June 28, 1927. 1,633,588

E. KLINENBERG

ICE CREAM CABINET

Filed April 30, 1923 3 Sheets-Sheet 1

Fig. 1.

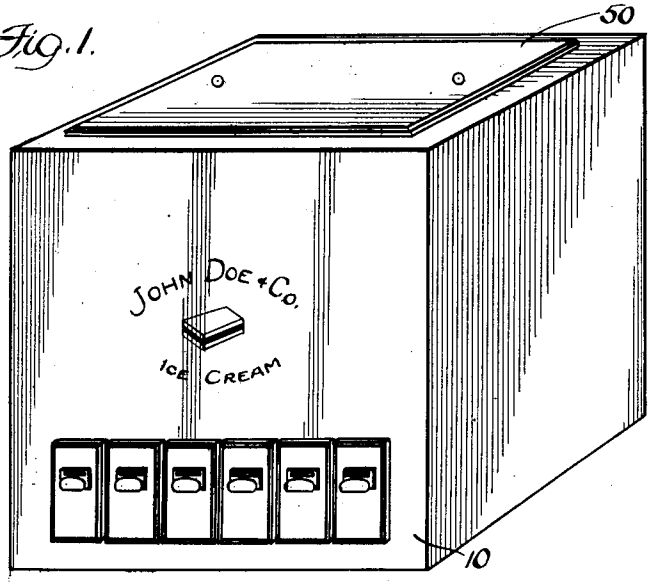
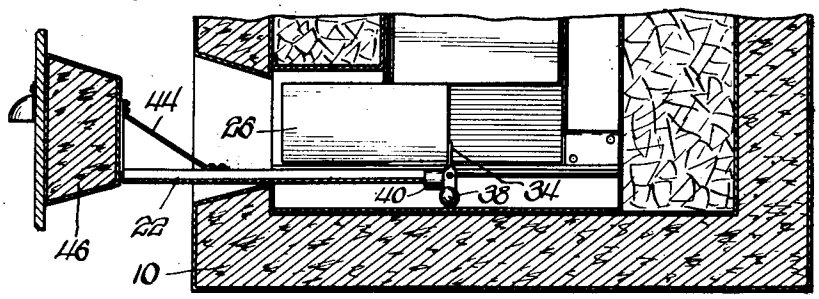



Fig. 2.




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ICE CREAM CABINET

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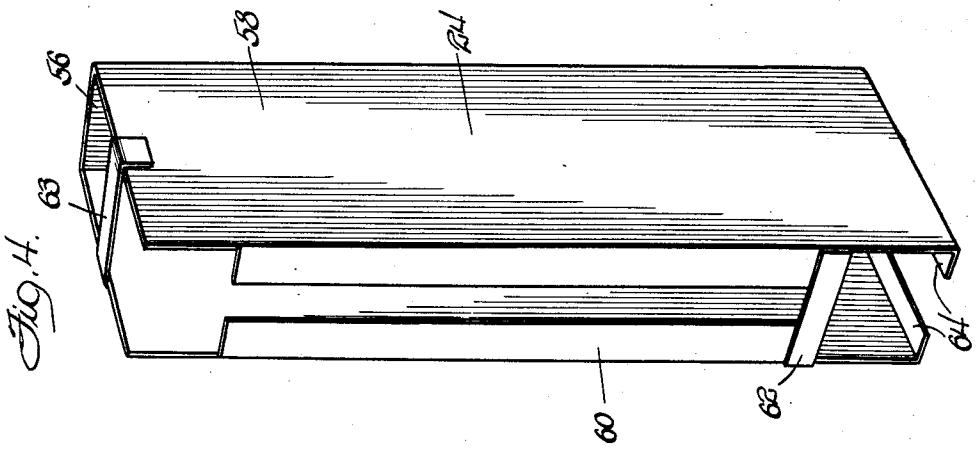



Fig. 4.

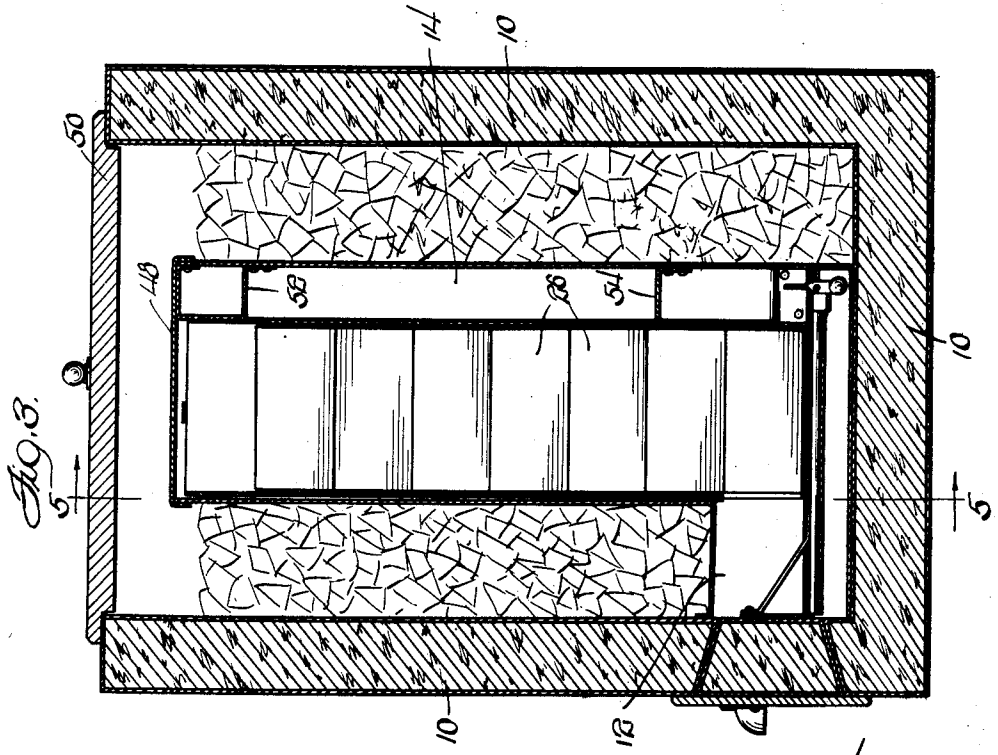



Fig. 3.

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ICE CREAM CABINET

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3 Sheets-Sheet 3

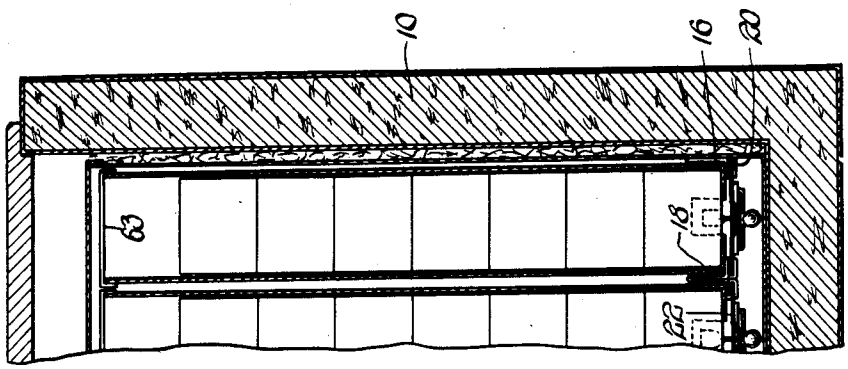



Fig. 5.

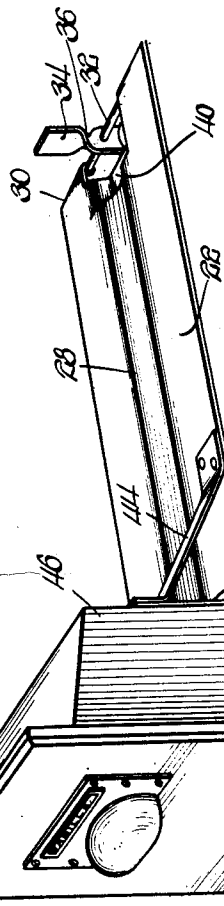



Fig. 6.

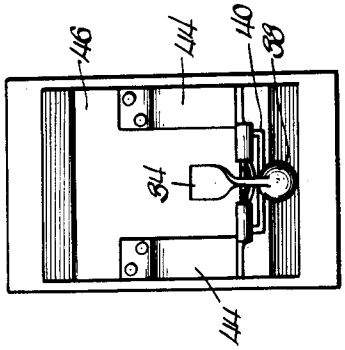



Fig. 7.

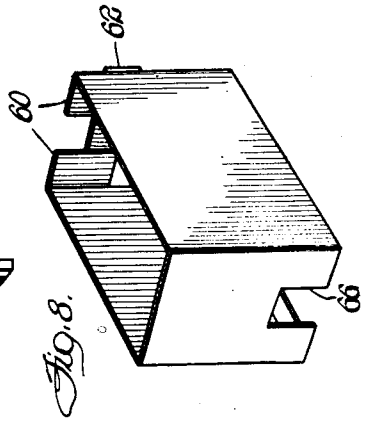



Fig. 8.

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Patented June 28, 1927. 1,633,588

# UNITED STATES PATENT OFFICE.

EDWARD KLINENBERG, OF CHICAGO, ILLINOIS.

## ICE-CREAM CABINET.

Application filed April 30, 1923. Serial No. 635,516.

My invention relates to merchandising, and more specifically to an improved cabinet for housing and handling brick ice cream. In the retail selling of brick ice cream, the cartons containing the bricks are ordinarily placed in a container in a pile, and subsequently removed one by one as they are sold. If the entire contents of the container has not been sold when the next supply arrives, the new bricks are apt to be deposited on top of the old ones. In this way, unless the retailer is very conscientious in the matter, the bricks at the bottom of the container may often remain there for several days or even weeks before they are sold. Obviously, the inferior quality of the old brick when it is sold injures the reputation, not only of the retailer, but of the manufacturer. There is also the more serious possibility of injury to the consumer.

According to my invention, the bricks move into and out of storage continuously in the same direction, so that there is no possibility of selling one day's delivery until the delivery of the previous day has been sold, in the absence of a deliberate intention to that effect on the part of the retailer. Furthermore, the space occupied by the device required, is not greater than that previously required for the storing devices of the prior art. Cabinets according to my invention are also much easier to fill and take care of than those of the prior art.

The difficulty in handling articles of as small structural strength as cartons containing quart bricks of ice cream, is believed to have hindered development along this line heretofore. Most of the mechanisms available for dispensing an object from the bottom of a pile, would be either certain or very apt to deform, crush or mangle the carton. An essential prerequisite of success is, therefore, mechanisms that will handle objects of the particular characteristics involved without injury.

Further objects and advantages of the invention will become apparent as the description proceeds.

In the accompanying drawings:

Figure 1 is a perspective view of a cabinet according to the invention;

Figure 2 is a longitudinal section through the lower portion of the device with the slide partly drawn out;

Figure 3 is a similar section through the entire container in the normal closed position;

Figure 4 is an enlarged perspective of one of the magazines.

Figure 5 is a partial section on line 5—5 of Figure 3;

Figure 6 is an enlarged perspective of the slide;

Fig. 7 is a rear elevation of the structure shown in Fig. 6; and

Fig. 8 is an enlarged detail perspective from the rear of the lower portion of a magazine.

In the embodiment of the invention selected for illustration, the cabinet body proper comprises insulating walls 10 of any suitable or preferred type. Resting on the bottom of this first enclosure, is an L-shaped, water tight housing comprising a horizontal passageway 12 communicating with the bottom of the vertical container 14. Spaced from the bottom of the housing are a plurality of shelves 16 and 18, the end shelves 16 comprising a simple angle bent back again at 20 to define a slot for receiving and guiding the edge of the withdrawing slide 22; and the intermediate shelves 18 comprising two sections similar to the end shelves 16 placed back to back and formed of a single piece of material. A plurality of magazines rest on the shelves 16 and 18.

The space between the housing and the insulating wall 10 is preferably filled with ice or other refrigerants and each magazine may be filled with cartons 26, each containing one quart brick of ice cream, either by dropping the bricks into the magazine, or by removing the magazines from the container, filling them with bricks and replacing them. Each slide 22 is depressed centrally at 28 and cut away at its rear end to leave projections 30 bent to form sleeves in which the pintle 32 of the pivoted target is supported. This target comprises a simple strip of sheet metal twisted at 36 through 90 degrees about its own axis, and is held in the position shown in Figs. 6 and 7 by a small weight 38 at its lower end. Slide 22 is depressed slightly further in the middle at 40 to form an abutment and prevent the target from yielding when the slide is being pulled out. It will be obvious that as the slide is pushed in, the target will be swung over into horizontal position by contact with the next carton.

Each shelf 22 is turned up at 42 and provided with braces 44 to enable it to support with satisfactory rigidity, the thick insulating block 46 having tapered faces adapted to fit accurately in the aperture provided therefor in the front wall 10.

Container 14 is provided with an individual cover 48, and a wooden or other suitable insulating cover 50 is supported on walls 10. To hold magazines 24 properly spaced from the rear wall of the housing, suitable spacer brackets 52 and 54 are provided.

Referring now to Figs. 4 and 8 it will be seen that each magazine is a simple integral piece of sheet metal bent to form a rear wall 56, two side walls 58 and front flanges 60 extending inwardly to guide and retain the carton 26. At the top brace 63 serves as a bail for picking up the entire magazine and flanges 60 are cut away to leave a space for the insertion of the bricks. I have found that dropping the bricks in from the top is relatively unsatisfactory as they are apt to fall on end. Brace 63 prevents any attempt to drop them in vertically, and sliding them in above the upper ends of flanges 60 brings the rear end against the back of the magazine to help keep the brick from turning on end. After only a very little use of the device the operator can slip the bricks very quickly into the magazines and none of them will ever fall on end. At the bottom, flanges 60 terminate at brace 62, high enough to leave a space for exit of the bottom carton, which carton rests on inturned flanges 64 at the bottom of the magazine. The rear wall is notched at 66 for passage of the target 34.

It will be apparent that I have provided a very simple and compact device, which will automatically insure against the sale of stale ice cream, as well as being more convenient for the retailer to handle. Furthermore, the distance through which the bottom carton must be pulled to withdraw it from the cabinet is small enough, compared with the dimensions of the carton itself, so that the usual space in front of the cabinet provided for the operator to stand in is ample to permit him to draw the slide out and obtain the carton.

Without further elaboration, the foregoing will so fully explain the gist of my invention, that others may, by applying current knowledge, readily adapt the same for use under various conditions of service, without eliminating certain features which may properly be said to constitute the essential items of novelty involved, which items are intended to be defined and secured to me by the following claim.

I claim:—

In a dispensing cabinet for bricks of ice cream in cartons, in combination, outer insulating walls, inner container walls spaced therefrom, a water tight lateral passageway out from the bottom of said container, a plurality of shelves in said passageway extending across the bottom of said container, a plurality of magazines in said container resting on said shelves, a plurality of slides, one below each magazine, said shelves having an upwardly extending portion which acts as a spacer between said magazine and horizontal leg portions, the horizontal legs of each shelf having their free edges reversely bent to form a guide for said slides.

In witness whereof, I hereunto subscribe my name this 27th day of April, 1923.

EDWARD KLINENBERG.