertical shaft 44 is supported on the inner wall of the housing 21 by bearing brackets 45. The shaft 44 is rotated by, or operatively connected with, the motor 35 through a pair of beveled gears 46. A pinion 47 is provided on the upper end of the shaft 44. The pinion 47 meshes with a ring gear 48 carried by the platform 11. The ring gear 48 may be attached to the lower portion of the flange 24 which projects downwardly from the platform. The beveled gears 46 and the pinion 47 and gear 48 may be related so that a substantial reduction in speed is obtained to provide for the comparatively slow rotation of the platform 11. It will be seen that, when the motor 35 is in operation, a continuous supply of water is circulated downwardly over the platforms 12 and 11, as well as the top 17, and that the platform 11 is continuously revolved. The motor 35 serves as the motive power of both the circulating means 13 and the platform operating means 14.

It is believed that the utility and practicability of the display device provided by the present invention will be readily apparent from the foregoing detailed description. The melons M may be attractively arranged on the top 17 of the base, or within the base in the event that the top 17 is not used, and on the platforms 11 and 12. The fixture may be proportioned so that the melons carried on the uppermost platform 12, as well as those on or in the base, are readily accessible to the customer and merchant. As the base 10 and the vertically spaced platforms 11 and 12 are graduated in diameter, the fixture is particularly attractive and carries the melons M so that they are effectively displayed. Further, as the platforms 12 and 11 and the upper end or top 17 of the base are stepped downwardly and outwardly, the water flowing downwardly from the baffle 42 and over the lips 31 and 23 is properly utilized to circulate over and cool the melons and is prevented from splashing from the base 10. The deflector or baffle 42 operates to spray the water downwardly and outwardly so as to flow over the melons carried on the uppermost platform 12. The platform 12 carries a certain amount of water, due to the provision of the lip 31, so that the lowermost tier or layer of melons carried on the platform 12 are effectively cooled. The water, in overflowing from the platform 12, passes downwardly onto the melons supported on the platform 11 to keep them moist and cool. In a similar manner, the melons supported on the top 17 of the base are showered with water passing from the rotating platform 11. The platform 11, in being continuously rotated, attracts the attention of the public or customers and materially adds to the novelty of the display. The present invention provides a device for effectively displaying melons, or the like, and for preserving them and keeping them cool or chilled.

Having described only a typical preferred form of my invention, I do not wish to limit myself to the specific details set forth, but wish to reserve to myself any changes or variations that may appear to those skilled in the art or fall within the scope of the following claims.

Having described my invention, I claim:

1. A display fixture including, a base, a top covering the base and adapted to support produce, a housing projecting upwardly from the base, and platforms spaced one above the other and independently rotatably mounted on the housing and adapted to support produce, the platforms being graduated in diameter, the lowermost platform being of the greatest diameter and being of less diameter than the said top.

2. A produce display fixture including a base having a top for holding produce, a housing projecting upwardly from the base and having vertically spaced upwardly facing shoulders, a plurality of annular platforms for carrying produce surrounding the housing and rotatable on said shoulders, and means for rotating a platform.

3. A produce display fixture including a base, a top covering the base and adapted to carry produce, a housing projecting upwardly from the said top and having vertically spaced upwardly facing shoulders, a plurality of platforms for carrying produce surrounding the housing and supported on said shoulders, the platforms being graduated in diameter, and upstanding flanges on the peripheries of the platforms.

4. A produce display device including, a base, a top covering the base and adapted to carry produce, a housing projecting upwardly from the said top and having portions of graduated diameter presenting upwardly facing shoulders, horizontal platforms surrounding the housing and independently rotatable on said shoulders, and means in the housing for rotating one of the platforms.

5. A produce display device including, a base, a top closing the upper end of the base and adapted to carry produce, a tubular housing projecting upwardly from the center of the top, the housing having portions of graduated diameters presenting vertically spaced upwardly facing shoulders, a platform rotatable on one of the shoulders and adapted to carry produce, and means in the housing for rotating the platform.

MARTIN L. MELTON.