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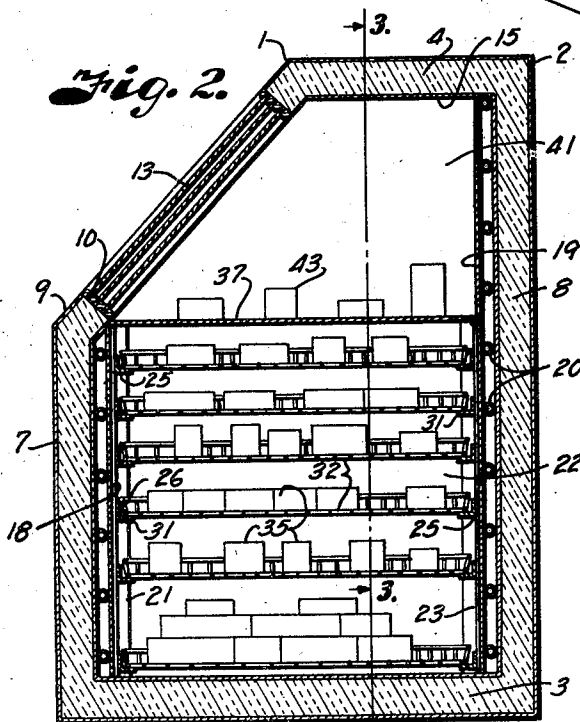
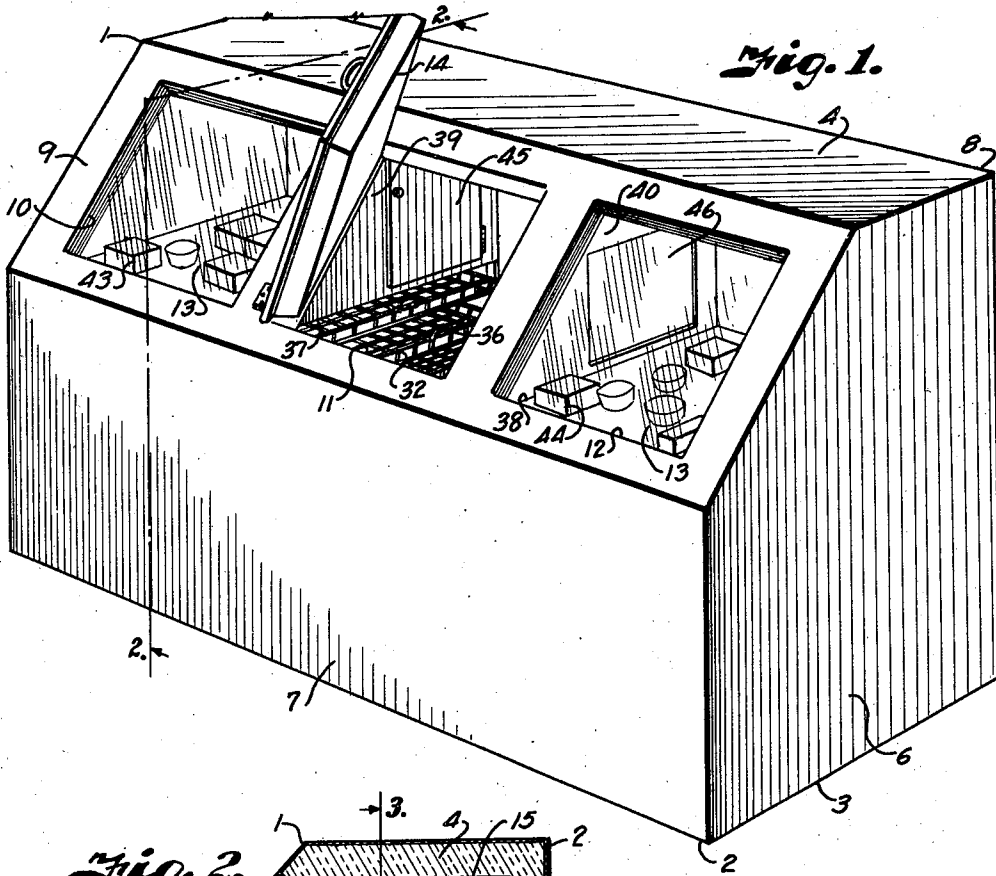
W. A. REICH

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CABINET

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2 Sheets-Sheet 1



INVENTOR
Walter A. Reich.
BY
Arthur L. Brown
ATTORNEY

UNITED STATES PATENT OFFICE

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CABINET

Walter A. Reich, Kansas City, Mo.

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2 Claims. (Cl. 312-119)

This invention relates to containers and more particularly to containers of cabinet type combining display, storage and vending features to aid in merchandising conditioned commodities such as frozen foods and the like.

Many foods, such as vegetables, fruits, fish, fowl, meat and similar goods are, at present, being conditioned, as by "quick-freezing" and frosting processes, to preserve such fare and maintain the same in a substantially natural state over relatively long periods of time. It is usually customary to suitably package the conditioned foods, and cabinets are ordinarily provided for such packages, the cabinets being of insulated and/or refrigerated type.

It has, heretofore, been the practice to seal the cabinets as effectively as possible for the purpose of maintaining the interior of the cabinet at a low temperature and for excluding light, the light having been found to adversely affect the packaged goods particularly as to appearance, yet allowing closures for the cabinets to be moved from sealing relation thereto for dispensing selected packages of such goods.

An inconvenience is thus worked for both seller and buyer of goods so dispensed in that the buyer cannot readily see goods he may wish to buy, and the seller, or buyer in "self-service" stores for example, must open the cabinet, grope about in the interior thereof to find the desired merchandise, and consequently expose packages of food to light and heat.

The principal objects of the present invention are, therefore, to overcome, as far as possible, the inconveniences resulting from the usual merchandising practices in connection with frozen foods; to provide novel means and arrangements thereof for conveniently, economically and efficiently displaying such commodities and at the same time excluding light from contact with the great majority of packages in the cabinet; to maintain the low temperature of the interior of the cabinet and of the displayed goods, as by allowing circulation of cold air therebetween and excluding warm exterior air; to facilitate selection of and access to commodities in storage portions of the container; to substantially obviate collection of moisture on display portions of the container; to provide improved elements and arrangements of them in a container of this character; and to provide a container of this character that is attractive in appearance, relatively economical in construction, and convenient and efficient in operation.

In accomplishing these and other objects of the present invention, I have provided improved details of structure, the preferred form of which is illustrated in the accompanying drawings, wherein:

Fig. 1 is a perspective view of an improved container embodying the features of the present invention.

Fig. 2 is a detail vertical transverse cross-section through the container substantially on the line 2-2, Fig. 1, and particularly illustrating the relation between storage and display compartments in the container.

Fig. 3 is a detail vertical longitudinal cross-section through the container substantially on the line 3-3, Fig. 2, particularly illustrating the relation of storage compartment and commodities therein to the intermediate access portions of the container.

Fig. 4 is a detail transverse vertical section through the container on the line 4-4, Fig. 3.

Fig. 5 is a detail perspective view of the preferred form of rack for slidably mounting the commodity containing trays in the storage compartment.

Referring more in detail to the drawings:

1 designates a container embodying the features of the present invention, which preferably includes an insulated shell 2 forming an enclosing frame. The shell or enclosing frame is provided with a bottom wall 3, a top wall 4, end walls 5 and 6, and side or front and rear walls 7 and 8.

A portion 9 of the shell is preferably bevelled to connect the top wall 4 and side or front wall 7, as particularly illustrated in Figs. 1, 2 and 4, and openings 10, 11 and 12 are formed in the bevelled portion 9 of the shell, the openings 10 and 12 being respectively closed by insulating transparent panels 13 and the opening 11 being closed by a hinged insulated door 14. The panels maintain the openings 10 and 12 in closed condition, and the door provides access to the interior of the shell as and when desired.

The inner surface of the shell is preferably provided with a finish 15 of enamelled metal or the like, and partitions 16, 17, 18 and 19 are preferably suitably mounted in the interior of the shell in spaced relation to the finish 15 for forming a housing to receive refrigerating means 20, such as cooling coils, which may be suitably energized in a manner known in the art.

21, Fig. 5, designates a support preferably in the form of an angle iron, one of which is preferably mounted in each corner of the interior of the shell and extends preferably to a height sub-

stantially in the horizontal plane of the lower edge of the bevelled portion 9 of the shell to define a storage compartment 22 in the interior of the shell. The supports 21 are preferably provided on their flanges 23 adjacent the front and rear walls of the shell with headed pins 24 that are spaced and vertically aligned in such a manner as to support racks or tracks 25.

The racks 25 are also preferably in the form of angle irons, the vertical flanges 26 of which have suitably formed openings 27 engageable over the headed pins 24 to support the racks in horizontal relation in the storage compartment. Depending upon the length of rack, a suitable number of supports 28 are mounted between the supports 21 to reinforce the racks 25 throughout their length, which supports 28 preferably consist of strap iron plates having spaced series of headed pins 29 horizontally aligned with the pins 24 and engageable in apertures 30 in the vertical flanges of the racks 25 to support the racks. The horizontal flanges 31 of the racks 25 are inwardly directed relative to each other to form supports for trays 32 and 33.

The trays 32 and 33 are of a width sufficient to be supported by the horizontally aligned racks 25, as shown in Figs. 1, 2 and 4, and are preferably of a length less than half the length of the interior of the storage compartment of the shell to the end that two trays may be arranged on a single rack level at opposite ends of the storage compartment and in such a manner that an operator may open the door 14 of the shell and reach to the bottom of the storage compartment between the tiers of trays so arranged to select a tray; slide the tray inwardly on the track; and extract a desired commodity or package of commodities 35, for example, from the selected tray.

In making such a selection, it will be noted that the bevelled portion of the shell facilitates access of the lowermost trays to an operator, not only in reducing the distance between the door opening and the bottom level of trays, but also by making the ends of the trays visible. Tags 36 are also preferably provided on the ends of the trays to indicate the nature of the articles contained in each particular tray.

37 and 38 designate horizontally arranged partitions preferably resting on the upper ends of the supports 21 and extending across the width of the storage compartment to define the top thereof, the partitions preferably extending inwardly toward each other from the ends of the shell to points adjacent the outer side edges of the door opening 12, at which points vertical partitions 39 and 40 are provided, which extend from the inner transverse edges of the partitions 37 and 38 to the top of the shell to define compartments 41 and 42 in the interior of the shell additional to the storage compartment 22. The arrangement of partitions 37-40 encloses spaces immediately in back of the transparent panels 13, and the compartments 41 and 42 are thus available for the display of suitable commodities 43 and 44 therein. Doors 45 and 46 are also preferably arranged in the panels 39 and 40 of the display compartments to provide access thereto for arranging and removing commodities in and from the display compartments.

The operation of a container constructed as described is as follows:

Assuming trays to be arranged on the racks 25 at opposite ends of the storage compartment of the container, packaged commodities such as frozen foods may be placed in suitable arrange-

ments on the trays by drawing one of the trays inwardly relative to the end of the storage compartment to a point below the door opening 11, after which the tray may be tagged to indicate the nature of its contents, and moved back to normal position at one end of the storage compartment. The other trays may be similarly provided with commodities and moved to their outermost positions on the racks.

The refrigerating means having been energized, the door 14 may be closed and the commodities maintained in frozen condition over long periods of time.

Commodities may be arranged for display in the compartments 41 and 42 by opening the door 14 and the doors 45 and 46.

When it is desired to dispense commodities or packages of them from this improved container, the door 14 is opened and the tagged ends of the trays are clearly visible to the operator. By providing the access opening on the bevelled portion of the container, it is a very simple matter for the operator to reach completely to the bottom tray of the container; draw a tray inwardly from an end of the storage compartment to a position directly below the access opening 12 and withdraw the desired commodity from the tray. That particular tray may then be moved to the outer end of its rack, and another tray on the same rack level may be drawn inwardly to permit withdrawal of a commodity on that tray for dispensing purposes. Similar operations may be performed to remove desired articles from one of the other rows or groups or tiers of trays.

When the access door 14 is opened, the normal consequence in conventional containers would be that the panels 13 react to the warm air entering the storage compartment and become frosted or misty. By providing the partitions 37-40, however, circulation of warm air is prevented, and the warm air does not normally contact the panels. The warm air thus does not frost or cloud the transparent panels. The display compartments thus remain effective, regardless of the opening and closing of the access door 14.

It is apparent, therefore, that a convenient, relatively economical and highly efficient combination vending display and storage container is provided by the present invention.

What I claim and desire to secure by Letters Patent is:

1. In a refrigerated container of the character described, an enclosing frame, a compartment in the frame having storage and dispensing spaces therein, a closure mounted in the frame to provide access to the dispensing space, a display compartment in the frame above the storage space, a transparent panel in the frame adjacent the closure for permitting view of the displayed articles, said display compartment being wholly enclosed to prevent light in the display compartment from entering the storage space, a plurality of racks in the storage space below the display compartment and having portions extending into the dispensing space, and trays supported on the racks and individually movable from the storage space to the dispensing space adjacent the closure for removal therethrough of articles carried on the trays.

2. In a refrigerated container of the character described, an enclosing frame, a compartment in the frame having storage spaces on opposite sides of a dispensing space therein, partitions above the storage spaces forming display compartments on opposite sides of the dispensing

space, transparent panels in the frame for permitting view of articles in the display compartment, a closure in the frame between the transparent panels for providing access to the dispensing space, a plurality of vertically spaced racks in the storage spaces below the display

compartments, and having portions extending into the dispensing space, and trays individually movable on the racks from the storage space to the dispensing space for removal through the closure of articles on the trays.

WALTER A. REICH.