

June 8, 1937.

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2,083,442

HUMIDIFYING DISPLAY CABINET

Filed Nov. 30, 1936

2 Sheets-Sheet 1

Fig. 1.

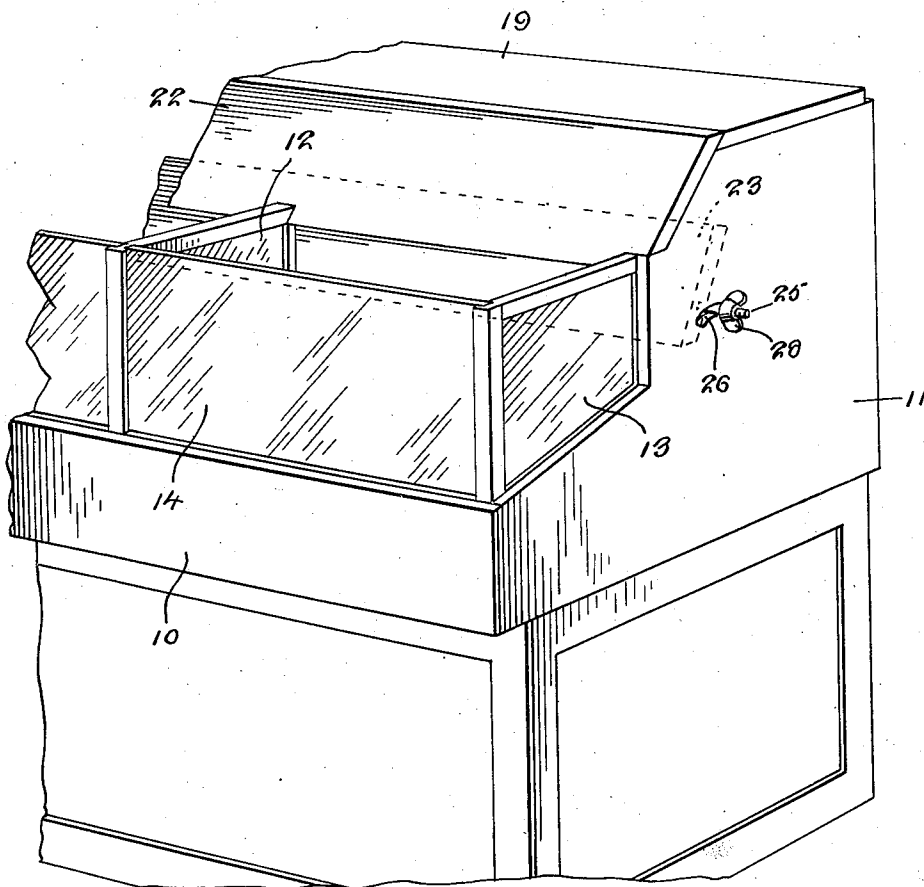
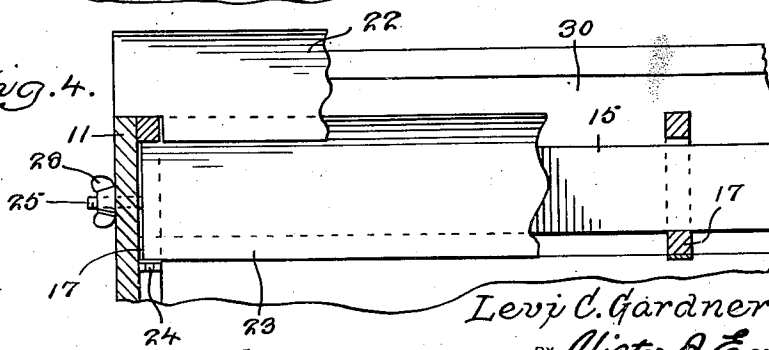


Fig. 4.



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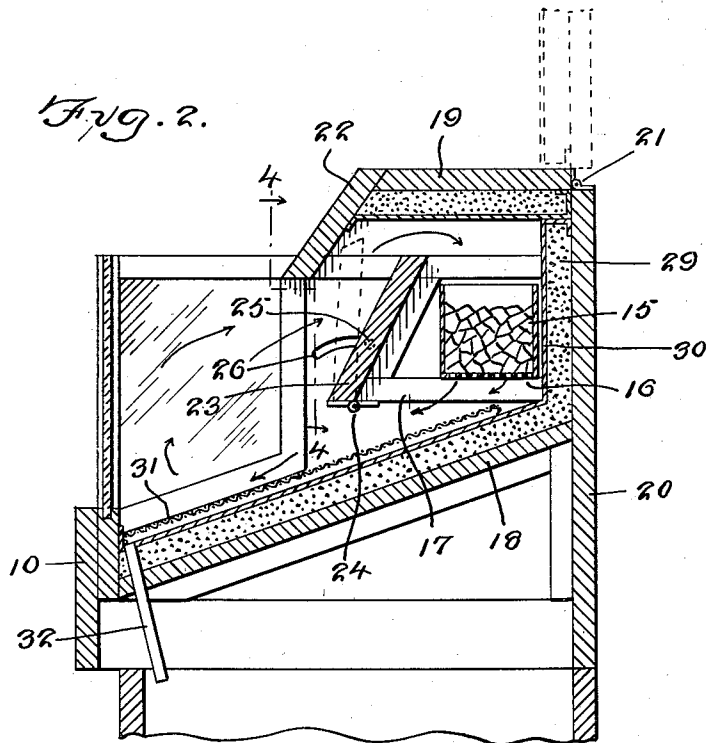
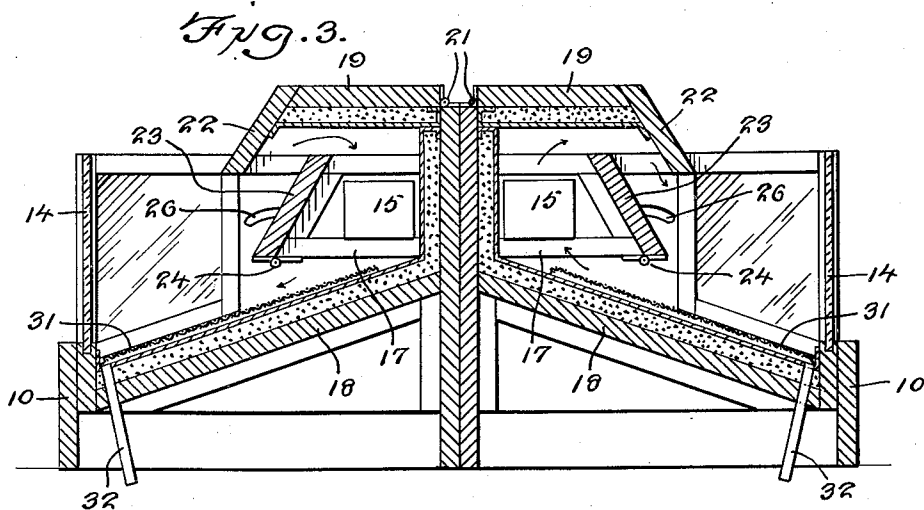
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2,083,442

HUMIDIFYING DISPLAY CABINET

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Application November 30, 1936, Serial No. 113,505

3 Claims. (Cl. 62—37.1)

This invention relates to humidifying display cabinets for fresh vegetables and has for an object to provide a novel cabinet having a refrigerating chamber and having means for establishing a downward draft through the chamber upwardly through the vegetables and thence to the refrigerating chamber to commence the cycle again.

It is highly desirable that fresh vegetables while on display be maintained in a cool moist condition so as not only to be attractive to the customers but also to be maintained fresh until sold. Hitherto sprinkling and other methods have been resorted to but such methods are unsatisfactory in that drains are necessary and time is consumed in the sprinkling operation.

With this disadvantage in mind the present invention provides a combined cooling chamber and display cabinet in which the vegetables may be inspected through the glass sides and removed from the open top thereof while means are provided for continuously circulating cold air upwardly through the vegetables without dissipating the air through the open top of the cabinet to the end that the vegetables will be chilled and moisture will condense on the exterior thereof to afford a pleasing appearance of freshness while at the same time the moisture, which is not taken at all from the vegetables, will tend to actually maintain a fresh condition throughout all the hours the vegetables are exposed on display.

A further object of the invention is to provide in a device of the character described, a damper for controlling the cold air draft through the vegetables to suit various climates and temperature changes.

A still further object is to provide a device of this character which will be formed of a few strong simple and durable parts, which will be inexpensive to manufacture, and which will not easily get out of order.

With the above and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter fully described and claimed, it being understood that various modifications may be resorted to within the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings forming part of this specification,

Figure 1 is a perspective view of a refrigerat-

ing display cabinet constructed in accordance with the invention.

Figure 2 is a cross sectional view of the cabinet.

Figure 3 is a cross sectional view showing a cabinet of the multiple type.

Figure 4 is a longitudinal sectional view taken on the line 4—4 of Figure 2 with part of the damper in front elevation.

Referring now to the drawings in which like characters of reference designate similar parts in the various views, the humidifying display cabinet preferably comprises a plurality of bins disposed end to end comprising a front wall 10, end walls 11, glass partitions 12, glass end walls 13, and glass front walls 14. The fresh vegetables of various types are exposed through the glass walls and partitions of the various bins and may be removed through the open tops of the bins by the customers in the usual manner.

In further carrying out the invention a refrigerating unit 15, which may be simply a container having a perforated bottom 16, is supplied at intervals with ice. However, a more elaborate refrigerating unit may be used such as an electrically operated refrigerating unit of usual and well known type.

The unit is disposed on frame bars 17 which extend horizontally above the downwardly and forwardly sloped bottom 18 of the cabinet in rear of the bins. A cover 19 is hinged to the rear wall 20 of the cabinet as shown at 21 considerably above the refrigerating unit and is provided with a downwardly inclined front wall 22 which serves as a baffle or wall of a flue to direct a draft of cold air upwardly and rearwardly as will presently be described in detail.

A damper 23 is hinged at the bottom as shown at 24 to the frame bars 17 and is provided in the ends with adjusting pins 25 which project through arcuate slots 26 in the end walls of the cabinet.

Wing nuts 28 on the pins provide means for adjusting the angular inclination of the damper 23 with respect to the sloping front wall 22 of the cabinet.

In operation a down draft of chilled air will move downwardly through the refrigerating unit 15 and along the downwardly sloped bottom 18 of the cabinet to and through the fresh vegetables confined in the bins. The draft will then rise through the vegetables but due to the tendency of the flue-like space between the damper 23 and downwardly inclined front wall 22 of the top 19 to suck up the cold air from the vegetables the

draft will consequently pass between the damper 23 and inclined front wall 22 and begin its cycle, downwardly through the refrigerating unit 15. During contact of the cold air draft with the vegetables the latter will be chilled and moisture will condense from the atmosphere and moisten the surfaces of the vegetables so that the vegetables will appear as though lightly sprinkled and thus the fresh appearance thereof will be enhanced while at the same time no detrimental effects will be produced since the moisture is not taken from the vegetables but is condensed from the warmer atmosphere surrounding the vegetables. The cabinet may be insulated in any preferred manner as shown at 29, the insulation being confined in place by metal sheets 30 as is customary. A screen 31 is disposed on the bottom of the cabinet and a drain pipe 32 is disposed at the lowest point in the bottom of the cabinet.

In Figure 3 there is shown a multiple form of refrigerating display cabinet, the same being simply two units of the type above described placed back to back and since the construction is the same as above explained identical reference numerals have been given to the modified form shown in Figure 3.

From the above description it is thought that the construction and operation of the invention will be fully understood without further explanation.

What is claimed is:

1. Humidifying display apparatus comprising a bin open at the top, a refrigerating unit for the bin outside of the open top thereof, a cover for the unit having a downwardly sloping wall or baffle, and a damper between the unit and the baffle coacting with the baffle in forming a flue to continuously circulate cold air from the unit upwardly through the bin and to the top of the unit.

2. Humidifying display apparatus comprising a bin open at the top, a refrigerating unit adjacent the top of the bin, a hinged cover for the unit for permitting access to the unit, said cover having a downwardly sloping wall forming a baffle, a hinged damper between the unit and the baffle, and means for adjusting the angular inclination of the damper with respect to the baffle for varying the draft space from the bin between the damper and baffle to the top of the unit.

3. Humidifying apparatus comprising a bin open at the top, a refrigerating unit above and in rear of the bin, a cover for the unit having a wall sloping toward the open top of the bin and forming a baffle, a damper between the baffle and the unit normally disposed parallel with the baffle for forming a flue space from the bin to the top of the unit, and means for adjusting the angular inclination of the damper with respect to the baffle for varying the size of said flue space.

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