

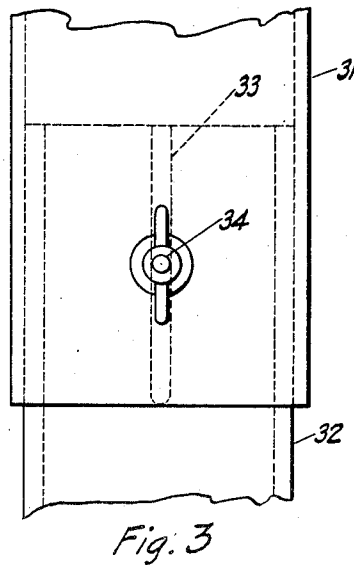
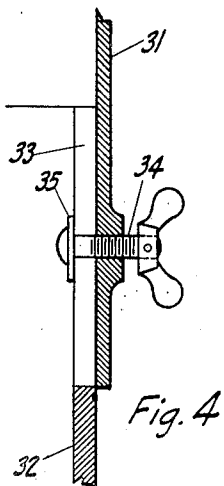
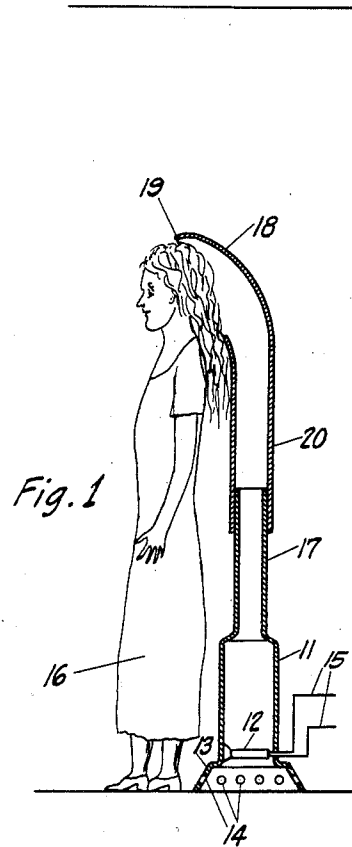
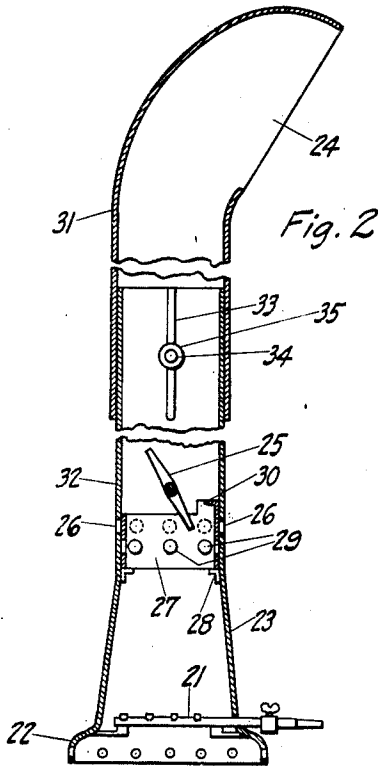
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HEATER AND DRIER

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HEATER AND DRIER.

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This invention relates to a device for heating, such as a room heater operated by gas or electricity, and more particularly to such a heater that may perform other useful functions as set forth hereinafter.

It is one of the objects of my invention to make it possible to use an ordinary room heater for drying the hair or other things by the aid of a draft of heated air. Such an arrangement is convenient, for example, in a bath room, where the auxiliary elements used with the heater to enable it to perform the drying function are not objectionable.

It is therefore another object of my invention to provide a bath room heater that can be made to serve a drying function.

It is still another object of my invention to make it possible to change at will and with facility, a heater so that it can be used either as a conventional heater or as a drier.

My invention possesses many other advantages, and has other objects which may be made more easily apparent from a consideration of a few embodiments thereof. For this purpose I have shown several forms of my invention in the drawings accompanying and forming part of the present specification. I shall now proceed to describe these forms in detail, which illustrate the general principles of my invention; but it is to be understood that this detailed description is not to be taken in a limiting sense, since the scope of the invention is best defined by the appended claims.

Referring to the drawings:

Figure 1 is a view, mainly diagrammatic, showing a heater built in accordance with my invention, in use for drying the hair;

Fig. 2 is a sectional view, on a larger scale but reduced in length, of a modified form of the heater;

Fig. 3 is an enlarged detail showing a feature of construction of the device of Fig. 2; and

Fig. 4 is an enlarged sectional detail of the elements shown in Fig. 3.

In Fig. 1 I illustrate a hollow heater body 11 that is operated in any well known manner; as for example by the aid of an electrical heating coil 12 placed near the bottom of the heater 11. This coil is supported for example from the inner wall of the heater 11, which has a base 13. This base is provided with a series of apertures 14 to permit the ingress of cool air to the heater. Wires

15 forming the terminals of coil 12 may be connected with any convenient source of electrical energy.

In order to supply a current of heated air for drying purposes at a level convenient for the hair, as for example that of a person 16, there is provided a flue 17 to the body 11. This flue or tube has a flaring or bell-shaped end 18, having a forwardly projecting top portion 19, under which the hair of the user may be readily placed. The downwardly projecting portion 19 serves efficiently to direct the heated air against the head of the user. Furthermore, to permit adjustment of the height of flue 17, the upper portion 20 is shown as made separate and as telescoping with the lower portion of the flue 17. The extent of telescoping can be varied by simply moving the upper portion 19 relatively to the lower portion. Friction can be utilized to maintain the parts in adjusted relation.

It is evident that the heater serves efficiently to provide a draft or current of heated air; and this may be accomplished by the addition of relatively few parts to heaters as already built.

In Figs. 2, 3 and 4, I disclose a modified form of heater, which is in this instance shown as operated by gas. The burner 21 is located near the apertured base 22, and is supported in the columnar body 23 in any appropriate manner.

The arrangement in this form is such that the heater can be made either to supply heat to a draft of air emerging from the opening 24 at the top, or else this current can be interrupted if desired, as by the aid of a butterfly valve 25. Furthermore as the valve 25 is closed for this purpose, it can also readily be arranged to uncover one or more openings such as 26, formed in the body 23. To effect this result, a collar 27 is mounted slidably in body 23, the weight of which normally causes it to rest on the clips 28 fastened to the inside of the body 23. This collar has a series of openings 29 which align with openings 26 when the collar 27 is lifted. The valve 25, when moved to closed position, is adapted to accomplish this result by engaging at its edge underneath a lip 30 formed on collar 27, and by lifting it to cause the apertures 26 and 29 to register. The valve parts are purposely arranged with frictional resistance in order that the collar 17 may be

maintained in its lifted position. When the apertures are thus alined, the heater serves to pass a current of heated air through them, and this serves as the usual conventional type of gas convection heater.

In this form a different type of adjustment is also provided for the height of the opening 24. The top portion 31 telescopes as before over the tubular extension 32 of the lower body 23. In this extension, there is a groove 33, through which a wing bolt 34 is arranged to pass. This bolt is threaded into the outer portion 31, whereby upon turning it by hand from outside, the bolt 34 is moved axially. In order to clamp the two parts together, the bolt 34 carries at its extremity, a clamping washer 35, which engages the inner surface of portion 32 when bolt 34 is moved axially outwardly. Thus to adjust the height of the opening 24, the bolt 34 is first turned inwardly, to loosen the washer 35; then part 31 is moved up or down relatively to part 32, to the desired extent, and the bolt 34 is again tightened. The extent of adjustment permissible is determined by the length of groove 33; and this is preferably such that persons of widely varying heights can use the device as a hair drier.

It is evident from the foregoing description that I have provided a heater that can be efficiently used either for passing a current of heated air into a room for heating it, or for causing it to pass through an aperture at the proper height to serve as a drier. It is further evident that the form and construction of the device can be materially changed, in fact, a built-in structure can if desired be utilized.

I claim:

1. In combination, a room heater, a tubular extension projecting above the heater to direct a current of heated air from the heater to a point above the heater, and means for throttling this current of air and for permit-

ting it to be transmitted into a room adjacent the heater.

2. In combination, a room heater, a tubular extension projecting above the heater to direct a current of heated air from the heater to a point above the heater, a valve for controlling the path of the heated air, and means arranged to be operated in accordance with the operation of the valve for permitting the air to escape from the heater at a lower level while the other path is throttled.

3. In combination, a room heater, a tubular extension projecting above the heater to direct a current of heated air from the heater to a point above the heater, a butterfly valve in said extension, and a collar arranged to be operated by the valve when it is closing, and located near the bottom of the path for the heated air, said collar having apertures arranged to aline with apertures in the bottom portion of the structure when operated by the valve.

4. In combination, a room heater, a tubular extension projecting above the heater to direct a current of heated air from the heater to a point above the heater, a valve for controlling the path of the heated air, and means arranged to be operated in accordance with the operation of the valve for permitting the air to escape from the heater at a lower level while the other path is interrupted.

5. In combination, a room heater, a tubular extension projecting above the heater to direct a current of heated air from the heater to a point above the heater, butterfly valve in said extension, and a collar arranged to be operated by the valve when it is closing, and located near the bottom of the path for the heated air, said collar having apertures arranged to aline with apertures in the bottom portion of the structure when operated by the valve.

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