

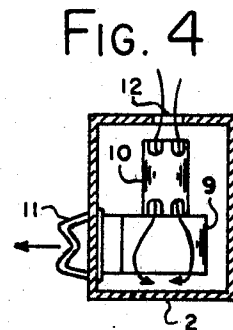
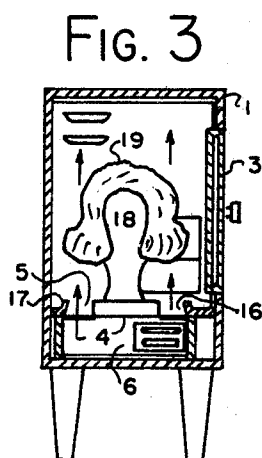
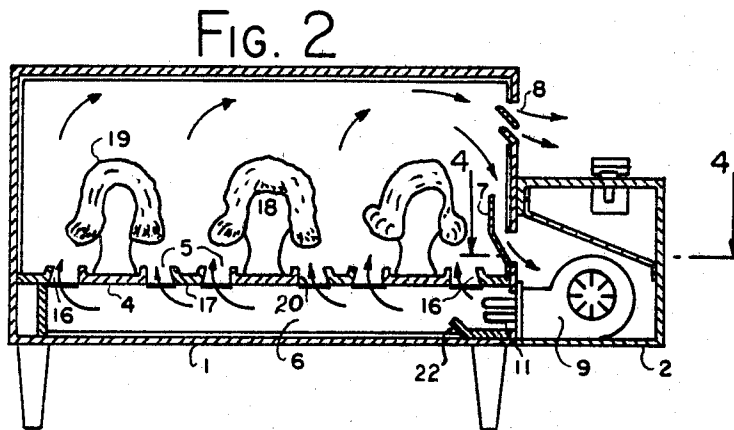
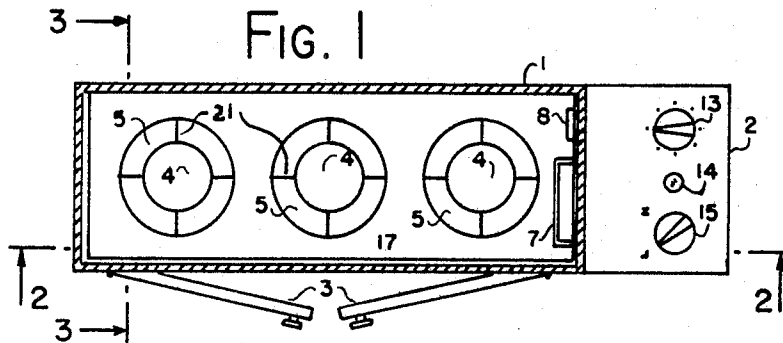
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DRYING APPARATUS

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1

2

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DRYING APPARATUS

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10 Claims

ABSTRACT OF THE DISCLOSURE

An apparatus for drying articles comprises a housing having means for placing articles to be dried, and drying means arranged to convey a current of drying gas around and about the articles in a direction from the bottom to the top of the housing.

BACKGROUND OF THE INVENTION

The present invention relates to drying apparatus. More particularly, it relates to apparatus and method for drying wigs or hair pieces. These items require periodic washing and setting. The cleaned and set wig is then ready for drying. The drying operation is effected by placing the wig under a hair dryer of the type used by beauty parlors to dry customers' hair or the portable unit used by women at home. More recently, multiple unit wig dryers have been proposed. All of these dryers blow hot air upon the top of the wig and down the side. A disadvantage of such dryers is that it takes undesirably long times to effect complete drying of the wig. Another disadvantage is that the heating mechanism is not readily accessible.

Accordingly, it is an object of the present invention to provide a drying apparatus which will dry wigs in less time than heretofore possible. Another object is to provide an apparatus which will dry wigs in a more effective manner than heretofore. Yet another object is to provide an apparatus which will dry a plurality of wigs in a uniform manner. A further object is to provide an apparatus whose drying mechanism is readily accessible. Still another object is to provide a new and improved method for drying wigs and other difficult-to-dry articles. These and other objects of the present invention will be apparent from the following description.

SUMMARY OF THE INVENTION

The apparatus of the present invention comprises a housing having a substantially cabinet-like shape and having means disposed therein for supporting one or more wigs. A drying mechanism mounted externally on the housing directs a flow of drying gas into the bottom of the housing, and circumferentially up past and around the wigs. At least part of the drying gas may be recycled, thereby providing a substantially circular flow of drying gas.

DESCRIPTION OF THE DRAWING

FIGURE 1 represents a plan view with the cabinet top removed to show the interior.

FIGURE 2 is a front elevation taken along the line 2—2 of FIGURE 1 with the cabinet doors removed to show the interior.

FIGURE 3 is a side elevation taken along the line 3—3 of FIGURE 1.

FIGURE 4 is a plan view taken along the line 4—4 of FIGURE 1.

DETAILED DESCRIPTION

As shown in FIGURE 1 the drying apparatus comprises a cabinet-like housing 1 which may be made of metal, wood or other suitable material. The housing is suitably insulated and provided with doors 3. Drying

mechanism 2 is mounted externally to the housing and attached to a sidewall of the housing at the lower end of the sidewall. Located within the housing is floor panel 17 having a plurality of wig supports 4. The wig supports are located within cut-out portions in floor panel 17 and maintained by support members 21. As shown the supports are circular; however, any other shape or configuration may be used. Surrounding each support are openings 5 for air or other drying gas formed by a cut-out portion of floor panel 17. The sidewall of the housing is provided with a vent 8 and duct 7. The latter leads to drying mechanism 2 which is provided with timing control 13, indicator light 14 and thermostat 15.

FIGURE 2 shows the positioning of the wig supports 4 on floor panel 17. Wigs 19 are placed on forms 18 for drying. Wig supports 4 have flange-like projections 20 around their perimeter. Floor panel 17 has flange-like projections 16 on the outer perimeter of openings 5. An air passage 6 below floor panel 17 communicates with drying mechanism 2 having blower 9 and heating element 11. Vent 8 is formed in the shape of an inverted louver. Duct 7 communicates with drying mechanism 2.

FIGURE 3 shows wig 19 mounted on form 18 which is placed on wig support 4 on floor panel 17. Air passage 6 is below floor panel 17. Flange-like projections 16 together with flange-like projections 20 on circumferences of wig supports 4 form directional flow-control means for the drying gas.

FIGURE 4 shows detail of the drying mechanism which has air intake 12, motor 10, blower 9 and heating element 11.

PREFERRED EMBODIMENT

The operation of the wig dryer will now be described.

Wigs 19 which have been washed are set or shaped on forms or blocks 18 for drying. The forms are placed on supports 4 and the doors 3 are closed. Thermostat 15 and timing control 13 are set to suitable and predetermined values. The timing control may be of a type to control the blower motor 10 and heating element 11 at different intervals. For example, the blower may be started and stopped, respectively, several minutes, say 5 minutes, after the heater is started and stopped. This allows unheated air to be blown through the unit after completion of drying operation. This cools the drying mechanism, removes heat from the cabinet and cools the wigs allowing the operator to touch and remove metal clips, pins, etc. immediately after the heater is shut off. Air is drawn into air intake 12 and passes through and around motor 10 before entering blower 9. This serves to cool the motor.

Air from blower 9 is passed into air passage 6 under "static pressure" and is forced through openings 5 where flange-like projections 16 and 20 direct the air flow up and around wigs 19. Baffle 22 serves to direct air through the openings 5 closest to blower 9. If desired, additional baffle plates may be provided adjacent other openings 5. The air rises in a manner shown by directional arrows and a portion is expelled through inverted louver and vent 8. The heaviest moisture laden air is scooped out of the unit by duct 7 and returned to heating mechanism 2 where it mixes with fresh air entering air intake 12 and is heated and recycled. The fresh air may constitute from about 5% to about 50% of the total air flow and the recycled air may constitute from about 95% to about 50% of the total air flow.

The type of air flow described above is extremely efficacious in drying wigs. The heated air is directed up around the entire circumference of the wig. In this manner, drying of the most difficult-to-dry portion of the wig, that is, the base of the wig, the wig nap and the roots of the hairs, is greatly facilitated and expedited. Locating the

3

heating mechanism outside the drying cabinet facilitates maintenance.

While the wig drier has been described in a specific embodiment it will be apparent that modifications and variations may be made therein without departing from the scope of the invention. For example, more than 1 shelf may be provided and other than 3 wig supports may be disposed on each shelf. Other articles may be dried in addition to wigs, particularly hard to dry fibrous or matted articles.

What is claimed is:

1. Apparatus for drying an article comprising a substantially cabinet-like housing, drying means attached to said housing for circulating a drying gas in the housing, the drying means communicating with the lower region of the housing, a substantially shelf-like member disposed above said lower region of the housing, said member having at least one cut-out portion with a support provided within the cut-out portion for holding an article to be dried, the support being smaller than the cut-out portion so as to provide a zone between the cut-out portion and the support for passage of the drying gas, the perimeter of the cut-out portion and the perimeter of the support being provided with substantially flange-like projections.

2. Apparatus according to claim 1 wherein the upper region of the housing is provided with a vent.

3. Apparatus according to claim 1 wherein the housing is provided with additional means communicating with the drying means, said additional means being separate from and located above the means communicating with the lower region of the housing.

4. Apparatus according to claim 3 wherein said communicating means is located above the substantially shelf-like member.

4

5. Apparatus according to claim 3 wherein the housing contains a vent in the upper region of the housing.

6. The apparatus according to claim 1 wherein said drying means is connected with a first opening in the lower region of the housing and with a second opening in a sidewall of said housing at a level above said first opening, and wherein said housing has a third opening communicating with the atmosphere.

7. The apparatus according to claim 6 wherein a duct disposed within said housing leads to said second opening.

8. The apparatus according to claim 7 wherein said duct is formed by a member adjoined to the side of said housing, said member extending upwardly along the side of said housing from the bottom of said second opening.

9. The apparatus according to claim 6 wherein said third opening is at a level above said second opening.

10. The apparatus according to claim 9 wherein said third opening is provided with a louver.

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