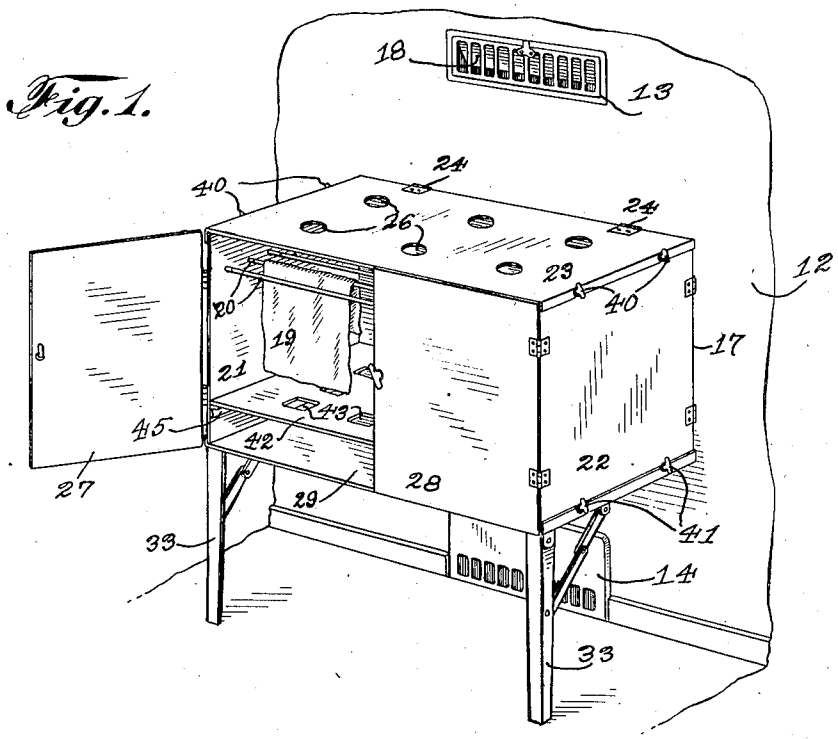
June 24, 1930. M. G. STEELE 1,767,157

CLOTHES DRIER

Filed Sept. 19, 1928

Fig. 1.



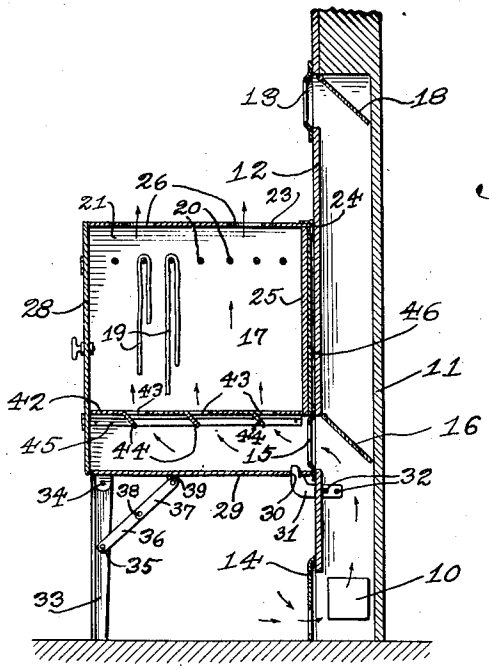


Fig. 2.

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UNITED STATES PATENT OFFICE

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CLOTHES DRIER

Application filed September 19, 1928. Serial No. 306,830.

This invention relates to drying appararatus, and more particularly to a clothes drying cabinet designed for use in connection with a concealed type of radiator.

One object of this invention is to provide a clothes drier of the above nature including a cabinet having a rear inlet for receiving a supply of hot air from a concealed radiator located within a stack behind the wall of a room.

A further object is to provide a clothes drying cabinet of the above nature adapted to be detachably supported adjacent the concealed radiator stack.

A further object is to provide a drying cabinet of the above nature which is adapted when not in use to be collapsed into a small amount of space.

A further object is to provide a drying apparatus of the above nature which will be simple in construction, inexpensive to manufacture, easy to install and manipulate, compact when not in use, ornamental in appearance, and very efficient and durable in use.

With these and other objects in view there has been illustrated on the accompanying drawings one form in which the invention may be conveniently embodied in practice.

Fig. 1 represents a perspective view of the clothes drying cabinet as it appears in use supported against a wall, within which is a concealed radiator and stack.

Fig. 2 is a side sectional view of the same.

The drying of clothes after they have been washed has always been attended with considerable difficulty. The common practice of hanging clothes outdoors for drying is not only troublesome and laborious, but often dangerous to the health of the laundress—more especially in the winter time. Moreover, the outdoor drying of clothes often injures them owing to tearing by clothes-pins and the whipping and snapping of the clothes by the wind. This practice is also unsanitary owing to the collection of dust and germs from the air. Again, many persons object to the public display of their wearing apparel.

In rainy weather, when it is impossible to dry clothes outdoors, it has been customary to hang them indoors upon cumbersome clothes horses or bars generally located in the kitchen. This practice has proven to be quite unsatisfactory because it usually requires a whole day to dry the clothes, and the whole house is made damp and disagreeable, to say nothing of the kitchen odors absorbed by the clothes and the necessity of postponing the ironing for another day.

By means of the present invention, the above and other disadvantages have been avoided and a combination drying cabinet and radiator stack has been produced which will generally dry an average supply of clothes sufficiently to permit ironing in less than an hour. Moreover, the clothes dried by means of this invention will be sweet and clean and free from all laundry or kitchen odors.

While the present invention is especially adapted for domestic use in homes and apartments, it may also be used in hotels, hospitals, factories, bath-houses, and dry-cleaning establishments. In the latter case the drying of the clothes is attended with complete safety because of the fact that there is no open flame to ignite volatile, inflammable, cleansing liquids which are generally employed in the dry-cleaning process.

Referring now to the drawings in which like reference numerals denote corresponding parts throughout the several views, the numeral 10 indicates a radiator located in a stack 11 which is preferably concealed behind the wall 12 of a room. The stack 11 communicates with the room by means of an upper grille 13 and a lower grille 14. In the normal operation of the radiator, relatively cold air will be drawn from the bottom of the room through the lower grille 14, and after being heated by the radiator 10 will rise in the stack 11 and pass out into the room again through the upper grille 13.

In order to permit the hot air from the radiator to be used for the purpose of drying clothes and other articles, the stack 11 is provided with an intermediate front grille 15 similar to the upper and lower grilles 13 and 14. A deflecting damper 16 is

provided for causing the hot air to enter a drying cabinet, generally indicated by 17, and located adjacent the wall 12. A similar damper 18 is provided in the top of the stack 11 for closing the upper grille 13. The clothes 19 or other articles to be dried are suspended upon racks 20 mounted in the sides 21 and 22 of the drying cabinet 17. The rear wall 25 of the cabinet is provided with an opening shaped to fit about the grille 15 and adapted to be held into alinement therewith.

The drying cabinet has a removable cover 23 hinged at 24 to the rear wall 25, said cover having a plurality of distributed apertures 26 therein to permit the escape of the hot air after it has passed through the cabinet 17. The front of the cabinet is provided with a pair of doors 27 and 28 vertically hinged to the sides 21 and 22, and having suitable locking means for holding said doors in closed position, as shown on the drawing. The bottom of the cabinet comprises a base 29 which is provided near its rear with a plurality of small slots 30 for fitting over an equal number of hook members 31 extending forwardly through the wall 12. The rear horizontal ends of said hook members are secured to the inner sides of the studding of the concealed stack 11 as by screws 32. The front of the radiator cabinet 18 is supported by a pair of legs 33 hinged at 34 to the base 29 and being connected at 35 to a pair of braces 36 and 37. The braces 36 and 37 are pivoted together by a pin 38 and the brace 37 is pivoted to a depending lug 39 on the base 29.

The top 23 of the cabinet 17 is removably locked in position by thumb screws 40, and the base 29 is similarly locked in position by thumb screws 41.

In order to produce a uniform flow of hot air from the radiator stack 11 to all parts of the clothes 19 in the cabinet 17, provision is made of a baffle partition 42 located in the lower part of said cabinet immediately above the intermediate grille 15. The baffle partition 42 is provided with a plurality of rectangular openings 43, and vanes 44 depend downwardly from the front edges of said openings 43 to direct the air upwardly into the upper compartment of the cabinet.

The baffle partition 42 is preferably supported by a pair of angle irons 45 so that it may be removed prior to the collapsing of the drying cabinet. The rear of the cabinet is preferably protected from the wall of the room, as by an insulating sheet 46.

In operation, when it is desired to use the drier, the cabinet 17 will first be pushed against the wall 12 of the room with the rear opening of the cabinet in alinement with the intermediate grille 15, and the damper 16 will be opened. The cabinet will then be supported in position by placing the slots 30 of its base 29 upon the hooks 31 and moving the front legs 33 to vertical position. Clothes 19 will then be hung on the rack bars 20 and will be dried by hot air passing up through the baffle partition 42 around them. The clothes should preferably be so disposed and separated so as to allow the hot air to pass freely therethrough so as to carry off the moisture rapidly and dry them uniformly.

While there has been disclosed in this specification one form in which the invention may be embodied, it is to be understood that this form is shown for the purpose of illustration only, and that the invention is not to be limited to the specific disclosure but may be modified and embodied in various other forms without departing from its spirit. In short, the invention includes all the modifications and embodiments coming within the scope of the following claims.

Having thus fully described the invention, what is claimed as new, and for which it is desired to secure Letters Patent, is:

1. In a clothes drier, a stack, having a side opening a cabinet having an inlet aperture adapted to fit said opening and adapted to receive a supply of heated air from said stack, a baffle partition above said inlet opening, a plurality of clothes-supporting racks in the upper part of said cabinet above said partition, and hook members on said stack for detachably supporting said cabinet against said stack, and means for supporting the front of said cabinet.

2. In a clothes drier, a hot air stack having a side opening, a drying cabinet having an inlet aperture adapted to fit said opening, means in said cabinet for supporting articles to be dried, a baffle partition above said aperture for uniformly distributing the rising hot air around said articles, means on said stack for supporting the rear of said cabinet, and means for supporting the front of said cabinet.

3. In a clothes drier, a hot air stack having a side opening, a drying cabinet having an inlet aperture adapted to fit said opening, means in said cabinet for supporting articles to be dried, a baffle partition above said aperture for uniformly distributing the rising hot air around said articles, means on said stack for detachably supporting the rear of said cabinet, and means for supporting the front of said cabinet.

4. In a clothes drier, a hot air stack having a side opening, a drying cabinet having an inlet aperture adapted to fit said opening, means in said cabinet for supporting articles to be dried, a baffle partition above said aperture for uniformly distributing the rising hot air around said articles, means on said stack for supporting the rear of said cabinet, and means for collapsibly supporting the front of said cabinet.

5. In a clothes drier, a hot air stack having a side opening leading into a room above the floor thereof, a drying cabinet having an inlet aperture adapted to fit said opening, means in said cabinet for supporting articles to be dried, a baffle partition above said aperture for uniformly distributing the rising hot air around said articles, means on said stack for supporting the rear of said cabinet, and means for supporting the front of said cabinet.

6. In a clothes drier, a cabinet having an inlet opening adapted to receive a supply of heated air from a radiator stack, detachable means to hold said cabinet upon said stack in position to receive heated air through said inlet opening, a baffle partition above said inlet opening, a plurality of clothes-supporting racks in the upper part of said cabinet above said partition, the top of said cabinet having air outlet apertures, said baffle partition having a plurality of rearwardly and downwardly inclined vanes for deflecting the inflowing air upwardly.

7. In a clothes drier, a cabinet having an inlet opening adapted to receive a supply of heated air from a radiator stack, means for detachably connecting said cabinet to said stack for permitting hot air to flow into said cabinet, a baffle partition above said inlet opening, a plurality of clothes-supporting racks in the upper part of said cabinet above said partition, the top of said cabinet having air outlet apertures, the top, base, front, and rear of said cabinet being movable to permit the removal of the dried clothes and the collapsing of said cabinet.

8. In a combination clothes drier and room heater, a hot air stack having a side opening, and an upper opening leading into the room, a clothes drying cabinet having a rear aperture communicating with said side opening, and means for causing hot air from said stack to flow selectively either into said cabinet or into said room.

9. In a combination clothes drier and room heater, a hot air stack having a side opening, and an upper opening leading into the room, a clothes drying cabinet having a rear aperture communicating with said side opening, and means for causing hot air from said stack to flow selectively either into said cabinet or into said room, said cabinet being detachably connected with said stack.

In testimony whereof, I have affixed my signature to this specificattion.

MAURICE G. STEELE.