Aug. 23, 1949. M. B. WILLIAMS 2,479,706

DRYING CABINET

Filed May 26, 1948

FIG. 1

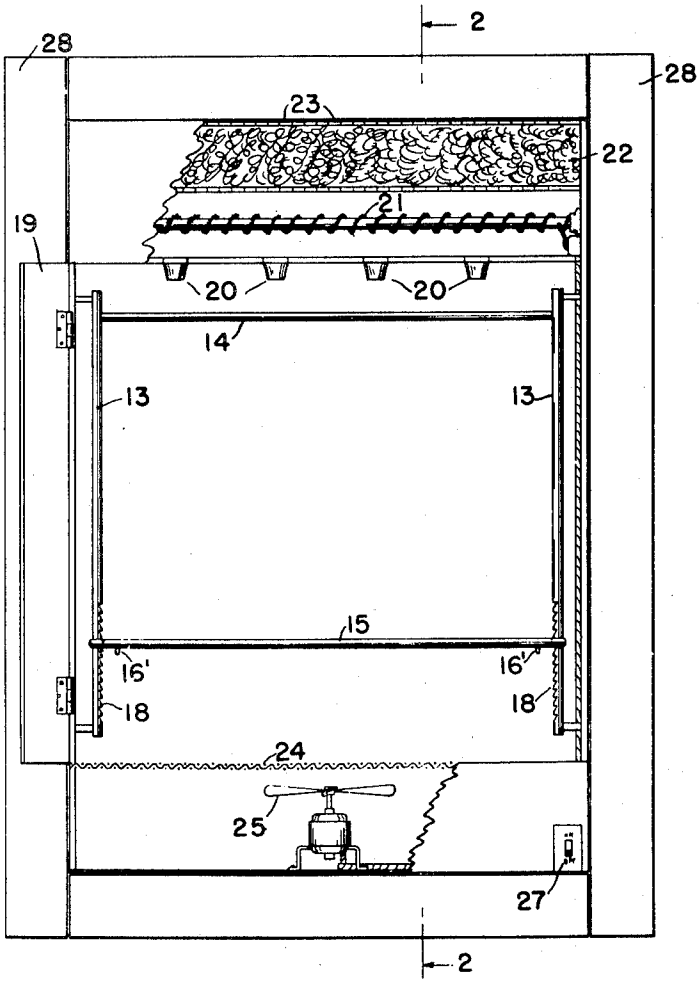
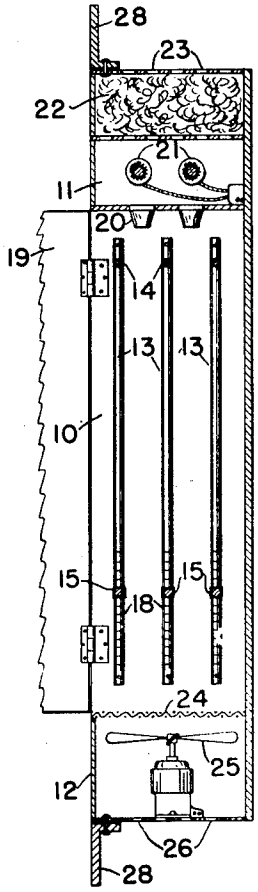


FIG. 2



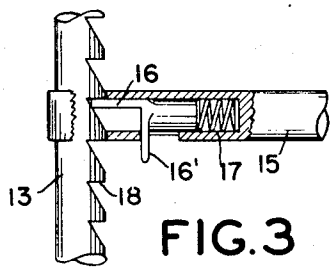


FIG. 3

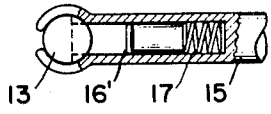


FIG. 4

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DRYING CABINET

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2 Claims. (Cl. 34—163)

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This invention relates to a drying cabinet, and more specifically to a cabinet for use in drying dish towels and such articles of clothing and the like as can be conveniently suspended in a cabinet. It will be understood, however, that the invention is not limited to the drying of any particular articles or materials and that the entire device, or portions of it can be used for other purposes and in other relations.

The average housewife, after washing dishes or rinsing out a few articles of clothing, finds it necessary to leave the dish towels or articles of clothing on a rack to dry. The drying process usually takes considerable time because there is not enough circulation of warm air about the articles; and, moreover, the articles are exposed for all to see—a situation all too frequently not desirable.

It is an object of my invention to provide a drying cabinet suitable for mounting in an opening in a wall and arranged so that the warm, moist air from the drying cabinet is discharged into or behind the wall.

Another object of my invention is to provide a drying cabinet in which the drying medium passes straight through from top to bottom.

Another object of my invention is to provide a drying cabinet having means for conveniently supporting and stretching articles to be dried.

Another object of my invention is to provide a drying cabinet which is simple and neat in design, attractive in appearance, inexpensive to manufacture, efficient in operation and rugged in construction.

Other and further objects and advantages of my invention will be apparent from the following description taken in connection with the accompanying drawing in which like characters of reference designate corresponding parts throughout the several views, and wherein:

Fig. 1 is a front view of a drying cabinet according to my invention.

Fig. 2 is a cross-sectional view taken along the line 2—2 in Fig. 1.

Fig. 3 is a fragmentary detail view showing the construction of the adjustable hanger.

Fig. 4 is a top view of the detail shown in Fig. 3.

The cabinet may be constructed of metal or any suitable material; and, as shown in the drawings, it comprises a drying chamber 10, a heating chamber 11 and an exhaust chamber 12.

The drying chamber 10 is provided on each side thereof with a plurality of upright supports 13 which are mounted securely in the side walls of the cabinet. A stationary upper hanger 14 is

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fixed horizontally between each pair of upright supports 13. Also, an adjustable lower hanger 15 is slidably mounted on each pair of upright supports 13. The adjustable hangers 15 are provided at each end with a latch 16 which is pressed by spring 17 into engagement with ratchet teeth 18 cut in the upright supports 13. Each latch 16 is provided with a thumb piece 16' for manual operation in raising the hanger 15. A door 19 provides access to the drying chamber. The drying medium enters the drying cabinet through nozzles 20 which are mounted in the upper wall of the drying chamber so as to direct the drying medium downwardly between the hangers 14, and they may be sufficiently small to permit the cabinet to operate under a slight vacuum.

The heating chamber 11 is located above the drying chamber 10 and communicates therewith by means of the nozzles 20. The heating chamber is provided with one or more electrical heating elements 21, and may also contain a filter element 22 of asbestos or other non-inflammable material. Holes 23 are provided in the upper wall of the heating chamber for admitting the drying medium.

The exhaust chamber 12 is located beneath the drying chamber 10 and communicates therewith by means of foraminous material 24. An exhaust fan 25 is located within the exhaust chamber for drawing air or other drying medium through the cabinet and exhausting it therefrom through holes 26 in the bottom of the exhaust chamber. A switch 27 is conveniently located for turning the heating elements and the exhaust fan on and off as desired.

Angular flanges 28 are bolted or otherwise fastened to all four sides of my drying cabinet to cover irregularities in a wall aperture into which my cabinet is adapted for insertion.

In the use of my drying cabinet, the dish towels or other articles to be dried are hung over one or more of the upper stationary hangers 14 or clipped thereto by clothes pins (not shown). The articles to be dried may also be similarly clipped to the adjustable lower hangers 15 and stretched tight, if desired, by pulling the adjustable hangers 15 downward so that the latches 16 automatically engage in a lower tooth on the ratchets 18. The door 19 may then be closed and the switch 27 thrown to turn on the heating elements 21 and the exhaust fan 25. The action of the fan draws air through the openings 23, across the filter 22, past the heating elements 21, and through the nozzles 20 which direct the heated

air downwardly between the articles suspended on the hangers for drying. The heated air picks up moisture as it descends, and the heavy damp air passes out of the drying chamber through the foraminous material 24 and is exhausted through the openings 26 in the bottom of the exhaust chamber. Articles are quickly dried in my cabinet, and the heating elements and fan may then be turned off and the door to the drying chamber may then be opened and the articles easily removed from the cabinet. In releasing the articles from the adjustable lower hangers 15, the thumb pieces 16' may be depressed against the action of springs 17 so as to release the latches 16 from the ratchet teeth 18 and the adjustable hangers 15 can then be raised to a convenient height.

It will be seen that the drying medium passes straight downwardly through my cabinet so that a minimum of resistance is offered and a maximum of efficiency is obtained. Also, it will be noted that in my cabinet the damp drying air is exhausted into or behind the wall in which the cabinet is arranged to be mounted, so that none of the odor of the exhaust enters the room with which the cabinet communicates.

While I have shown and described one embodiment of my invention, it will be realized that many modifications, changes and adaptations can be made without departing from the scope of my invention as defined in the appended claims.

I claim:

1. A drying cabinet comprising a drying chamber, a heating chamber above said drying chamber and an exhaust chamber below said drying chamber, said drying chamber being provided with a plurality of upright supports on each side thereof, a hanger fixed horizontally from side to side in said drying chamber between each pair of upright supports and near the top thereof for holding an article to be dried, an adjustable hanger for holding a lower portion of said article similarly fitted between each said pair of upright supports and arranged for vertical sliding engagement therewith, ratchet teeth on each said upright support and a latch at each end of each said adjustable hanger for engagement therewith, electrical heating elements in said heating chamber for heating a drying medium, nozzles for directing said heated drying medium downward between said upright supports, a fan for pulling sai drying medium into said heating chamber, past said heating elements, through said nozzles, downward between said upright supports and exhausting it through the bottom of said exhaust chamber, and angular flanges arranged around said cabinet to adapt it for mounting in an opening in a wall whereby drying medium exhausted from said cabinet passes behind said wall.

2. A drying cabinet comprising a drying chamber, a heating chamber above said drying chamber and an exhaust chamber below said drying chamber, said drying chamber being provided with a plurality of upright supports on each side thereof, a hanger fixed horizontally from side to side in said drying chamber between each pair of upright supports and near the top thereof for holding an article to be dried, an adjustable hanger for holding a lower portion of said article similarly fitted between each said pair of upright supports and arranged for vertical sliding engagement therewith, a heating element in said heating chamber for heating a drying medium, means for directing said heated drying medium downward between said upright supports, a fan for pulling said drying medium into said heating chamber, past said heating element, through said means for directing, downward between said upright supports and exhausting it through said exhaust chamber, and flanges arranged around said cabinet to adapt it for mounting in an opening in a wall whereby drying medium exhausted from said cabinet passes behind said wall.

MARY BLAIR WILLIAMS.

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