Jan. 21, 1947. J. G. ELLIOTT 2,414,588

AUXILIARY REFRIGERATOR

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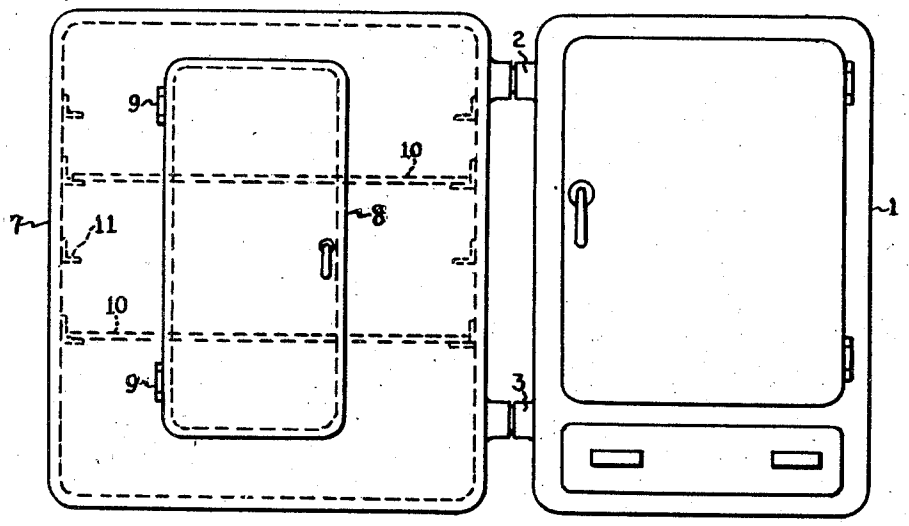

Fig. 1.

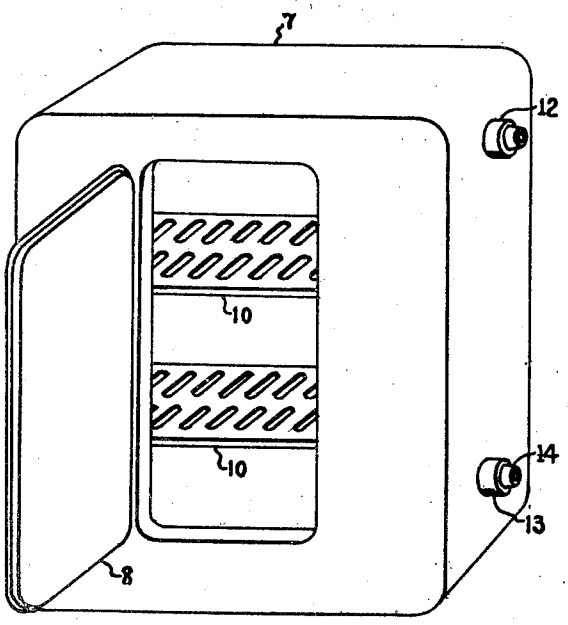

Fig. 2.

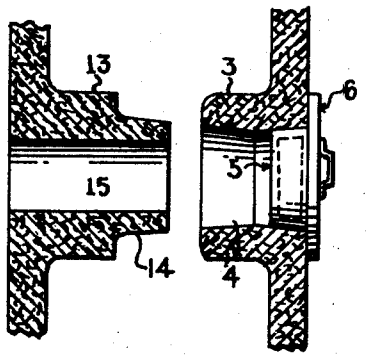

Fig. 3.

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AUXILIARY REFRIGERATOR

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4 Claims. (Cl. 62—89)

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This invention relates to refrigerators and particularly refrigerators for household use.

An object of the invention is to provide a refrigerating cabinet auxiliary to and interconnected with the cabinet of an ordinary household refrigerator so that cold air may be delivered to the auxiliary cabinet from the refrigerator.

Other objects are to adapt the auxiliary cabinet and that of said refrigerator to be readily connected or disconnected, and to provide for closing or opening a passage for delivering air from the refrigerator to the auxiliary cabinet.

These and various other objects are attained by the construction hereinafter described and illustrated in the accompanying drawing, wherein:

Fig. 1 is a view in front elevation of my auxiliary cabinet operatively connected to a refrigerator.

Fig. 2 is a perspective view of the auxiliary cabinet.

Fig. 3 is a fragmentary enlarged vertical sectional view of interengageable tubular air flow fittings carried respectively by the refrigerator and auxiliary cabinet.

In these views, the reference character 1 designates the cabinet of a household refrigerator of any desired design, producing refrigeration in any desired manner but preferably mechanically, the walls of said cabinet being heat insulated as is common. One of said walls and preferably a side wall is formed with two spaced short outwardly projecting heat insulated fittings 2 and 3, one adjacent to the top and the other to the bottom of such wall. These fittings are formed with passages 4 opening into the refrigerator, and it is preferred to gradually flare each such passage from its mid portion to its ends as best appears in Fig. 3. A closure plug 5 is provided for each passage 4 and may be applied either interiorly or exteriorly of the refrigerator, said plug being tapered to fit either flared end portion of either passage 4. It is preferred to form each plug with an annular flange 6 which may seat either against the interior face of the wall carrying such plug or against the outer end of the fitting which receives the plug.

My auxiliary cabinet 7 has heat insulated walls of any desired proportions, its capacity preferably somewhat exceeding that of the cabinet 1. The height of the two cabinets is preferably the same, this producing the best appearance. A door 8 in the front wall of the cabinet 7 gives access thereto, and is hinged as indicated at 9. Within the auxiliary cabinet there is installed

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any desired arrangement of shelves 10, and brackets 11 may provide for vertical adjustment of such shelves or installation of additional shelves.

From a side wall of the cabinet 7, spaced upper and lower heat-insulated fittings 12 and 13 project laterally, being adapted to align with and engage the fittings 2 and 3. Thus the outer end portions of these fittings have a slight taper, indicated at 14, adapting such portions to snugly enter and frictionally fit in the outer portions of the passages 4. Air passages 15 extend centrally through the fittings 12 and 13 and open into the cabinet 7.

The purpose of the auxiliary cabinet is to occasionally derive from an ordinary refrigerator a volumetric refrigerating effect far in excess of that normally attained. For example, many housewives do considerable canning of fruits and vegetables when these are most plentiful, and it is important to keep such home canned products in a fairly cool place until they are needed. Fruit shelves in basements are commonly used for storing such products but basement temperatures are occasionally high enough to damage such products. Moreover, basement storage facilities are not available to many housewives. My auxiliary cabinet may be used for storing home canned products with assurance that a safely reduced temperature will be maintained. Cold air will initially flow by convection through both connecting passages to the auxiliary cabinet and after temperatures in the two cabinets are fairly equalized, there will be a thermo-syphon circulation of air, into the auxiliary cabinet through the lower connection and back to the refrigerator through the upper connection. It is of course a fact that the volume of air normally cooled by a refrigerator cannot be largely increased, as here contemplated, and still derive the same cooling effect. However, it is not intended nor desirable to produce in the auxiliary cabinet a temperature reduction such as ordinarily prevails in a refrigerator, the connections between the two cabinets being closed by the plugs 5 as soon as a desired moderate cooling of the auxiliary cabinet is accomplished. This will not require any prolonged interval particularly if the automatic mechanism is adjusted during such interval to function at its maximum efficiency, a provision for such an adjustment being made in modern mechanical refrigerators. From time to time as the temperature in the auxiliary cabinet gradually rises, the circulation of air from and to the refrigerator may be again temporarily established. When there occurs a considerable time interval during which there is no need of the

auxiliary cabinet, it may be, if desired, shifted to some other location until again needed. Under such conditions the plugs 5 are exteriorly applied to the fittings 2 and 3, so that the refrigerator may function in an ordinary manner and have substantially an ordinary appearance.

While the safe storage of home canned products has been mentioned as one function of the auxiliary cabinet, it is apparent that numerous other food products and articles may be beneficially stored in such cabinet.

What I claim is:

1. The combination with a refrigerator including a refrigerated cabinet, of an auxiliary cabinet for intermittent connection to the refrigerated cabinet, one of said cabinets having upper and lower spaced tubular fittings fixed thereof, communicating therewith, and laterally projecting

therefrom, and the other cabinet having similarly spaced openings in a lateral wall thereof disposed to snugly receive said fittings when the cabinets are in mutual proximity, whereby an air flow may be established between said cabinets.

2. The combination as set forth in claim 1, said fittings each having an exterior taper, and said openings being flared to receive such taper.

3. In the combination as set forth in claim 1, closure plugs applicable to the refrigerated cabinet to close its openings for connection with the other cabinet.

4. In the combination as set forth in claim 1, closure plugs applicable either interiorly or exteriorly to the refrigerated cabinet to close its openings for connection with the other cabinet.

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