

June 1, 1937.

T. G. BOSS

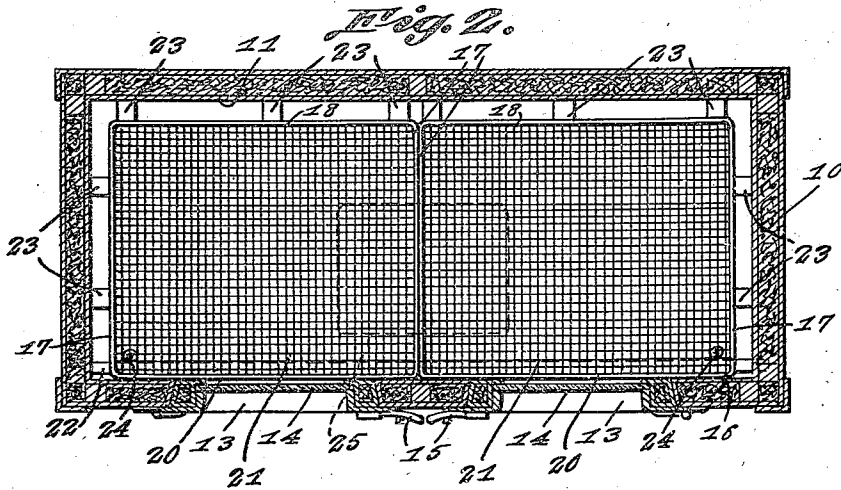
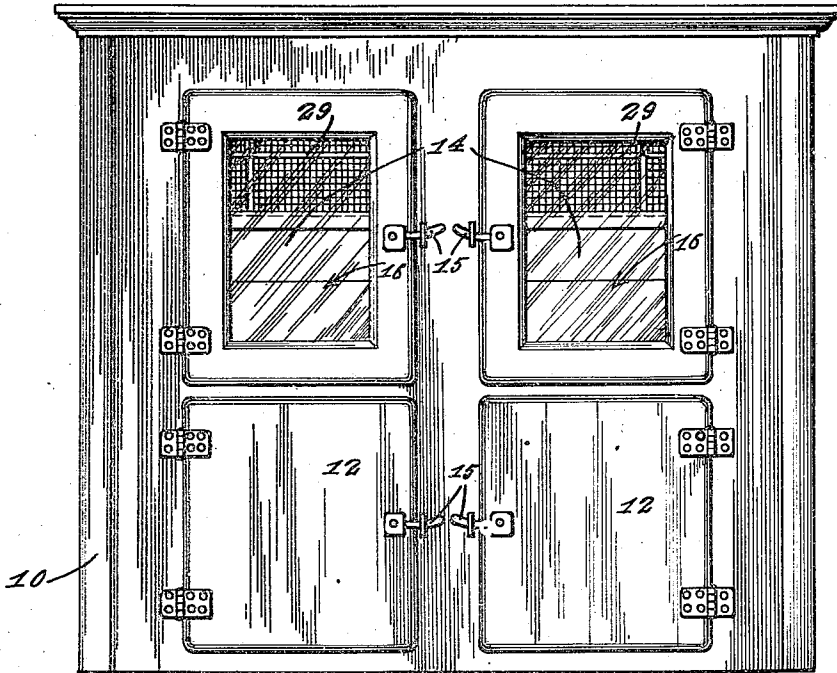
2,082,377

DISPLAY AND STORAGE REFRIGERATOR

Filed Nov. 13, 1935

2 Sheets-Sheet 1

Fig. 1.



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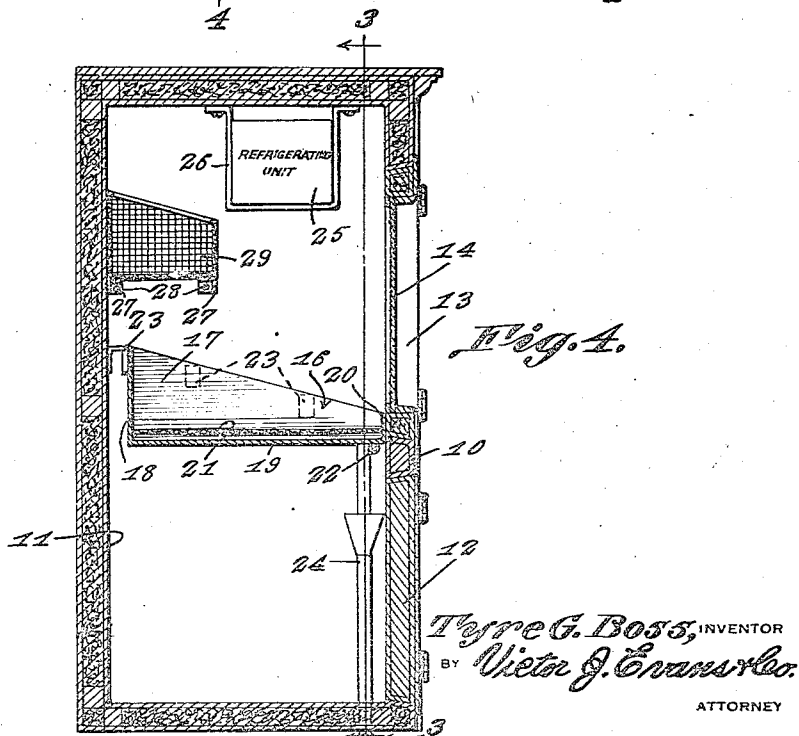
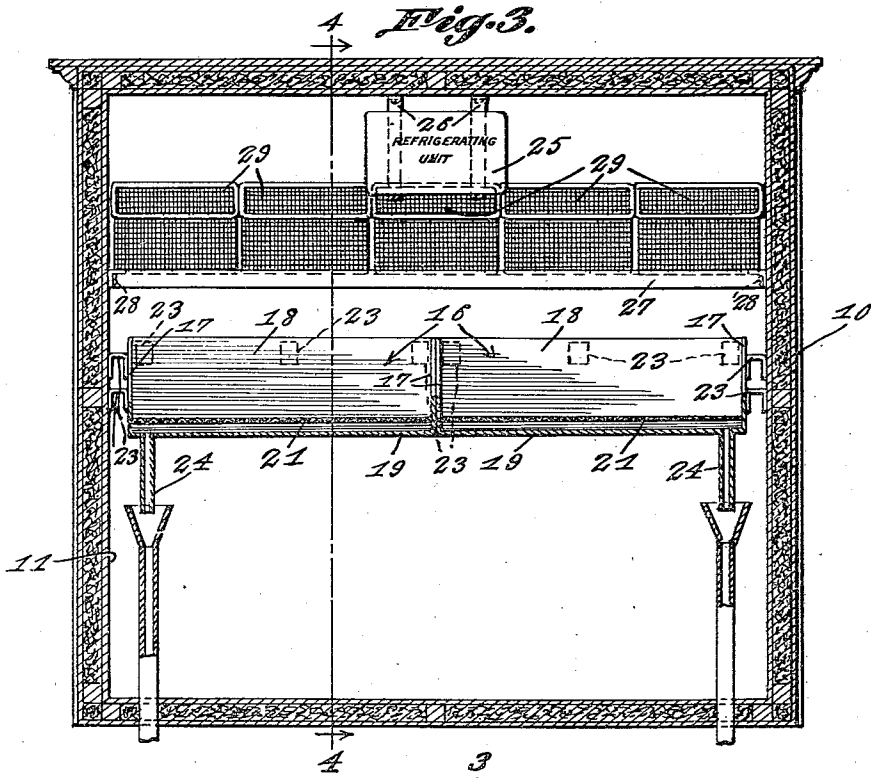
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UNITED STATES PATENT OFFICE

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DISPLAY AND STORAGE REFRIGERATOR

Tyre G. Boss, Alton Park, Tenn.

Application November 13, 1935, Serial No. 49,617

1 Claim. (Cl. 62-89.6)

This invention relates to display and storage refrigerators and has for an object to provide a device of this character that will be particularly suited for the preservation of perishable goods in groceries and the like.

A further object of the invention is to provide a device of this character in which there will be containers for the perishable vegetables, so disposed as to be entirely visible through the glass doors of the casing and at the same time so located within the casing that there will be ample space for the circulation of cooling and ventilating air throughout all parts of the casing.

A further object is to provide a casing which will be insulated and which will be equipped with a refrigerating unit to maintain a predetermined low temperature within the casing, the refrigerating unit being disposed centrally at the top of the casing and the wire baskets at the rear of the casing being set back so as not to project beneath the unit the advantage of this being that both the baskets and the main tray are exposed to the direct streams of cold air passing downward from the unit, and thus the baskets and the tray will be more efficient than ordinarily in maintaining the freshness of the goods stored therein.

A further object is to provide a main tray, the walls of the tray being provided with strap metal brackets which bear against the walls of the refrigerator while a pipe or rod forms a support for the bottom of the tray at the front thereof. Thus the tray may be firmly anchored and positioned while ample ventilating spaces are provided between the walls of the tray and the walls of the casing.

A still further object of the invention is to provide an extremely simple and durable refrigerator for the storage and display of perishable goods, the refrigerator being formed of a few strong simple and durable parts which will be easy 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 claim 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 front elevation of my improved display and storage refrigerator.

Figure 2 is a horizontal sectional view of the refrigerator showing the main tray in top plan.

Figure 3 is a longitudinal sectional view taken on the line 3-3 of Figure 4.

Figure 4 is a cross sectional view taken on the line 4-4 of Figure 3.

Referring now to the drawings in which like characters of reference designate similar parts in the various views, 10 designates in general a refrigerator having as usual insulated walls top and bottom. The casing may be lined with sheet metal for the sake of economy as shown at 11 if desired. The front wall of the casing is provided with a pair of upper doors 12 and a pair of lower doors 13, the upper doors being provided with transparent panes 14 through which the interior of the casing may be viewed at all times. The doors are provided with the usual latches 15.

The main tray 16 is disposed within the casing at about the center thereof and may be formed if desired of sheet metal shaped to provide triangular end walls 17 a rear wall 18 a bottom 19 and a low front wall 20 which latter lies below the transparent panes 14 of both doors so that the interior of the tray may be visible through the panes at all times. A wire mesh screen 21 disposed in the tray and arranged slightly above the bottom of the tray so that a ventilating space exists in the tray underneath the screen which space also will obviously collect foreign matter of any kind gravitating from the vegetables or other perishable articles stored in the tray.

A pipe 22 is arranged at about the horizontal central plane of the casing and the ends of the pipe are secured in the walls of the casing. This pipe forms a support upon which the bottom of the tray at the front may be placed. A rod bar or other similar member may be substituted for the pipe if desired.

The tray is formed in two similar sections. The purpose of this is to permit removal of the tray through the doors to facilitate frequent cleansing so that the tray may be kept in sanitary condition. For the purpose of this description however the two sections or units of the tray will be referred to simply as the main tray.

A plurality of inverted U shaped brackets 23 are fixed to the back and end walls of the tray and bear against the walls of the casing to support the tray upon the rod 22 but spaced considerably at the ends and back from the walls of the casing. Thus ventilating spaces exist between the walls of the casing and the walls of the tray to permit easy circulation of air in

the casing around and over the stored perishable articles so that the latter are maintained in fresh condition.

A drain pipe 24 is arranged in one end of the casing to drain off water accumulating in the bottom of the tray. The pipe may be detachably assembled with the tray or permanently assembled if desired.

The brackets 23 it will be observed permit the tray 16 to be rigidly supported at spaced points around the walls thereof as best shown in Figure 2 so that collapse of the tray under heavy loads will be prevented while at the same time the ventilating spaces between the brackets will be ample in size to permit free circulation of cold air in the casing.

A refrigerating unit 25 is mounted in the top of the casing at about the center thereof. This unit may be of any standard type and in the present embodiment of the invention is shown to be supported from the top of the casing by strap hangers 26. Moreover the unit is arranged near the front of the upper position of the casing.

A pair of spaced angle iron bars 27 are disposed in the casing considerably above the central horizontal plane of the casing and the ends of the bars are secured to the end walls of the casing by riveting as shown at 28 or otherwise secured. These bars form a support or skeleton shelf, upon which a plurality of wire mesh baskets 29 may be placed end to end as shown in Figure 1. Preferably the baskets are of shallow

depth and width and although superimposed above the rear of the main tray 16 the reticulate nature of the baskets permits circulation of air therethrough in a downward direction from the refrigerating unit so that proper ventilation of the perishable articles stored in both the tray and the baskets will be assured.

It is thought that from the above description the construction and operation of my invention will be fully understood without further explanation.

What is claimed is:

A refrigerator including walls, a top and a bottom, a sheet metal lining for the refrigerator, a pair of upper doors and a pair of lower doors in the front wall of the refrigerator, the upper doors being provided with transparent panes, a main bin disposed within the refrigerator at about the center thereof having triangular end walls, a rear wall, a bottom and a low front wall, said front wall lying below the transparent panes of both upper doors so that the interior of the bin may be visible through the panes, a wire means supporting the bin in the refrigerator, a refrigerating unit suspended from the top of the refrigerator, a plurality of wire baskets supported at the rear of the refrigerator and set back so as not to project underneath the unit whereby both the baskets and the bins are exposed to direct downward streams of cold air from the unit, and drain pipes for the bins.

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