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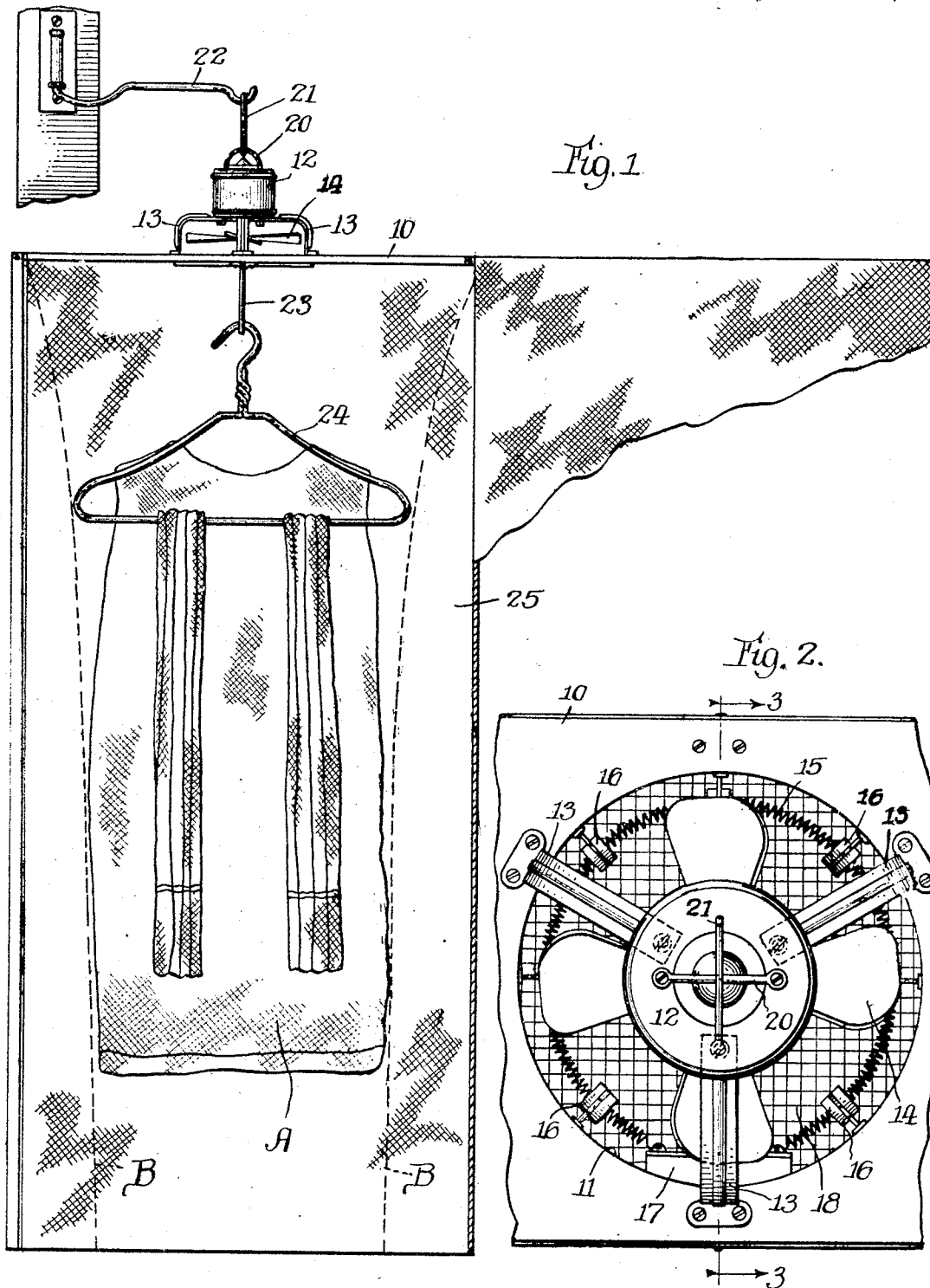
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CLOTHES DRIER

Filed Nov. 20, 1929

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

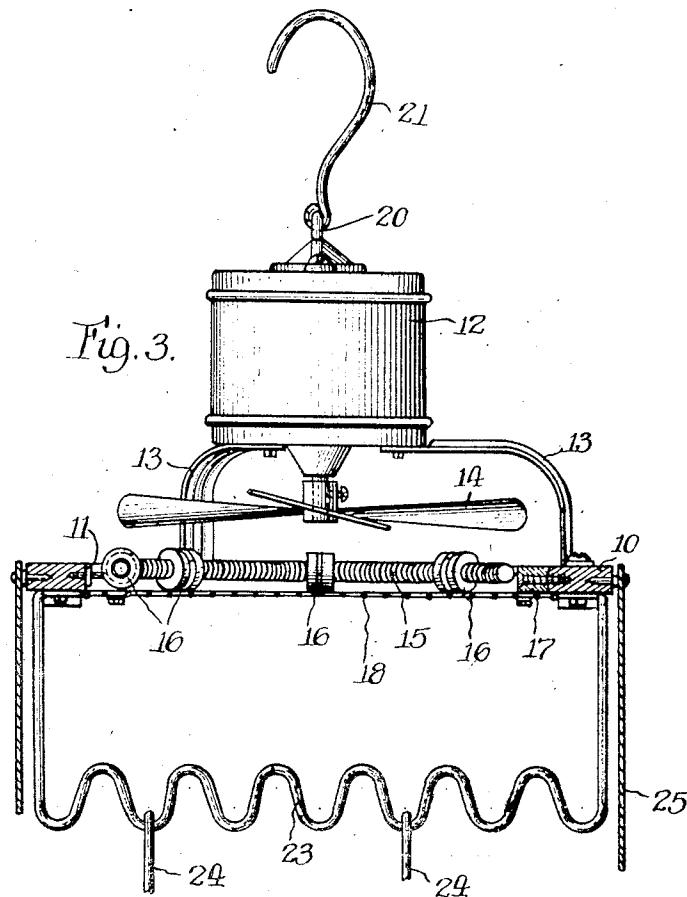
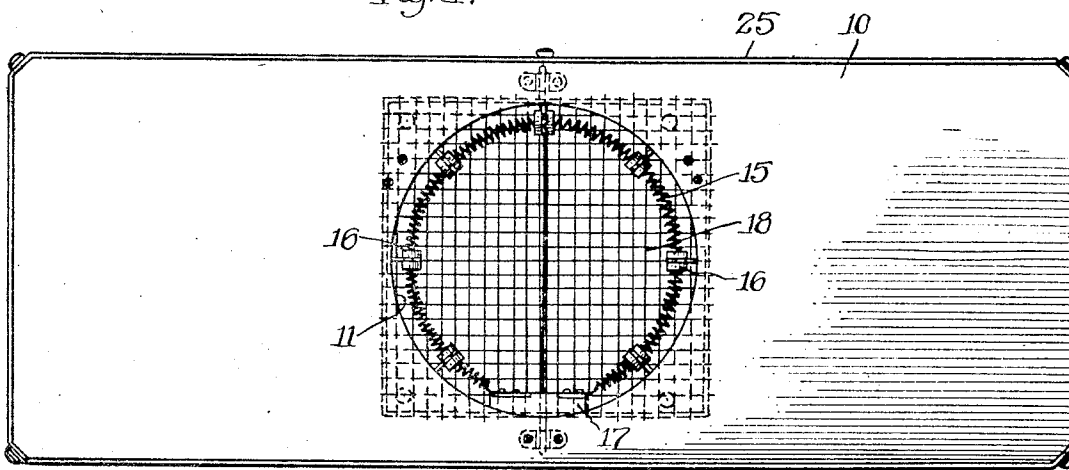


Fig. 4.



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CLOTHES DRIER

Application filed November 20, 1929. Serial No. 408,606.

This invention relates generally to clothes driers and more particularly to portable clothes driers adapted for household use.

The general object of this invention is to provide a novel clothes drier in which the clothes to be dried may be supported in the path of a blast of air with the blast confined in such a manner that it is concentrated within the space actually occupied by the clothes.

Another object is to provide a portable clothes drier which may be folded to occupy a comparatively small space when not in use, which will dry clothes quickly with an efficient use of the energy supplied to generate and heat the blast of air, and which is economical to construct.

A further object is to provide such a clothes drier which is light and may be easily placed in operative position, and which is adapted to dry a small amount of clothing in a short time.

Other objects and advantages will become apparent from the following description taken in connection with the accompanying drawings, in which:

Figure 1 is a front elevation of a device embodying the features of my invention, showing the front part of the curtain thrown aside to indicate the position in which the clothes may be hung.

Fig. 2 is an enlarged plan view of a portion of the top of the device.

Fig. 3 is a vertical section taken along the line 3—3 of Fig. 2.

Fig. 4 is a plan view of the device with the motor and fan removed.

While the invention is susceptible of various modifications and alternative constructions, I have shown in the drawings and will herein describe in detail the preferred embodiment, but it is to be understood that I do not thereby intend to limit the invention to the specific form disclosed, but intend to cover all modifications and alternative constructions falling within the spirit and scope of the invention as expressed in the appended claims.

The device is adapted to be hung from a suitable bracket and comprises in general

an apertured base plate, means for generating a blast of air and forcing it through the aperture in the base plate, means for supporting clothes in the path of the blast, and a curtain surrounding the clothes and attached to the base plate.

As shown in the drawings, the base plate comprises a rectangular piece 10 of wood or other suitable material having a central aperture 11. To generate a blast of air, a motor 12 drawing current from a light socket is mounted over the aperture 11 by means of brackets 13 attached to the base plate 10 and is axially aligned with the aperture. A fan 14 is mounted on the lower end of the shaft of the motor 12 which is adapted to force a blast of air downwardly through the aperture 11, the motor brackets 13 being such as not to interfere materially with the inrush of air to the fan.

To heat the air, if it be desired, an electric heating element 15 of suitable form may be mounted in the path of the blast in the aperture 11 by means of tubular insulating blocks 16 supported from the sides of the aperture 11. The ends of the heating element 15 are connected to a terminal block 17 of insulating material with the element in circuit with the motor 12. A wire screen 18 extends across the aperture below the heating element 15 as a guard.

Suitable means is provided for suspending the device which, in the present instance, comprises a bail 20 pivoted to the top of the motor 12 and a hook 21 adapted to be hung on a bracket 22 attached to the wall or other convenient place.

As mentioned above, means is provided for supporting clothes in the path of the blast of air, which means in this instance comprises a wire bail 23 pivotally attached to the underside of the base plate 10 in a position extending diametrically across and beneath the aperture 11. The bail 23 is formed in a series of spaced loops from which ordinary clothes hangers 24 may be suspended in spaced relation, or clothes may be hung directly upon the bail 23.

A curtain 25 for enclosing the clothes has its upper edge attached to the perim-

eter of the base plate 10 by readily detachable fasteners such as snap fasteners and depends therefrom. Quickly opening means (not shown) is provided for attaching the side edges of the curtain to each other thus forming a flexible tube whose upper end is closed by the base plate 10 and whose bottom end is open to permit free egress of the blast of air. The device is suspended at a height that permits the bottom of the curtain to be well above the floor so that the blast of air may pass freely out of the curtain.

In operation, assumed the device is as shown in Figure 1 with the front portion of the curtain folded aside. Clothes represented by the letter A are hung upon the hangers, or directly upon the bail 23. The front portion of the curtain is turned back to surround the clothes, its upper edge is snapped on to the base plate, and its side edges are fastened together. Thus, a flexible tube is formed enclosing the clothes A with its upper end closed except for the aperture 11 through which the blast of air is forced, and its bottom end open. Current is then turned on for the motor 12 which also passes through the heating element 15, and a blast of heated air is forced downwardly through the aperture 11, through and around the clothes A, and out through the opening formed by the bottom edge of the curtain.

When the blast of air is forced downwardly through the clothes A in this manner, the curtain being flexible, is drawn inwardly from all sides and caused to conform snugly to the body of the clothes as illustrated by the dotted lines B in Figure 1. Thus, the curtain forms a flexible collapsible tube surrounding the clothes which closely confines the path of the blast of air to the space actually occupied by the clothes. In this manner, the cross-sectional area of the space included within the curtain is reduced or restricted to the area actually occupied by the clothes and the full drying effect of the heated air is employed without any of the heated air being permitted to escape unused.

When the device is not in use, it may be compactly packed by removing the curtain from the base plate and folding it, and folding the wire bail 23 flat against the base plate. Thus, only a small amount of space need to be taken for storing the device.

From the above description, it is obvious that I have provided a clothes drier which will dry clothes quickly with an efficient use of current for generating and heating the blast of air, and which is light and easily handled and may be economically constructed.

I claim as my invention:

1. A clothes drier comprising, in combination, a base plate having a central aperture therethrough, an electric motor axially aligned with and supported above said aper-

ture, means attached to the top of the motor by which the device may be suspended, a fan over said aperture driven by said motor for forcing a blast of air downwardly through said aperture, an electric heating element arranged within said aperture in circuit with said motor for heating said blast, a screen extending across said aperture below said heating element, a wire bail extending diametrically across and below said aperture and pivoted to said base plate, said bail being adapted to support clothes hangers in spaced relation in the path of the blast of air, and a curtain having its upper edge detachably attached to the perimeter of the base plate, its side edges adapted to be detachably attached to each other, and its bottom edge forming an opening through which the blast of air passes out of the device.

2. A clothes drier comprising, in combination, a base plate having a central aperture therethrough, an electric motor over said aperture and mounted upon said base plate, means by which the device may be suspended, a fan aligned with said aperture and driven by said motor for forcing a blast of air downwardly through said aperture, an electric heating element mounted in the path of said blast, means for supporting clothes beneath the base plate and the heating element and in the path of the blast of air, and a flexible curtain attached to and depending from the base plate and adapted to surround the clothes.

3. A clothes drier comprising, in combination, a base plate having an aperture therethrough, a motor driven fan mounted on said base plate over said aperture for forcing a blast of air downwardly through said aperture, an electric heating element mounted in the path of said blast, means for supporting clothes hangers beneath the base plate and in the path of the blast of air, and a curtain attached to and depending from the base plate and adapted to surround the clothes.

4. A drier comprising, in combination, an apertured base plate, means for supplying a blast of heated air blowing downwardly through the aperture in said base plate, means for supporting articles to be dried below and adjacent said aperture, and flexible means movable under the influence of said blast of air to confine said blast closely to the space actually occupied by said articles.

5. A drier comprising, in combination, means for generating a blast of air, means for supporting articles to be dried in the path of said blast, and collapsible means for automatically confining said blast closely to the space actually occupied by said articles.

6. A drier comprising, in combination, means for supplying a blast of air, means for supporting articles to be dried in the path of said blast, and a flexible collapsible tubular curtain for enclosing the articles and

adapted to be drawn snugly against the articles by the blast as it passes through the articles.

5 7. A portable clothes drier comprising, in combination, a base plate having an aperture therethrough, an electric motor mounted on said base plate over said aperture, means attached to the motor by which the device may be suspended, a fan driven by said motor for
10 forcing a blast of air through said aperture, an electric heating element mounted across said aperture for heating said blast, means for supporting clothes beneath said base plate and in the path of the blast of heated air
15 and adapted to be compactly folded against the base plate when not in use, and a flexible curtain depending from and detachably attached to the base plate and adapted to enclose the clothes.

20 8. A clothes drier comprising, in combination, an apertured base plate, a motor-driven fan mounted therein for forcing a blast of air down through said aperture, an electric heating element for heating said blast, means for
25 supporting the clothes beneath said base plate and in the path of the heated blast, and a flexible collapsible, tubular curtain depending from said base plate and completely surrounding the clothes, the upper end of said
30 curtain being closed by said base plate and the lower end being open, whereby the blast of air will cause said curtain to be drawn inwardly to snugly conform to the body of clothes, thereby confining the path of heated air to
35 the space actually occupied by the clothes.

9. A clothes drier comprising, in combination, a base plate having a central aperture, a flexible tubular curtain depending from said base plate with its upper end closed
40 thereby and its lower end freely open, means for suspending clothes beneath the aperture in the base plate, and means for blowing a blast of heated air downwardly through said aperture, through and around the clothes
45 and out from the curtain, said blast causing a reduction or restriction of the normal cross-sectional area of said curtain.

In testimony whereof, I have hereunto affixed my signature.

50 IRVEN H. WILSEY.

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