This invention relates to improvements in cabinets and, more particularly, to cabinets of the type employed in the construction of refrigerators.

An object of the invention is to provide a refrigerator with a novel door construction wherein the door contains within its own confines one or more compartments adapted for the reception and preservation of articles of food.

Another object of the invention resides in the provision of a refrigerator door by which the contents of the door compartment are rendered accessible without affecting the temperature of the main food storage compartment of the cabinet.

A further object of the invention is to provide the interior of the door with a substantially transparent wall capable of transferring in part the temperature of the main storage compartment of the refrigerator to the supplemental storage compartment formed in the door itself, so that when the door of the supplemental storage compartment is opened to permit the reception or removal of articles of food with respect thereto, there will be no escape of the cold or chilled atmosphere of the main storage compartment from the refrigerator cabinet and yet the contents of said main storage compartment may be readily viewed.

In the attainment of these objects, my invention consists in a novel refrigerator door construction comprising inner and outer door members capable of swinging bodily as a unit to open or close the associated cabinet, or wherein the inner of said door members may be moved to an open position independently of the outer member in order to provide access to the supplemental food storage compartment formed in the door itself, and in the provision of a transparent panel at the back of the door and the supplemental food storage compartment which constitutes a part of the door assembly, protects the interior of the refrigerator cabinet against loss of its chilled or cooled atmosphere and provides for the observing of the contents of the main storage compartment when the supplemental storage cabinet is opened.

For a further understanding of the invention, reference is to be had to the following description and the accompanying drawing, wherein:

Fig. 1 is a perspective view of a refrigerator cabinet provided with the improved door construction comprising the present invention;

Fig. 2 is a vertical sectional view taken through the cabinet and the door construction thereof on the plane indicated by the line II—II of Fig. 1;

Fig. 3 is a horizontal sectional view showing the cabinet and door construction, the plane of which being indicated by the line III—III of Fig. 2;

Fig. 4 is a similar view on a somewhat enlarged scale, disclosing the manner of mounting the transparent panel in the rear of the door construction.

Referring more particularly to the drawing, the numeral 1 designates the cabinet of a refrigerator used for the storing and preservation of foods in a cooled or chilled atmosphere, effected in any well known way. The cabinet includes the usual insulated walls to minimize loss of its internal temperatures. The front wall 2 of the cabinet is provided with the usual rectangular door opening 3, and a composite door 4 of novel construction, which door comprises the present invention, is hingedly mounted in connection with the front wall to provide access to the interior main food storage compartment 5 of the cabinet. In this instance, the compartment 5 has been disclosed as provided with the usual food supporting shelves 6 and in the top thereof with a mechanical ice producing unit 7, although ordinary ice may be employed for cooling the cabinet in the usual well known manner.

The composite door 4 comprises an outer rectangular frame 8 carried by hinges 9 in connection with the front wall 2, the frame 8 conforming closely to the configuration and proportions of the door opening 3, as is customary in refrigerator cabinet design. In addition to the frame 8, the door further comprises an inner door member 10 which is supported by means of the vertical hinges 11 carried by the frame 8, in order that said door frame and inner door member may swing bodily as a unit when access to the main food storage compartment 5 is desired. In this regard, the door frame 8 is provided with the usual handle and latch appliance 12 arranged for cooperation with a stationary keeper 13 carried in connection with the outer part of the front wall 2, which provides for the latching and unlatching of the composite door and the usual swinging thereof in the conventional manner. In addition, however, the inner door member 11 is also provided with a corresponding handle latch 14 which is arranged for cooperation with a keeper 15 secured to the outer surface of the door frame 8. By means of these latch members 12 and 14, the composite door may be swung bodily as a unit or, if desired, the inner door member may be opened or closed and turned.
about its hinges 11 independently of the outer door frame.

The inner door member is provided in order to provide access to a supplemental food compartment 16 which is disposed entirely within the confines of the composite door and is adapted for the reception of certain articles of food which should be kept separate from the comestible products contained within the main compartment 5. A chilled or cooled atmosphere may be maintained in the compartment 16 by the provision of a transparent panel 17 which is carried in connection with the rear part of the door frame 5, the marginal edges of said panel, as shown in Fig. 4, being disposed within seats 18, formed in the frame 5, and held in engagement with said seats by clamping strips 19 provided with fastening elements 20.

By the provision of this construction, it will be noted that the contents of the supplemental compartment may be removed or replaced at any time without affecting the temperature of the main food compartment 5 through the mere opening of the inner door member 16, since when said inner door member occupies its open position, the panel 17 will prevent loss of the cooled or chilled atmosphere which normally prevails within the main compartment 5. It is preferable to form the panel 17 from a transparent material, such as glass, since the latter possesses the ability to transmit the coldness of the main compartment 5 at least in part to the supplemental compartment 16. Moreover, in view of the fact that the panel 17 is formed from a solid imperforate material, there will be no transmission of odors from one food compartment of the refrigerator to the other and this is of material importance in the proper storage of many different kinds of foods. Again, the transparent panel permits the contents within the main compartment 5 to be readily observed from the exterior of the refrigerator and without opening the door governing access to the main compartment.

While I have shown the preferred embodiment of my invention, yet it will be understood that numerous changes and modifications thereof may be made without departing from the spirit of the invention disclosed, and as defined in the following claims.

What is claimed is:

1. In a refrigerator, a cabinet provided with a door opening and a main food storage compartment, an outer door member hingedly connected with said cabinet to control access to said food compartment through said doorway, said outer door member being provided within the confines thereof with a supplemental food storage compartment, an inner door member hingedly connected with said outer door member and independently movable with respect thereto for governing access to said supplemental food compartment, and an imperforate panel rigidly carried by the back of the outer door member separating the main and supplemental compartments, said panel being formed from a material possessing thermal conductivity sufficient to transmit in part the temperatures prevailing in the main food compartment to said supplemental compartment and maintaining the atmospheres of said compartments distinctly separate and without intercommunication.

2. The structure as specified in claim 1 wherein the door carried panel separating the main and supplemental compartments is formed from glass.

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