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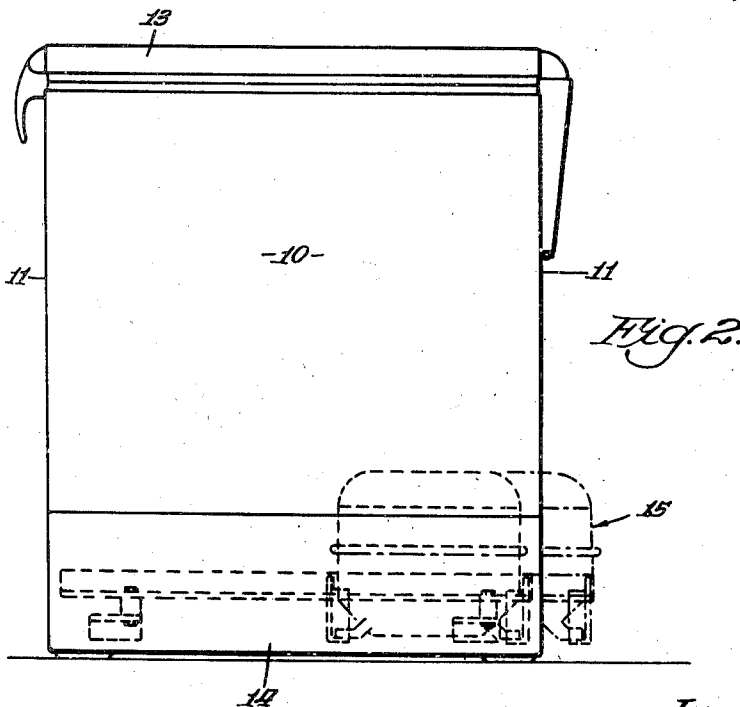
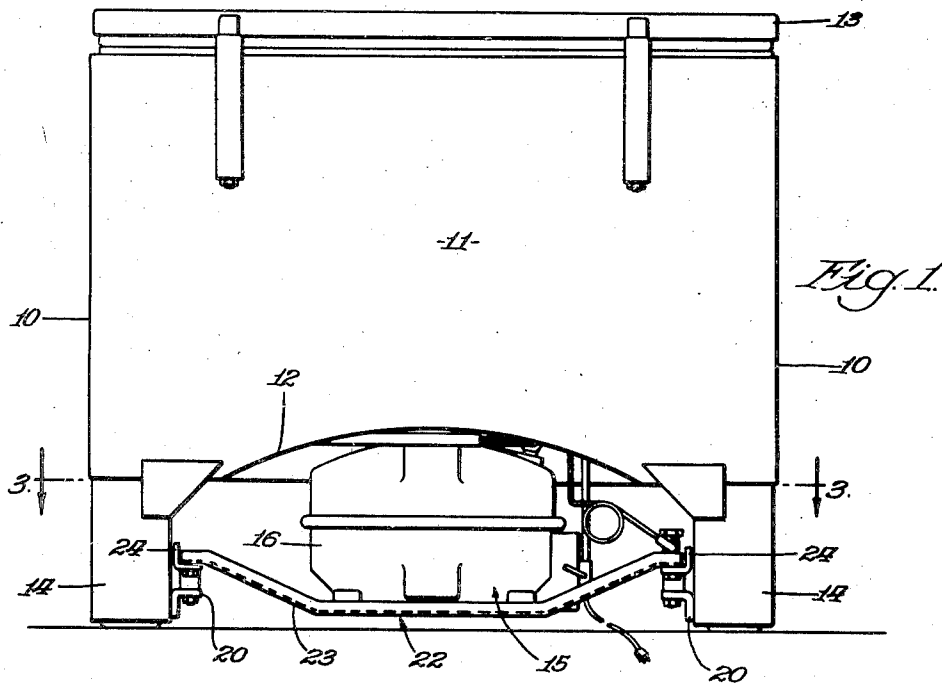
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2,454,727

REFRIGERATING APPARATUS

Filed April 4, 1947

2 Sheets-Sheet 1



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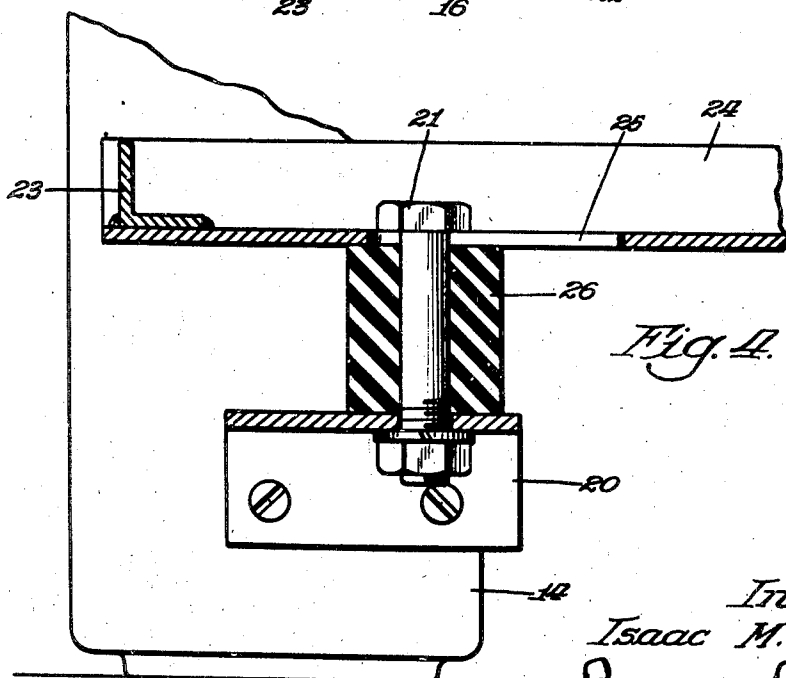
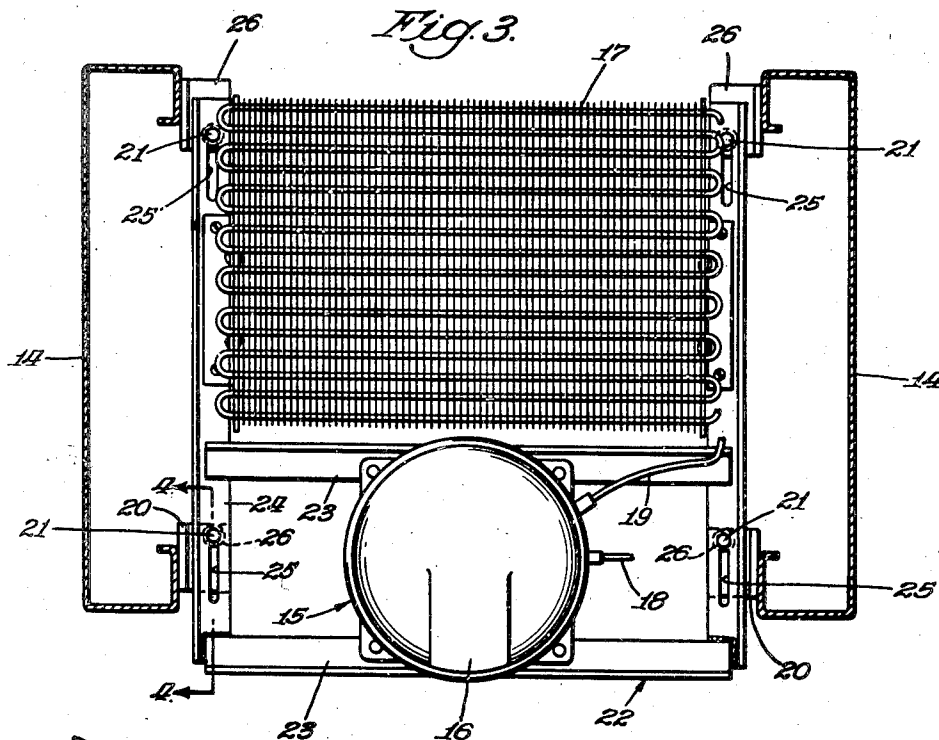
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REFRIGERATING APPARATUS

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The present invention relates to a refrigerating apparatus and more particularly to a unit of the freezer chest type. The invention is concerned particularly with the provision of means in conjunction with a refrigerator cabinet whereby a refrigerant-liquefying means is mounted in such a manner as to be positionable in either of two positions.

The invention contemplates and has for its principal object the provision of an improved refrigerating apparatus comprising a cabinet having means for supporting its bottom in spaced relation above the floor, the space at the bottom providing a machinery space or compartment within which is normally housed refrigerant-liquefying machinery such as a motor-compressor unit and a condenser. The refrigerant-liquefying machinery is mounted so that it may be moved from a position in which it is disposed normally within the confines of the machinery space or compartment to a position in which at least a part of the machinery extends outside the space or compartment. When the machinery is normally disposed within the confines of the compartment, the refrigerating apparatus is more easily transported and the machinery is more effectively protected against damage incident to transport. It is found, however, that the machinery operates at higher efficiency when it is exposed at one side of the compartment or space, since normally the cabinet is placed against a wall and maximum circulation of air to cool the condenser is not obtained.

Other objects and features of the invention will be apparent to those skilled in the art upon an examination of the following detailed description and accompanying sheets of drawings of a preferred embodiment of the invention.

In the drawings, Figure 1 is a side elevation of a refrigerating apparatus embodying the principles of the invention.

Figure 2 is an end elevation of the same structure, the outward or operating position of the refrigerant-liquefying machinery being indicated in dot-dash lines.

Figure 3 is a transverse sectional view taken on the line 3—3 of Figure 1.

Figure 4 is an enlarged sectional view showing in detail the construction of the means for mounting the machinery frame, the view being taken substantially along the line 4—4 of Figure 3.

Although the following description will pertain to a preferred embodiment of the invention as associated with a refrigerating apparatus of the freezer chest type, it should be understood that

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the invention has wider application; the disclosure should be taken therefore as illustrative and not limiting.

The refrigerating unit has a cabinet having opposed end walls 10 and opposed side walls 11, the structure forming a box or chest closed by a bottom wall 12, the intermediate portion of which is arched (Figure 1). The cabinet may be closed in the usual manner as by a hinged cover 13.

The cabinet is supported with its bottom 12 in spaced relation above the floor, the supporting means comprising a base including longitudinally spaced supports in the form of end elements or legs 14. As best shown in Figure 3 each end element is preferably formed of sheet metal and of box-like construction, the outer walls of which are respectively in vertical alinement with the end walls 10 of the cabinet.

It will be noted that the bottom 12 of the cabinet and the end elements or legs 14 provide a space or compartment below the cabinet. This space serves to accommodate refrigerant-liquefying machinery generally indicated by the reference numeral 15. As is conventional, this machinery may include a motor-compressor 16 and a condenser 17. The suction side of the compressor is connected in the usual manner by tubing 18 to an evaporator (not shown), and the condenser 17 is connected to the compressor by means of tubing 19, this latter tubing being broken away in Figure 3 to illustrate more clearly supporting structure for the machinery. The machinery unit 15 is of such size as to be confining in the machinery space below the cabinet; that is to say, normally no part of the machinery projects beyond the side walls 11 of the cabinet.

Each end element or leg 14 is provided with bracket means comprising a pair of transversely spaced angle bars 20, the horizontal leg of each of which carries a vertical securing means in the form of a bolt 21. The machinery unit is carried on a supporting frame 22, which preferably comprises a plurality of longitudinally running angle bars 23 cross connected at their ends by a pair of transversely running angle bars 24. Each of the angle bars 24 is longitudinally slotted in two places at 25 to receive the proximate mounting bolts 21. As shown in Figure 4, the bolts 21 may pass through rubber cushions 25 for resiliently mounting the frame 22 on the brackets 20. The supporting frame 22 is also of such size as to be confining within the machinery space below the cabinet.

In the operation of the refrigerating unit, the bolts 21 are loosened so that the frame 22 may be slid or moved horizontally outwardly through one open side of the machinery space. The machinery unit then occupies the position shown in Figure 3 and shown in dot-dash lines in Figure 2. In this position a portion of the machinery unit extends at one side of the cabinet beyond the proximate side wall 11. This position of the unit may be termed the operating position, for it is found that the unit operates at increased efficiency in this position as compared to its operating efficiency when occupying its position entirely within the machinery space. This position of the machinery unit, of course, increases the overall width of the cabinet. However, when it is desired to transport the unit, the machinery carrying frame, together with the machinery thereon, may be moved inwardly so that it is confined within the machinery space. In this position of the parts utmost protection is afforded the machinery and the overall width of the cabinet is no greater than the transverse width of the end walls 10.

The bolts 21 may be completely removed in the event that it is desired to completely remove the frame 22 and the unit 15.

The foregoing description is, of course, based upon a preferred embodiment of the invention, and it will be obvious that numerous modifications and alterations may be made therein without departing from the spirit and scope of the invention as set forth in the appended claims.

What is claimed is:

1. In a refrigerating unit, the combination of: a cabinet having end and side walls and a bottom; means including a base having spaced apart end elements, disposed vertically, arranged to support the cabinet with its bottom spaced above the floor, the bottom and the end elements defining a machinery space open at at least one side; bracket means carried by the end elements within the machinery space; a supporting frame associated with the brackets and of such size as to be confinable within the machinery space; refrigerant-liquefying means carried by the frame, also of such size as to be confinable within the machinery space; and means including slotted connections mounting the frame on the bracket means for limited horizontal sliding movement of the frame with respect to the cabinet through the aforesaid open side of the machinery space from a first position, in which the frame and refrigerant-liquefying means are confined within the machinery space, to a second and operative position, in which at least part of the refrigerant-liquefying means extends outside of the machinery space

horizontally beyond the proximate side wall of the cabinet.

2. In a refrigerating unit, the combination of: a cabinet having end and side walls and a bottom; means including a base having spaced apart supporting elements arranged to support the cabinet with its bottom spaced above the floor, the bottom and the elements defining a machinery space open at at least one side; a supporting frame of such size as to be confinable within the machinery space; refrigerant-liquefying means carried by the frame, also of such size as to be confinable within the machinery space; and means mounting the frame on the supporting elements for limited horizontal sliding movement of the frame with respect to the cabinet through the aforesaid open side of the machinery space from a first position, in which the frame and refrigerant-liquefying means are confined within the machinery space, to a second and operative position, in which at least part of the refrigerant-liquefying means extends outside of the machinery space horizontally beyond the proximate side wall of the cabinet.

3. In a refrigerating unit, the combination of: a cabinet having end and side walls and a bottom; means including a base having spaced apart supporting elements arranged to support the cabinet with its bottom spaced above the floor, the bottom and the elements defining a machinery space open at at least one side; a supporting frame of such size as to be confinable within the machinery space; refrigerant-liquefying means carried by the frame, also of such size as to be confinable within the machinery space; and means mounting the frame on the supporting elements for limited movement of the frame with respect to the cabinet through the aforesaid open side of the machinery space from a first position, in which the frame and refrigerant-liquefying means are confined within the machinery space, to a second and operative position, in which at least part of the refrigerant-liquefying means extends outside of the machinery space.

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