Sept. 14, 1948. G. L. C. EARLE 2,449,207

SOUND DEADENER DRAWER

Filed May 7, 1945

Fig. 1.

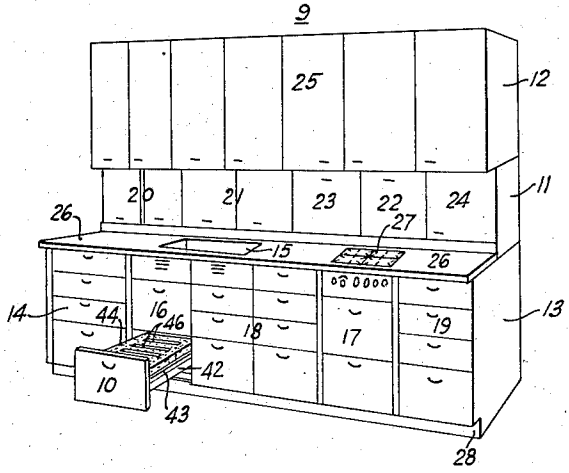
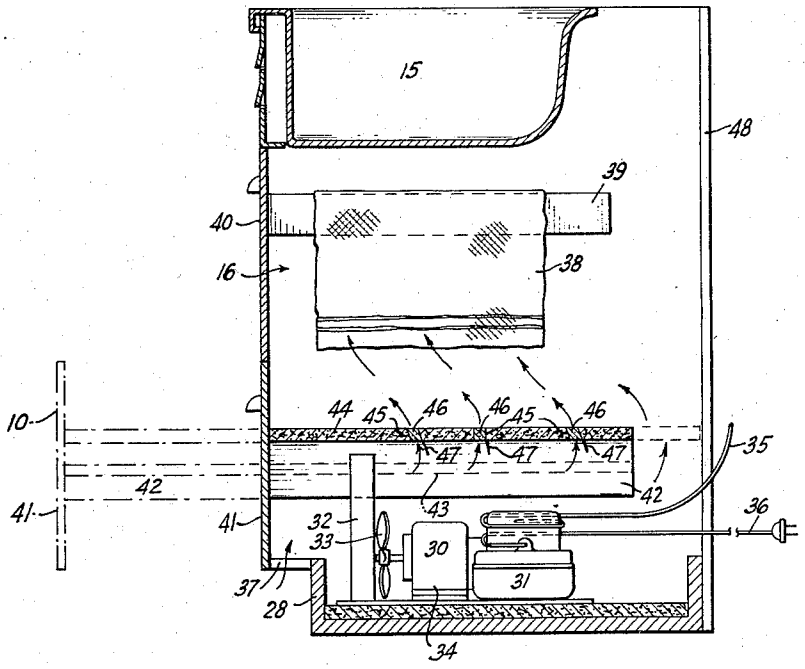


Fig. 2.



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SOUND DEADENER DRAWER

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5 Claims. (Cl. 34—90)

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This application relates to kitchen units and more specifically to units of this type which include a refrigerator which has a portion of its operating member within a cabinet located at the side thereof.

It is an object of this invention to provide an improved kitchen unit of the type including a refrigerator which has a portion of its operating member located in another portion of the unit.

Patent 2,328,129, issued January 18, 1940, to Guyon L. C. Earle, discloses a kitchen unit wherein a portion of the operating member of a refrigerator is used to warm air which enters at the base of the unit and which is caused to flow through first a towel-drying compartment and then a dish-drying compartment. The towels have usually been located directly over this portion of the refrigerator operating member and if any towels drop they are liable to fall on the mechanism of this member. Moreover, and still more important, noise from the member frequently comes out into the room, particularly when the slidable member holding the towel racks is pulled out to or left in its open position. Still another disadvantage in the arrangement disclosed in the patent is that the front closure member for the compartment containing the above-mentioned portion of the refrigerator operating unit usually is screwed, bolted or snapped into place. If it is relatively permanently fastened in place, as by screwing or bolting, it is difficult to reach the operating member for servicing. If it is snapped into place, the closure member is repeatedly being pulled off by people mistaking it for a drawer front. The present invention relates primarily to the removal or the alleviation of these disadvantages.

It is another object of this invention to provide a kitchen unit wherein the above-mentioned disadvantages are not present or are greatly reduced.

The above and related objects are attained in accordance with the invention by providing in an illustrative embodiment thereof a slidable closure member having a vertical front surface like a drawer front and a horizontal member of sound-deadening material adapted to slide over the portion of the operating member of the refrigerator located outside the refrigerator. This horizontal member is supported by any convenient means such as guides or rollers and is usually not as long as the horizontal distance from front to back in the towel-drying compartment so that the warm air to dry the towels can reach the towels above the horizontal member. Alternatively, the horizontal member can be provided with one or more slots or other apertures so that the warm air can pass therethrough and reach the towels and rags on the racks above. If slots or other apertures are provided the horizontal member can, if desired, extend the complete distance from front to rear of the cabinet. Moreover, air filters can be provided in the slots or other apertures. This arrangement makes possible a great reduction in the noise from the operating member, provides a shelf to catch any towels or rags which drop off the racks, and makes easy access to the operating member possible.

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The invention will be more readily understood by referring to the following description taken in connection with the accompanying drawing forming a part thereof, in which:

Fig. 1 is a perspective view of a kitchen unit including the novel slidable member of this invention; and

Fig. 2 is a vertical cross-sectional view through a portion of the unit of Fig. 1 including the slidable member.

Referring more specifically to the drawing, Fig. 1 shows, by way of example for purposes of illustration, a complete kitchen unit 9 including a novel slidable member 10 in accordance with the invention. While the invention will be hereinafter described for use in connection with a kitchen unit of the "set-back" type employing a refrigerator utilizing an operating member having a portion located outside the refrigerator, it will be readily apparent that in certain of its aspects the invention is not limited thereto.

The kitchen unit 9 is one in which the front plane of the intermediate portion 11 of the unit and the front plane of the upper portion 12 of the unit are set back from the front plane of the lower portion 13 thereof. The lower portion 13 comprises the lower part 14 of a "set-back" refrigerator, a sink 15, a towel drying compartment 16, the lower portion 17 of a "set-back" stove and various cabinets 18 and 19. The intermediate portion 11 comprises the upper portion 20 of the refrigerator, a dish-drying compartment 21, the upper portion 22 of the stove, and cabinets 23 and 24, while the upper portion comprises shelved cabinets 25. A table top member 26 is laid over the lower portion of the unit and the surface thereof is broken to provide spaces for burners 27 and the sink 15. The entire unit preferably rests on a recessed base 28.

A complete unit of the type briefly described above is disclosed in the above-identified Earle

patent. A suitable "set-back" refrigerator is disclosed in Earle Patent 2 312,326, issued March 2, 1943, a stove of the "set-back" type is described in Patent 2,180,459, issued November 21, 1939, to the same inventor, and Patent 2,328,129, issued August 31, 1943 to the same inventor discloses a dish and towel drying arrangement.

Below the towel drying compartment or at the lower portion thereof is the portion 30 of the operating member of the refrigerator. The portion 30 includes a compressor 31, a condenser 32, and a fan 33 driven by a suitable motor 34. It is connected to the evaporator (not shown) located in the upper portion 20 of the refrigerator by means of various connections and tubes represented by the single tube 35. Connection 36 provides electrical power. Air enters the lower portion of the compartment through the opening 37, passes over the portion 30 of the refrigerator operating unit and is warmed thereby and then rises to dry towels or rags 38 placed on racks 39 located beneath the sink 15. For simplicity in the drawings, the plumbing connections for the sink have not been shown. The racks 39 are mounted from a slidable member having a drawer front 40.

Located under this last-mentioned slidable member is the slidable member 10 in accordance with this invention. This comprises a drawer front member 41, side strips 42 containing suitable slide or roller means 43 which engage complementary members (not shown) in the sides of the compartment 16, and top member 44 of sound-deadening material. The side strips 42 can also be of sound-deadening material, if desired. There is no bottom in the member 10. If desired, although not required in all cases, one or more slots or other apertures 45 can be located in the top member 44. Air filter material 46 can be provided in the apertures 45, if desired. Deflecting members 47 can be associated with the apertures 45 to direct air therein and these deflecting members and the apertures corresponding thereto can be sloped so as to direct the air passing through the apertures to various portions of the space above to more efficiently dry the towels and rags 38. The top member 44 can extend, in the closed position, as far as the rear framework or wall 48 of the compartment 16 (as shown by the dotted lines) or can leave a small space therebetween as shown by the full lines in Fig. 2, in which latter arrangement, or in the former arrangement where the member 48 is a framework, air passes behind the member 44.

In order to prevent recirculation of air, the horizontal member 44 should be as close as possible to the top of the condenser 32. The member 44 may be arranged so as to move in and out with the drawer front member 40, if desired. Moreover, certain advantages are obtained even if the air is used to circulate through the dish drier alone, the towel drier not being used. Other obvious modifications will also occur to those skilled in the art.

The arrangement described above provides a means for deadening the sound from the portion 30 of the refrigerator operating member, a shelf for catching any rags which drop from the racks 39, and means for directing warm air to various portions of the towel-drying compartment and for filtering the air. Moreover, by merely removing the member 10, convenient access to the member 30 is obtained for maintenance and repair.

Various modifications can be made in the embodiment above described without departing from the spirit of the invention as indicated in the appended claims.

What is claimed is:

1. In a kitchen unit, a refrigerator containing an operating unit a portion of which emits heat and is located at a stationary position outside the refrigerator, a cabinet member enclosing said heat-emitting portion of the operating unit, said cabinet member having an opening in the front thereof and an air inlet adjacent the bottom thereof located to permit air to circulate over said heat-emitting portion of the operating unit, a slidable closure member for said opening comprising a vertical front member and a horizontal member connected to said front member and positioned to slide to a position over and closely adjacent said heat-emitting portion of the operating unit to control said air circulation, and means for exhausting air from said cabinet.

2. In a kitchen unit, a refrigerator containing an operating unit a portion of which emits heat and is located at a stationary position outside the refrigerator, a cabinet member enclosing said heat-emitting portion of the operating unit, said cabinet member having an opening in the front thereof and an air inlet adjacent the bottom thereof located to permit air to circulate over said heat-emitting portion of the operating unit, a slidable closure member for said opening comprising a vertical front member and a horizontal member of sound-deadening material connected to said front member and positioned to slide to a position over and closely adjacent said heat-emitting portion of the operating unit to thereby reduce the noise from the said heat-emitting portion of the operating unit which reaches the outside of the kitchen unit, and means for exhausting air from said cabinet.

3. In a kitchen unit, a refrigerator containing an operating unit a portion of which emits heat and is located at a stationary position outside the rerfrigerator, a cabinet member enclosing said heat-emitting portion of the operating unit, said cabinet member having an opening in front thereof and an air inlet adjacent the bottom thereof located to permit air to circulate over said heat-emitting portion of the operating unit, a slidable closure member for said opening comprising a vertical front member and a horizontal member connected to said front member and positioned to slide to a position over and closely adjacent said heat-emitting portion of the operating unit, said horizontal member being so constructed that air under it can pass to the space in said cabinet member above the horizontal member for drying purposes, and means for exhausting air from said cabinet.

4. In a kitchen unit, a refrigerator containing an operating unit a portion of which emits heat and is located at a stationary position outside the refrigerator, a cabinet member enclosing said heat-emitting portion of the operating unit, said cabinet member having an opening in the front thereof and an air inlet adjacent the bottom thereof located to permit air to circulate over said heat emitting portion of the operating unit, a slidable closure member for said opening comprising a vertical front member and a horizontal member connected to said front member and positioned to slide to a position over and closely adjacent said heat-emitting portion of the operating unit, said horizontal member having at least one aperture therein so that air can pass therethrough to the space in said cabinet member above the horizontal member for drying purposes and

deflecting means associated with the aperture to direct air therethrough, and means for exhausting air from said cabinet member.

5. In a kitchen unit, a refrigerator containing an operating unit a portion of which emits heat and is located at a stationary position outside the refrigerator, a cabinet member enclosing said heat-emitting portion of the operating unit, said cabinet member having an opening in front thereof and an air inlet adjacent the bottom thereof located to permit air to circulate over said heat-emitting portion of the operating unit, a slidable closure member for said opening comprising a vertical front member and a horizontal member connected to said front member and positioned to slide to a position over and closely adjacent said heat-emitting portion of the operating unit, said horizontal member being so constructed that air under it can pass to the space in said cabinet

member above the horizontal member for drying purposes, means for supporting wet objects in said space above the horizontal member, and means for exhausting air from said cabinet.

GUYON L. C. EARLE.

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