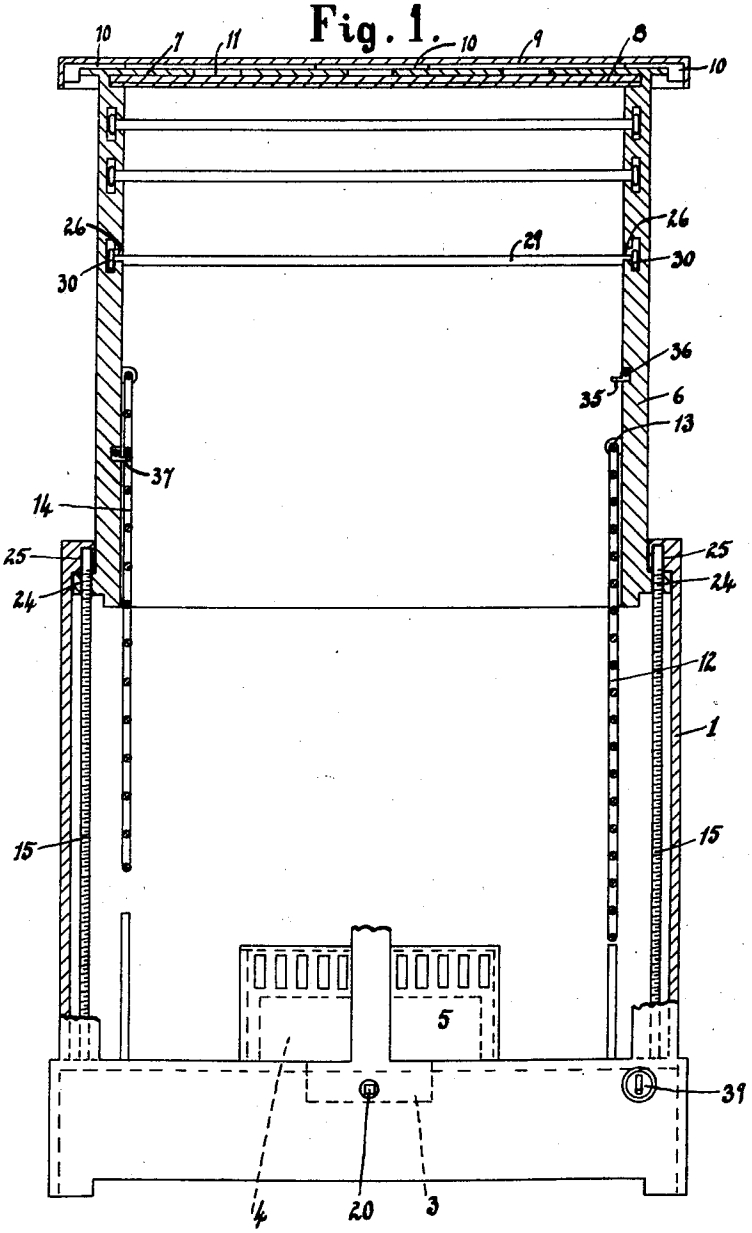
Aug. 19, 1941. C. WILLBER 2,253,475

CLOTHES DRYING AND AIRING CABINET

Filed June 19, 1939 3 Sheets-Sheet 1

Fig. 1.



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Fig. 2.

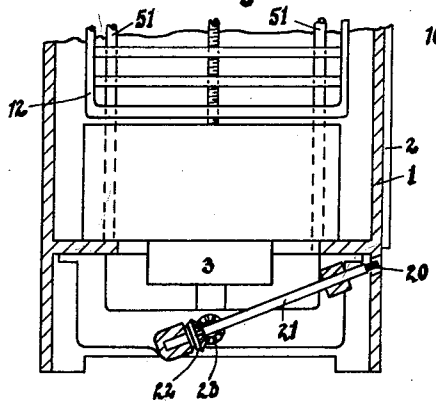


Fig. 3.

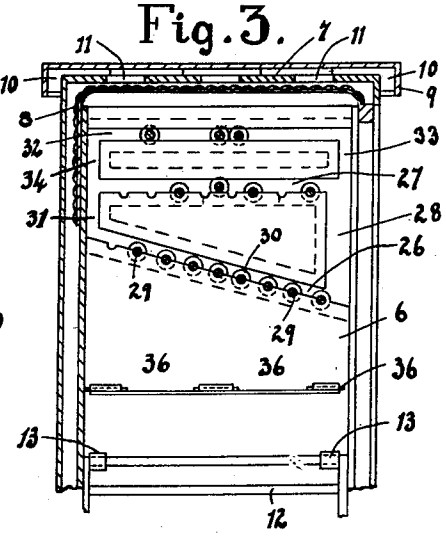
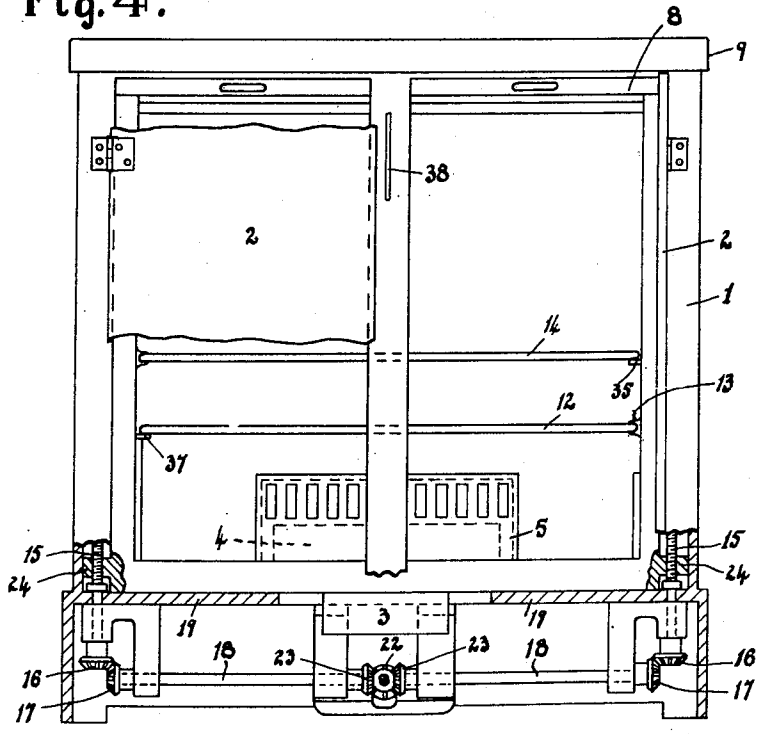


Fig. 4.



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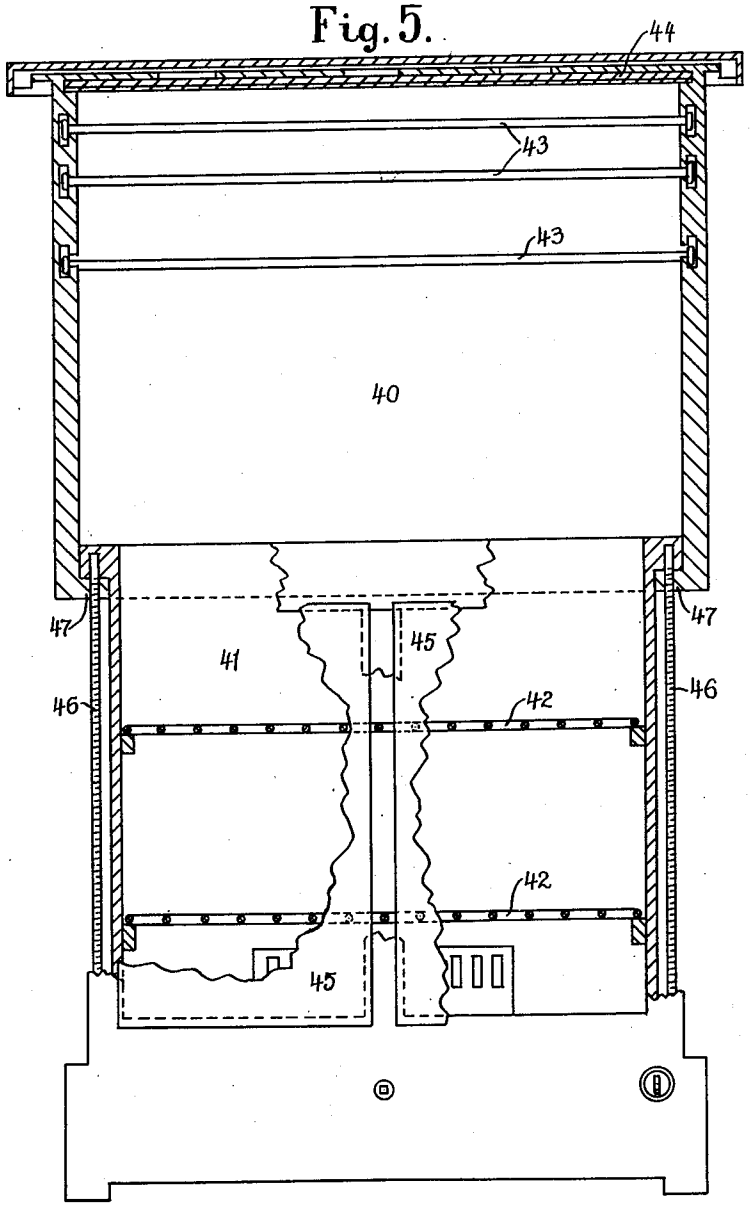
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CLOTHES DRYING AND AIRING CABINET

Filed June 19, 1939 3 Sheets-Sheet 3

Fig. 5.



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Patented Aug. 19, 1941 2,253,475

UNITED STATES PATENT OFFICE

2,253,475

CLOTHES DRYING AND AIRING CABINET

Charles Willber, Pendleton, Salford, Manchester, England

Application June 19, 1939, Serial No. 279,867
In Great Britain July 6, 1938

4 Claims. (Cl. 312—151)

This invention relates to clothes drying or airing cabinets such as are employed in domestic kitchens or wash houses for drying the washing or airing clothes.

In households it is customary to wash and dry clothes on fixed days, for example once a week and hitherto known clothes drying and airing cabinets occupied valuable space at all times although it was utilized only on the said days, except perhaps for airing purposes. Therefore a large part of the necessarily restricted floor space of small kitchens or washhouses was occupied by an article which served no useful purpose for the major portion of the time.

The main object of my invention is to overcome this defect.

A clothes drying and airing cabinet in accordance with my invention is formed telescopic whereby it can be converted when not required to dry clothes of considerable length into an article of furniture having a flat, horizontal surface substantially at table height and an interior serving to dry shorter articles or air folded articles and to store household utensils, comestibles or the like.

The said flat horizontal surface at table height can therefore be used as an ironing table or a cookery table or a table for any other purpose for which it is suited.

The said clothes drying or airing cabinet is thus made to serve every-day purposes when not in its main but occasional use for drying clothes of considerable length.

In one form, the clothes drying and airing cabinet is formed in two vertically telescopic parts one of which can be raised or lowered on the other at will and has a flat, horizontal top surface which is at table surface height in the lowered position.

Both of the said two parts are provided with apertures adapted to be closed by hinged doors, shutters or blinds or the like, the aperture or apertures of the one part when in the lowered position registering with that or those of the other part, whereby access to the interior of the said other part is obtainable when the parts are telescoped together.

Rods provided for hanging the clothes in the drying and airing cabinet may be mounted to slide but be non-removable or removable only when brought into a predetermined position.

The said rods may be arranged to be slid from positions of storage or non-use separately into their positions of use, whereby the hanging and removal of the clothes is facilitated.

The said upper part of the telescopic cabinet may be raisable and lowerable by means of a handle operating through gearing.

The cabinet is provided at the bottom with heating means and/or fan means.

The cabinet may be provided with a perforated floor and hinged racks to support any articles in its lower part when the cabinet is not in use for drying clothes.

I attain this object by the means illustrated in the accompanying drawings, wherein—

Figure 1 is a front view partly in vertical section of a clothes drying and airing cabinet in an extended state.

Figure 2 is a fragmentary side view in vertical section of a portion thereof.

Figure 3 is a fragmentary side view in vertical section of another portion thereof.

Figure 4 is a front view, partly in vertical section of the said clothes drying and airing cabinet in a collapsed state.

Figure 5 is a front view, partly in vertical section, of a clothes drying and airing cabinet in an expanded state and illustrates a modification.

Referring to the drawings, in the construction shown therein, I provide a box-like lower part 1 with an open top and two openings and two hinged doors 2 at the front to close the said openings when desired. One of the doors 2 is shown closed in Figure 2 and open in Figure 4. A portion of the other door 2 is shown closed in Figure 4. At the bottom of the part 1 there are heating means, such as electric heating elements 3, and an electric fan 4 or fans adapted to blow air upwardly. The elements 3 and fan 4 are shown only diagrammatically as they are of well known construction which forms no part of this invention. Guard means 5 may be provided to protect the heating elements 3 and fan or fans 4 from dripping water.

A box-like upper part 6 with flat, horizontal, top 7 and open bottom and having an open front which can be closed by a flexible shutter 8, is provided. The shutter 8 is shown in the open position. The upper part 6 is narrower and of less depth than the lower part 1 so that it can be accommodated in the lower part 1 and be lowered and raised therein. In Figure 1 the part 6 is shown in the raised position, whereas in Figure 4 it is shown in the lowered position. The upper part 6 fits in the lower part 1 and is guided vertically therein by vertical guide rods 51, see Figure 2, provided in the lower part 1. An enamelled sheet metal table top 9 may be

fixed to or removably provided on the top 7, preferably spaced a distance above the top 7 by blocks 10 whereby provision is made for the escape of air passing from the interior of the cabinet through holes 11 in the top 7. The said closed top may project to cover the upper edges of the lower part 1, as shown. The upper part 6 is provided with a rack 12 hinged to one side of the said part by lugs 13, and with a rack 14 hinged in a similar manner but at a different level to the opposite side of the said part, to receive folded clothes for airing, kitchen or washing utensils, crockery, food or the like when the cabinet is not in use for drying purposes. A bracket 35 which can be swung upwards on pivots 36 is provided inside the upper part 6 to support the free end of the rack 14. A similar bracket 37 is provided to support the free end of the rack 12.

A vertical, screw-threaded spindle 15 is mounted in the lower part 1 at each side thereof and has at its lower end a bevel wheel 16. The bevel wheels 16 mesh with bevel wheels 17 on horizontal shafts 18 mounted on the underside of the bottom 19 of the lower part and adapted to be rotated by a removable or non-removable but foldable handle (not shown) applied to the end 20 of a shaft 21 mounted on the underside of the bottom 19 and having a bevel gear 22, see Figure 2, meshing with bevel gears 23 provided on the shafts 18. A portion 24 having a screw-threaded hole engaged by one of the spindles and holes through which the guide rods 51 extend is provided on the upper part 6 at each side thereof. The upper ends of the spindles 15 and guide rods 51 are mounted in portions 25 of the lower part 1.

At the inner side of each side of the upper part 6 there is a slot which has a lower portion 26, see more particularly Figure 3, which inclines downwardly in a forward direction and extends from back to front of the said part, an upper portion 27 which is horizontal and extends from back to front of the said part a distance above the lower portion, and a vertical or substantially vertical portion 28 which connects the front ends of the lower and upper portions 26 and 27 together. There is also a vertical portion 31 which connects the rear ends of the portions 26 and 27 together. The ends of horizontal clothes hanging rods 29 extending from side to side of the upper part 6 engage the slot portions 26 and 27 and are supported thereby. The bottom side of the lower and upper slot portions 26 and 27 is provided with spaced notches into which the ends of the rods 29 drop, for the purpose of holding the rods in parallel positions. The slot portions 26 and 27 are undercut and the ends of the rods are provided with heads 30 to engage the undercuts which thereby prevent the ends of the rods 29 from being pulled out of the slot portions 26 and 27 whilst leaving them free to be slid along the same and along the connecting portions and to be withdrawn or inserted at the connecting portion 28, which is sufficiently wide to permit passage of the heads 30 therethrough. There may be a horizontal slot 32 above the upper slot portion 27 connected to the upper slot portion 27 at the front and rear by slots 33 and 34 respectively for storage of the rods 29 not in use. A thermometer 38 may be provided on the lower part 1 to indicate the temperature existing in the cabinet.

In operation, when the cabinet is not required for drying clothes of any considerable length, the upper part 6 is in its lowermost position and lies inside the lower part, see Figure 4, the shutter 8 of the upper part 6 being open and the open front of the said upper part registering with the openings of the lower part, and the table top 9 of the upper part being at the height of a normal table. By opening the doors 2 of the lower part, access is had to the interior which therefore can be used for the airing or storage of bed clothes and other clothes or any other articles, the rods serving to hang folded clothes therein. The racks 12 and 14 serve to carry folded clothes or any other articles it is desired to store therein, or to hold crockery whilst it is being dried therein.

The table top 9 of the upper part forms a table top which can be used for ironing, cooking, or keeping articles on within easy reach, and so forth at all times. The cabinet when not serving its main purpose of drying clothes of considerable length, serves as a convenient storage place and table or dresser and the space occupied by it is therefore more fully utilised than hitherto.

When it is desired to dry clothes of considerable length, the upper part 6 is raised on the lower part 1, by turning the shaft 21 by means of the said handle until it has reached its uppermost position, see Figure 1, where the lower end of the upper part 6 and the upper end of the lower part 1 are still engaged. The doors 2 are then opened, the brackets 35 and 37 are swung upwards to allow the free ends of the racks 12 and 14 to descend past them and the racks are allowed to swing into the positions shown in Figure 1. The rods 29 are then all slid into the uppermost slot 32 and slot portion 27. The foremost rod is then slid down to the front of the slot portion 26 or 27 and one or more articles of clothing are hung thereon, whereupon the rod is pushed towards the rear of either of the said portions, according to whether the articles are short or long. When slid into position the rod is engaged with the rearmost notches therein. The succeeding rods are then manipulated separately in a similar manner until all the clothes have been hung. This arrangement of sliding but irremovable rods 29 greatly facilitates the hanging and removal of the clothes, and the securement of the ends in the slots by the heads 30 enables the rods 29 to carry greater weights because their ends can not be dragged away from the supporting slots by the bending of the rods caused by the weight which they support. Rods can however be removed or added when required, by inserting or removing them at the connecting portion 28, by tilting of the rods. The shutter 8 is then pulled down and the doors 2 are then closed and the heat and/or fan turned on, for example by means of a switch 39.

To remove the clothes after drying, the shutter 8 is pushed up and each rod is pulled in turn along the slot portion 26 or 27 to the front after its ends have been lifted clear of the holding notches, and the clothes are then removed therefrom through the open front of the upper part 6. The rod is then pushed up the connecting portions of the slots into the uppermost slots and rearwardly along the same into a position where it is out of the way.

When the clothes have been removed, the upper part 6 is again lowered into the lowermost position shown in Figure 4.

Instead of sliding in the lower part, the upper part may be arranged to slide on the lower part,

in which case the shelves, if any, are provided in the lower part.

Figure 5 shows a clothes drying and airing cabinet of this construction. The upper part 40 slides on the lower part 41. Shelves 42 are provided in the lower part 41. The shelves 42 are removable and are removed when it is desired to dry long clothes. Hanging rails 43 provided in the upper part 40 are removed before the upper part 40 is lowered on the lower part 41. The upper part 40 has a sliding shutter 44. The lower part 41 has hinged doors 45 which can swing open through the aperture in the front of the upper part 40 when the shutter 44 is in the open position. The upper part 40 is raised and lowered by means of screws 46 which engage internal screw-threads provided on the inwardly projecting portion 47 of the upper part 40, the screws 46 being operated in a manner similar to that described with reference to the screws 15 of Figures 1 to 4.

I claim:

1. A clothes drying and airing cabinet comprising in combination, a lower drying and airing portion having apertures at the front and an open top, swing doors on the said lower portion for closing the said apertures, an upper drying and airing portion having an open bottom and projecting into the lower portion through the open top thereof and completely filling the said open top and vertically slidable in the lower portion in a telescopic manner and having at the front an aperture which registers with the apertures in the lower portion when the two portions are telescoped together, a sliding shutter on the upper portion for closing the last named aperture when the portions are extended and registering with the said doors when the portions are telescoped, and a flat top on the said upper portion for use as a table top, the two portions being closable by the said doors and shutter, and forming a clothes drying and airing cabinet both when extended and telescoped and additionally a table when telescoped, and the interior of the said upper portion being available for airing and storage when the portions are telescoped and being accessible through the said apertures when both the doors and shutter are open and the portions are in the telescoped state.

2. A clothes drying and airing cabinet comprising in combination, a lower drying and airing portion having an open top and front apertures, doors on the lower drying and airing portion for closing the said apertures, an upper drying and airing portion having an open bottom and a front aperture and slidable telescopically in the lower drying and airing portion, a sliding shutter on the upper drying and airing portion for closing the aperture therein when the said portions are extended, racks in the upper airing and drying portion extending from side to side thereof, hinges connecting one end of each rack to an opposite side of the upper drying and airing portion, movable catches on the upper drying and airing portion for releasably supporting the other end of each rack, whereby the racks serve as vertical guards when the two portions are extended and as drying and airing shelves when the two portions are collapsed.

3. A clothes drying and airing cabinet comprising in combination, a lower drying and airing portion having apertures at the front and an open top, swing doors on the said lower portion for closing the said apertures, an upper drying and airing portion having an open bottom and having the said lower portion projecting into it through the open bottom thereof and completely filling the said open bottom, the said upper portion being vertically slidable on the said lower portion in a telescopic manner and having at the front an aperture which registers with the apertures in the lower portion when the two portions are telescoped together, a sliding shutter on the upper portion for closing the last named aperture when the portions are extended and registering with the said doors when the portions are telescoped, and a flat top on the said upper portion for use as a table top, the two portions being closable by the said doors and shutter and forming a clothes drying and airing cabinet both when extended and telescoped and additionally a table when telescoped, and the interior of the said lower portion being available for airing and storing when the portions are telescoped and being accessible through the said apertures when the portions are in the telescoped state and both the shutter and doors are open.

4. A clothes drying and airing cabinet, comprising in combination a box-like upper portion having an open bottom and a front aperture, a table top mounted on the said upper portion, a box-like lower portion having an open top and front apertures and telescopically engaged by the upper portion, two vertical screw-threaded spindles rotatably secured to the said lower portion, internally screw-threaded members non-rotatably provided on the said upper portion and engaged by the said spindles, a floor provided in the lower portion, horizontal aligned shafts mounted rotatably beneath the said floor, bevel wheels on the said shafts, bevel wheels on the said spindles meshing with the said bevel wheels, further bevel wheels on the said shafts, an oblique shaft mounted beneath the said floor and projecting between opposed ends of the horizontal shafts, a bevel wheel on the oblique shaft meshing with the said further bevel wheels on the horizontal shafts, and means on the higher end of the oblique shaft for connection of a manually rotatable handle thereto, the higher end of the oblique shaft being accessible from the front of the said lower portion for rotation thereof and therefore of the said vertical spindles by manual rotation of a handle.

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