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H. WOODHEAD ET AL

2,100,992

REFRIGERATOR STRUCTURE

Filed Oct. 1, 1935

2 Sheets-Sheet 1

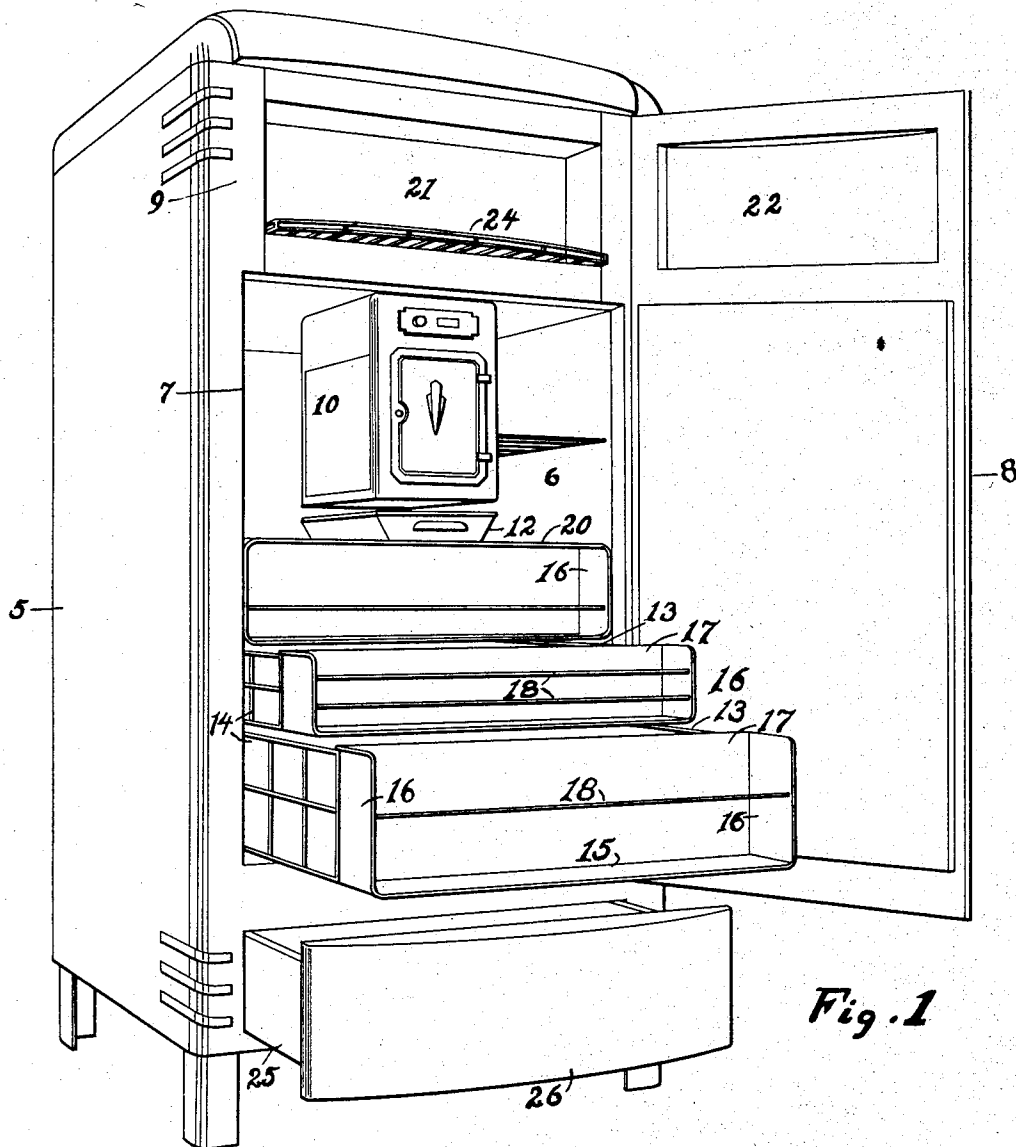


Fig. 1

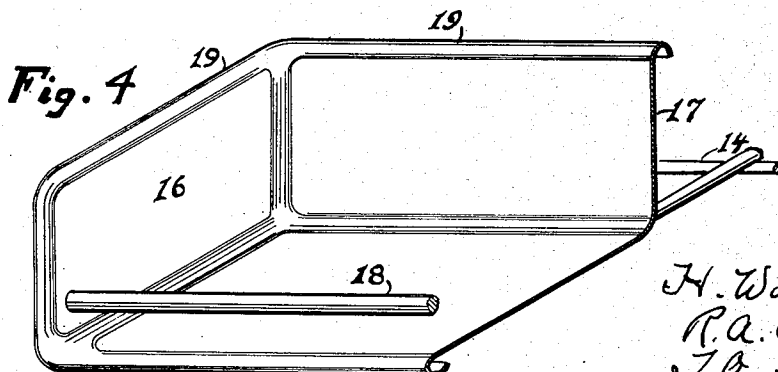


Fig. 4

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2 Sheets-Sheet 2

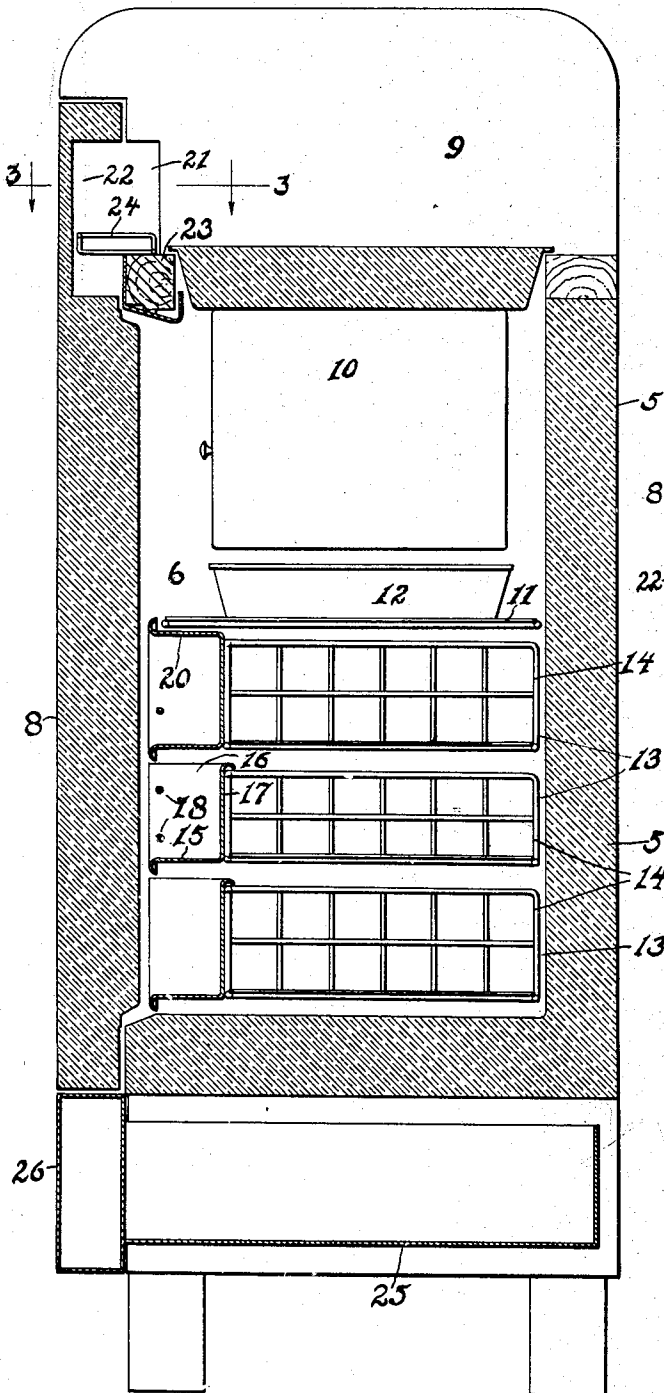


Fig. 2

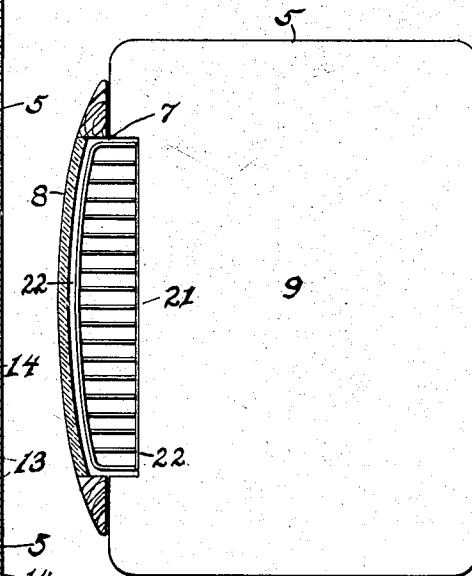


Fig. 3

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UNITED STATES PATENT OFFICE

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REFRIGERATOR STRUCTURE

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Application October 1, 1935, Serial No. 43,124

5 Claims. (Cl. 62—89)

The invention has particular reference to the means for storing food stuffs and the like in refrigerators, and the object is to provide a means that is readily accessible to permit the introduction and removal of the articles and to hold those that are most commonly wanted in exposed relation where they can be seen when the refrigerator door is opened.

A further object is to provide a means that forms a part of the storage devices which will materially obstruct the escape of cold air from the refrigerator when the door is opened and yet will permit the necessary circulation of air within the food-holding chamber.

In the accompanying drawings:

Figure 1 is a perspective view of a refrigerator in which the novel mechanism is embodied.

Figure 2 is a vertical sectional view through the same with the doors closed.

Figure 3 is a detail sectional view on the line 3—3 of Figure 2.

Figure 4 is a detail perspective view of a portion of one of the sliding shelves or drawers.

In the embodiment disclosed the refrigerator cabinet or case, designated 5, may be of any desired or well-known construction and encloses or defines a chamber 6 having an open front 7 closed by the usual swinging door 8. An upper compartment outlined at 9 acts as a container for the refrigerating mechanism, and located in the upper portion of the chamber 6 is the usual cooling member 10. These parts may be of standard or well-known form, and it is believed need no further disclosure.

A stationary shelf 11 below the member 10 constitutes a support for a drip tray 12, and beneath this is a series of shelves 13 that are slidably mounted so as to be movable outwardly through the doorway 7. These shelves being preferably substantially duplicates except possibly for the different heights, a description of one, it is thought, will be sufficient for all. The shelf has a rear portion 14 in the form of an open mesh basket preferably of rods that thus make the bottom and sides foraminous. The front portion of the shelf may be of sheet metal, having a bottom 15, side walls 16 and a rear wall 17. The basket portion is suitably welded or otherwise attached to this front portion. The front of said front portion may have retaining rods 18 extending horizontally across the same, and the sheet metal portion preferably has a rolled rim 19 extending entirely around it. The top shelf preferably, though not necessarily, may have a top wall 20. The walls 17, it will be noted,

really constitute partitions that define front compartments and rear compartments and it will be obvious by reference to Figure 1 that when the door is opened, the front compartments are exposed and are readily available to introduce and remove smaller articles that are commonly wanted. The rear compartments are readily accessible also if the shelves are drawn outwardly as shown.

When the shelves are in their rearmost positions and the door is closed, it will be evident that air can circulate freely through all the compartments and when the door is opened, it will also be clear by reference to Figure 2 that the partitions or rear walls 17 constitute a baffle or obstruction that will hold much of the air behind them and prevent its escape outwardly through the doorway.

In order that as much space as possible be utilizable, the top portion 9 is recessed, as shown at 21, and this recessed portion is covered by the top portion of the door 8. Said top portion is also recessed, as shown at 22, the two recesses 21 and 22 registering when the door is closed. A suitable supporting bar 23 at the bottom of the recess 21 has secured to it a suitable shelf 24 that enters the recess 22 when the door is closed. Thus an additional cooling and storage shelf is provided in the upper part of the refrigerator in front of the refrigerating mechanism.

There is also preferably provided in the bottom of the refrigerator a sliding drawer 25 having a front portion 26 that is located below the bottom of the door 8 and constitutes an extension of the same. The drawer therefore is not interfered with by the door 8, whether in opened or closed position, so that said drawer may be opened or closed, irrespective of the door 8.

From the foregoing, it is thought that the construction, operation and many advantages of the herein described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

What we claim, is:

1. In a refrigerator including a casing having a chamber for the goods to be refrigerated provided with a doorway, and refrigerating means within the chamber, a drawer having an open front and an open top mounted in the chamber and movable outwardly through the doorway, said drawer having a transverse partition in rear

of its front portion that divides said drawer into a rear compartment and a front compartment, the front compartment being accessible through the doorway by way of the open front of the drawer when the drawer is within the chamber, and the rear compartment being accessible by way of the open top of the drawer when the drawer is moved outwardly.

2. In a refrigerator including a casing having a chamber for the goods to be refrigerated, and having a doorway, and refrigerating means within the chamber, a drawer having an open front and an open top slidably mounted in the chamber and movable outwardly through the doorway, said drawer having a substantially solid transverse partition behind its front end that divides the drawer into a front compartment and a rear compartment, and said partition being arranged to extend across the doorway to form an obstruction to the escape of cold air from the refrigerator when the doorway is open, the open front of the drawer providing access to the front compartment when the doorway is open and the open top of the drawer providing access to the rear compartment when the drawer is drawn outwardly.

3. In a refrigerator including a casing having a chamber for the goods to be refrigerated and provided with a doorway, and refrigerating means within the chamber, a plurality of drawers in the casing, each drawer having a transverse partition behind its front end that forms a front compartment and a rear compartment, the said partitions of the different drawers co-acting to substantially close the portion of the chamber occupied by the drawers, against the escape of cold air from the chamber through the doorway when the latter is open.

4. In a refrigerator including a casing having a chamber for the goods to be refrigerated, and provided with a doorway, and refrigerating means within the chamber, a plurality of drawers in the casing, each drawer having a transverse partition behind its front end that divides the drawer into a front compartment and a rear compartment, the walls of the drawer surrounding the rear compartment being foraminous to permit the circulation of air from one drawer to another behind the partitions, the said partitions of the different drawers coacting to substantially close the portion of the chamber occupied by the rear compartments against the escape of cold air through the doorway.

5. In a refrigerator including a casing having a chamber for the goods to be refrigerated, and provided with a doorway, and refrigerating means within the chamber, a plurality of drawers having open fronts and tops and arranged one above the other in the chamber and slidable outwardly through the doorway, each drawer having a transverse partition behind its front end, dividing the drawer into a small front compartment and a rear compartment that is accessible through the open top of the drawer when the latter is moved outwardly through the doorway, the front compartment having a front retaining wall and the partitions of the drawers when the drawers are within the chamber together forming a wall that obstructs the escape of cold air from the rear compartments.

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