

Nov. 17, 1953

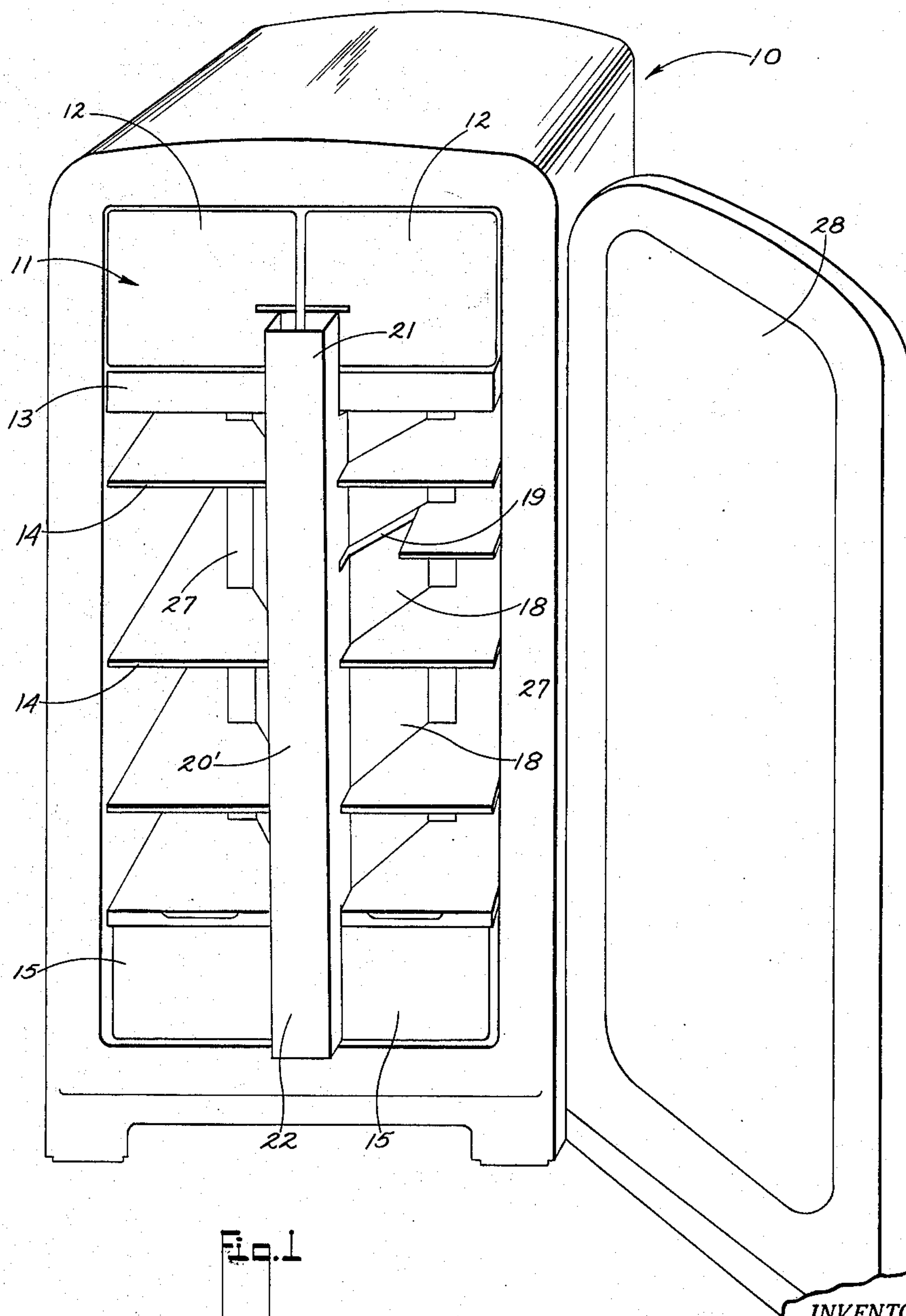
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PACKING BRACE

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2 Sheets-Sheet 1



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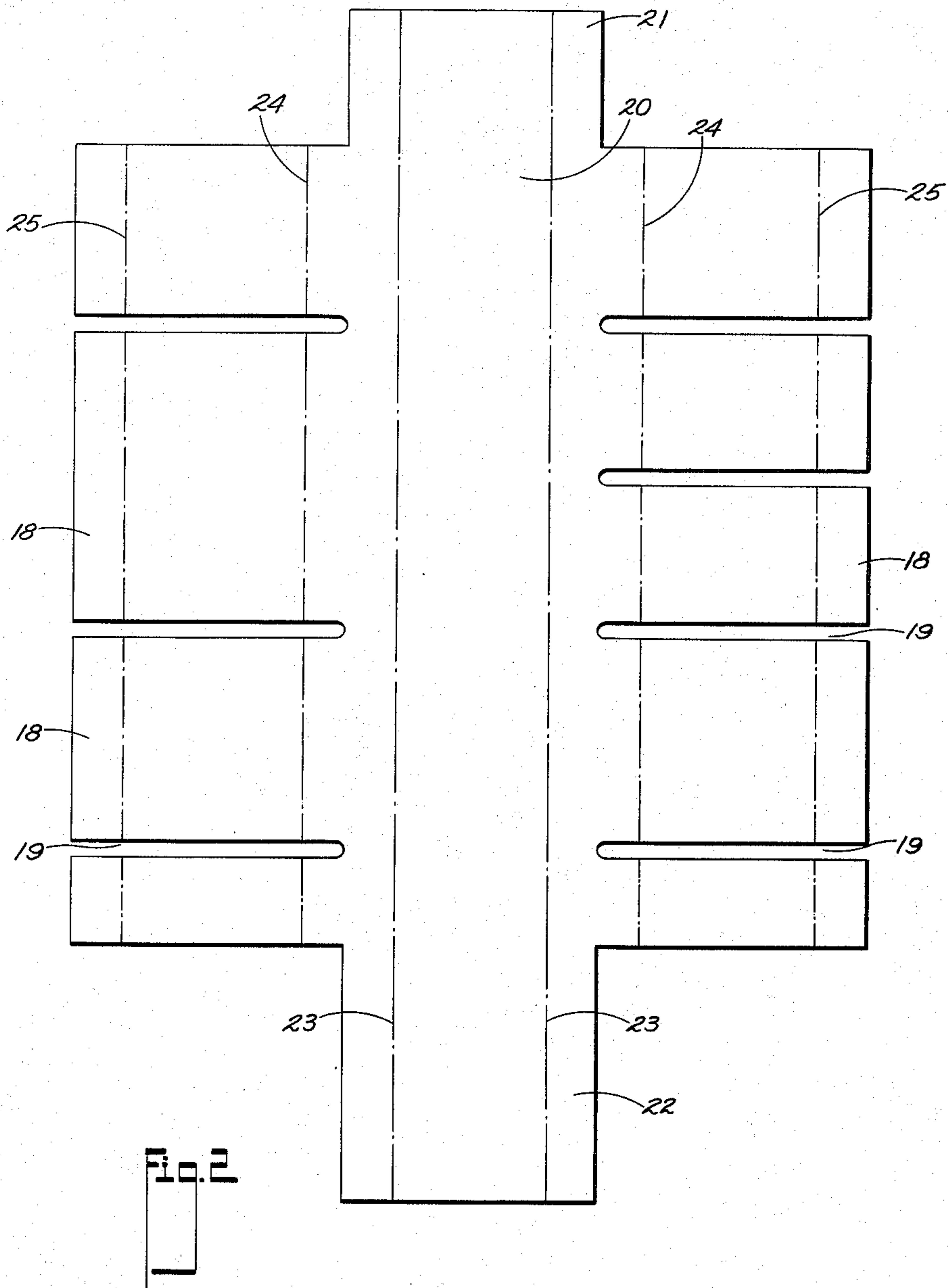
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2,659,648

PACKING BRACE

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Application September 16, 1950, Serial No. 185,185

4 Claims. (Cl. 312-237)

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This invention relates to packaging devices, and more particularly to a device for use in packing, for shipment of a cabinet with movable shelves, to hold the shelves in place. The device is particularly useful in preparing household refrigerators for shipment.

Household refrigerators and some other cabinets are customarily provided with shelves which may be removed or adjusted and, therefore, are not permanently fastened to the cabinet. Doors to the freezing compartment of the refrigerator and vegetable drawers and the like are also movable in the cabinet. In preparing the cabinet for shipping, all these drawers, shelves, etc., must be fastened so that they are substantially immovable in the cabinet.

Prior to my invention, each drawer, door and shelf was individually fastened to the cabinet by some means. This required considerable time in preparing the refrigerator for shipment and consequently added to the cost thereof.

By my invention, I provide a single means which can engage all the drawers, doors and shelves simultaneously and will hold them all in position and keep them from rattling. This single means is not expensive. It may be easily formed from a single piece of corrugated cardboard or the like and kept flat as a blank until such time as it is necessary for use.

Further advantages of my invention, and the invention itself, will become apparent from a reference to the accompanying figures and description which forms a part of this specification.

In the drawings:

Fig. 1 is a perspective view of an embodiment of my invention applied to a household refrigerator; and

Fig. 2 is a plan view of the blank from which the embodiment of Fig. 1 was folded.

While the device of my invention is described and illustrated in connection with household refrigerators, it is not intended to limit its use to such an application. It is envisioned that the device may be used in any cabinet having shelves and/or drawers or the like which are loose and should be fixed for shipment, and particularly to those cabinets which have doors to enclose the compartment in which the shelves are situated.

As illustrated in Fig. 1, the usual household refrigerator cabinet 10 is provided at the top with a freezer compartment 11 closed by a door or doors 12. This compartment may extend completely across the top of the cabinet 10 as shown,

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or it may be only a small part of the upper cabinet, as is well known in the art.

Beneath the freezing compartment 11, a meat drawer 13 or freezer drawer or the like is customarily provided, and beneath that, the shelves 14 are arrayed. It is customary to use shelves formed as racks and resting on buttons in the walls of the cabinet 10 or having short rods extending from the shelf for insertion into grommetted holes in the cabinet wall. Both of these methods are well known in the art and are no part of the present invention. A vegetable drawer 15, or in some cases two drawers, may be provided within the cabinet beneath the shelves.

All of these drawers, shelves, doors, etc., are likely to be moved around during shipment and may damage the inside of the cabinet. To prevent such movement is the object of my invention, which comprises a single member adapted to hold all the movable parts in place. This member is bent from a blank illustrated in Fig. 2. The blank is preferably die cut from corrugated cardboard material. A series of wing portions 18 defined by slots 19 extend laterally outward from a central longitudinal part 20. Near the upper and lower ends 21 and 22 of the part 20, the wing parts 18 may be eliminated for a reason made apparent hereinafter. The central part 20 may be scored at 23 to make folding more easy. Similarly, the wings 18 are scored at 24 near their junction with the central part 20 and near the tip at 25.

As best shown in Fig. 1, when the blank is folded for use, the central part 20 is folded to form a channel shaped beam member 20'. This member extends across the front of the doors 12 and meat drawer 13 at its upper end 21. Beneath the drawer 13 and above the top shelf 14, and between the successive lower shelves 14, the wing members 18 are folded outwardly from the channel on the line 24 and may be folded along the line 25 to provide tip members 27 which engage the shelves to hold them in position. At the same time, the whole assembly may be locked together in the same relative positions because of the frictional engagement of the wing members 18 and tips 27 with the shelf racks. The lower end 22 of the central part 20 engages the vegetable drawers 15 and holds them in place. It will be apparent to those skilled in the art that the wing members need not be folded outward but could be mere extensions of the sides of the channel beam member 20', and that these wing members 18 could be shortened to the point where they simply defined a lateral notch across

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the beam. This configuration, however, supplies less support for the shelves and therefore is not preferred.

The mere holding of the shelves, drawers, etc., in the same relative position by such a device is not relied on wholly, however. The beam part 20' is so proportioned that when the insulated door 28 of the cabinet is closed, it just engages the outer face of the beam member and thus holds the entire assembly in place while the refrigerator is shipped. In the case of the alternative configuration suggested above, the engagement of the door with the beam member 20' is essential for successful use of the device.

Thus it is apparent that I have provided a new and very useful means for holding the shelves in place in a cabinet for shipping. It will be obvious to those skilled in the art that the same means could be used for other cabinets besides refrigerator cabinets. It is also apparent that some part of the convenience of the device comes from the fact that it is a single piece and formed from a blank which can be stored flat until ready for use.

Having thus described my invention, I am aware that numerous and extensive departures may be made therefrom without departing from the spirit or scope of my invention.

I claim:

1. In combination with a refrigerator having at least one freezer compartment door, a meat tray beneath said door, a plurality of shelves beneath said tray and at least one vegetable drawer beneath said shelves and closed by an insulated door, a beam member extending vertically in front of said freezer compartment door, over said tray, across the front of said shelves and in front of said drawer, and wing members integral therewith extending rearwardly and laterally between each of said shelves and in engagement therewith to prevent movement of the shelves, said beam member engaging said door when closed to hold the beam member in position.

2. In combination with a refrigerator having a plurality of shelves therein, a folded slotted paperboard member forming a beam and lateral wings extending divergently therefrom, said

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beam member extending vertically across the front of said shelves, said wing members extending rearwardly and laterally between each of said shelves and in engagement therewith to prevent movement of the shelves during shipment.

3. In combination with a cabinet having movable shelves for shipment, a longitudinal member extending over the front of said shelves near their center and wing members extending integrally from opposite sides of said longitudinal member and in an outwardly flaring direction from said member and tip means integral with the ends of said wing members and extending at an angle thereto and outwardly therefrom, said longitudinal member holding said shelves in spaced parallel arrangement in said cabinet and preventing movement thereof relative to said cabinet.

4. A blank for a packing device for maintaining shelves, doors and compartments of refrigerators or the like stationary, comprising a flat sheet having a continuous longitudinal extending central portion and laterally extending wing portions on opposite sides thereof terminating short of the ends of said central portion so as to define free end portions longitudinally outwardly of said wing portions, said wing portions being defined by lateral slots extending from said central portion to the terminal side edges of said wing portions, said central portion having longitudinally extending score lines disposed inwardly from both side edges of said free end portions and wing portions, longitudinally disposed score lines on said wing portions disposed adjacent said terminal side edges thereof, and additional longitudinally disposed score lines inwardly of said score lines on the wing portions and adjacent the inner ends of said slots.

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