July 25, 1950 L. FLETCHER 2,516,378

PORTABLE HAIR DRYING APPARATUS

Filed May 24, 1948

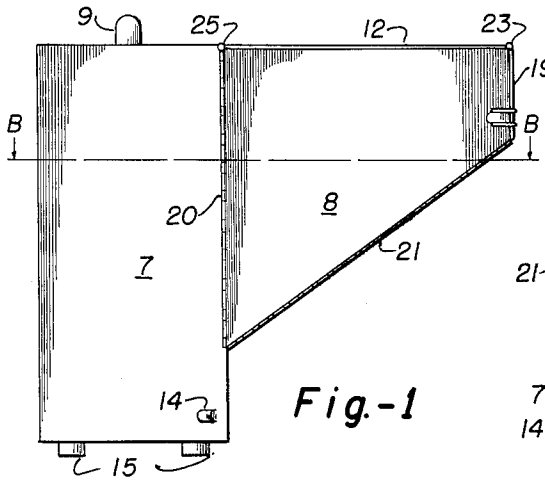



Fig.-1

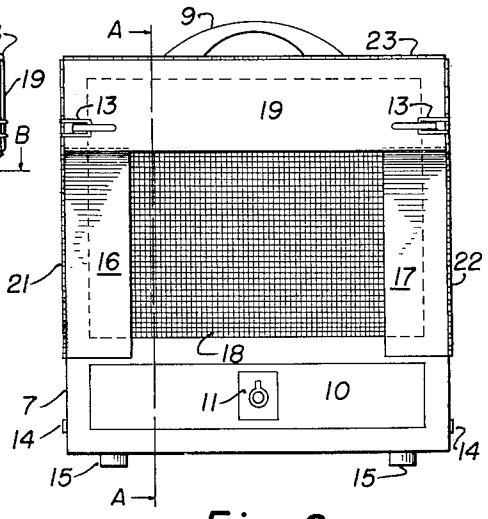



Fig.-2

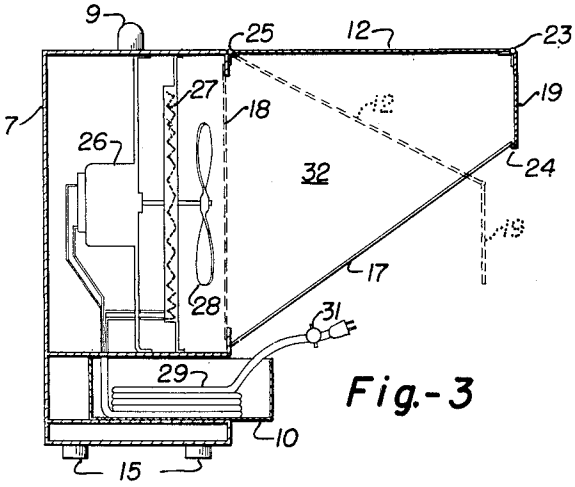



Fig.-3

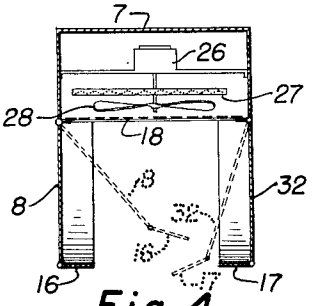



Fig.-4

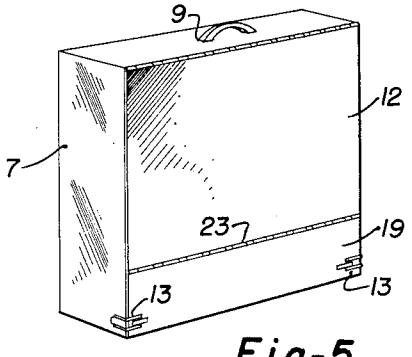



Fig.-5

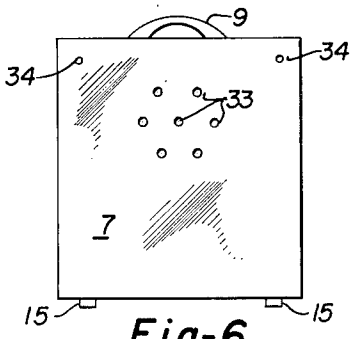



Fig.-6

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## PORTABLE HAIR DRYING APPARATUS

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8 Claims. (Cl. 34—99)

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My invention relates to portable devices for drying the human hair, particularly women, after bathing, shampooing or setting curl in hair.

So far as is known, hair driers of the prior art have been of the type which can only be practically used in beauty parlors, and are of a stationary character, making it impracticable for a woman to have one in her home for her own use.

The general object of the present invention is to provide a small, light, inexpensive portable hair dryer that every woman can own and use in her home and operate herself.

A further object of the invention is to provide such device including means for supplying a flow of heated air, a casing for said means having an opening through which the heated air may be directed, and a collapsible hood for receiving and directing the flow of heated air from said opening, said collapsible hood constituting a closure for said opening when in collapsed position.

A still further object of the invention is to provide such a device which can be supported on a wall bracket or on a table or other common article of household furniture when in use, and which, when so supported, will conveniently direct a flow of heated air to the head of the person whose hair is to be dried.

In order that the invention may be readily understood, reference is had to the accompanying drawings, forming a part of this specification, and wherein:

Fig. 1 is a side elevation of a portable hair drier constructed in accordance with a preferred embodiment of the invention, showing the closure in open or extended position to form an air flow directing hood;

Fig. 2 is a front elevation of the device as shown in Fig. 1;

Fig. 3 is a vertical section along the line A—A, Fig. 2;

Fig. 4 is a horizontal section along the line B—B, Fig. 1, but on a reduced scale;

Fig. 5 is a view in perspective of the device shown in Fig. 1, but with the closure member in closed or collapsed position; and

Fig. 6 is a rear elevation of the device.

In all the views, the same reference characters indicate similar parts.

Referring particularly to Figures 1, 2, 3, and 4 the portable hair dryer constructed in accordance with my invention comprises a rectangular casing 7, containing a motor 26, electric heating element 27 and a fan 28, with a screen 18 to prevent the hair from being injured or caught in

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the fan blades. An electrical cable 29 is provided for connecting heating element 27 and motor 26 to a suitable source of current, and this cable is preferably equipped with a manually operated switch 31. The casing is provided in any suitable way with an air inlet, as by forming one or more holes 33 in one of the side walls, as illustrated in Fig. 6. Casing 7 is further provided with a lateral opening 18, Fig. 3, as by cutting away another of the side walls, across which opening preferably extends a screen 18a; 9 is the handle used for carrying said portable hair dryer and 15 are rubber grommets on the bottom of the casing to keep same from injuring any article upon which the casing is placed; 10 is a removable drawer to contain the electric cable 29 and to hold pins and other supplies which drawer is removed when the portable hair dryer is in operation. 11 is the ordinary drawer handle used to pull the drawer outward.

Hinged at one edge to the casing 7 about a horizontal axis at 25 above opening 18 is a closure member comprising a main section 12, and an auxiliary section or portion 19, hinged together at 23 along a line parallel to but removed from hinge 25, so that, when the closure member is in raised position, the main section 12 is substantially horizontal and the auxiliary portion 19 may depend vertically therefrom, as shown in Fig. 3. When the closure member is in closed or lowered position, however, both sections lie in the same plane, flush against the front of casing 7, as seen in Fig. 5.

At each side of opening 18 of casing 7, there is hinged about a vertical axis one of a pair of air-flow-directing supplementary closure members 8 and 32, respectively. Members 8 and 32 can be swung inwardly to closed or collapsed positions in overlapping relation across opening 18 and swung outwardly to open or extended positions, substantially at right angles to the plane of opening 18. When members 8 and 32 are in open position, as shown in Fig. 1, after closure member has been raised, they support the main section 12 and abut the ends of the depending portion 19. As illustrated in Fig. 3, closure member section 12 and the depending portion 19 are planar, and the edges of members 8 and 32 which contact the closure member are straight, so that the main section 12 will rest flush on the top edges of the two supplementary closure members. Depending portion 19 of the closure member is provided with clasps 13 arranged to cooperate with suitable catches on the two supplementary closure members, so that portion 19 may be held

tightly against the forward edges of the two supplementary closure members, and the entire closure assembly may thus be locked in open position. When the closure members are arranged in open position, they constitute an air-flow-directing hood into which heated air is discharged through opening 18. As best seen in Figs. 2 and 4, the resulting hood is open at the bottom and will accommodate the head of the person whose hair is to be dried.

When the device is to be used, the closure member comprising the sections 12 and 19 is raised and members 8 and 32 are swung out to their extended positions. Clasps 13 are engaged with their cooperating catches to hold the hood in assembled position. Cable 29 is connected to a suitable source of current, as by being plugged into the usual wall outlet, and switch 31 is actuated to complete the circuit of the motor and heating element 27. The person whose hair is to be dried is seated in a chair so positioned relative to the drier that his or her head can comfortably be held partially within the air-flow-directing hood defined by closure member sections 12 and 19, and members 8 and 32.

After use, members 8 and 32 are folded inwardly to closed position across opening 18 and the closure member comprising sections 12 and 19 is lowered to the position shown in Fig. 5, over the members 8 and 32. The hinges for supplementary closure members 8 and 32 are indented slightly behind the forward surface of casing 7, as indicated in Fig. 1, in order that closure member section 12 may lie flush against the casing when the device is to be stored. Clasps 13 on flap 19 are engaged with cooperating catches 14 on the side walls of the casing 7 to maintain the closure in closed position.

Though supplementary closure members 8 and 32 may obviously be of various shapes, it is preferred that they be of the simple trapezoidal shape shown, having an outwardly and upwardly inclined lower edge, in order that the hood shall not cover the face of the person using the device. The members are hinged to the casing along the longer of the two parallel sides of the trapezoid.

It is desirable that a swirling action be imparted to the stream of heated air as it passes through the drying hood, in order to obtain a more efficient drying action. This is preferably accomplished by providing inturned flaps 16 and 17 hinged along the lower inclined edges of members 8 and 32 respectively. As shown in Fig. 3, flaps 16 and 17 are held in their inturned positions substantially at right angles to members 8 and 32 by an inwardly directed flange or ledge 24 on depending portion 19, when the hood is in open or extended position as seen in Figs. 2 and 3, but are adapted to be flattened out into positions in the same planes with members 8 and 32 respectively, when these latter members are swung to closed or collapsed positions in overlapping relation across opening 18, as indicated in broken lines in Figs. 1 and 4.

As previously stated, the device may be supported from a wall bracket if desired, and any suitable fitting for this purpose may be attached to the back of casing 7, as by sheet metal screws engaging holes 34, Fig. 6.

My device is especially adapted for use in the home and dispenses with the necessity of women being called upon to visit beauty parlors which calls for a waste of time and extraordinary expense, as well as permitting the women to do their own hair and putting in their own permanent wave.

The device is light, portable, simple of operation and a great convenience to the feminine sex.

Having described my invention what I claim is:

1. In a hair drier, a casing having a lateral opening and an air inlet, means mounted within said casing for forcing heated air outwardly through said opening, and a plurality of planar members hinged to said casing at an angle to each other and movable to either open position, in which they extend at right angles to each other, or collapsed position in which they lie in parallel, overlapping relation over said opening, said members when in open position forming an air-flow-directing hood.

2. In a hair drier, a casing having a lateral opening and an air inlet, means mounted within said casing for forcing heated air outwardly through said opening, a closure member hinged to said casing above said opening and arranged for swinging movement about a horizontal axis from a lowered position across said opening to a raised position substantially at right angles to the plane of said opening and foldable means carried by said casing at each side of said opening and cooperating with said closure member, when said closure member is raised, to form an air-flow-directing hood.

3. A portable hair drier including a rectangular casing open at one side, a planar member pivoted to the casing on an axis adjacent and parallel with the upper edge of said side to swing from a lowered position in which it lies flat against said side to a raised position in which it extends outwardly from said casing, supplementary members movable relative to the casing and disposed at the sides of said planar member, said supplementary members serving to support said planar member in raised position, and said members together forming an air-flow-directing hood, and means within said casing for forcing a stream of air outwardly into said hood.

4. In a hair drier, a casing having a lateral opening and an air inlet, means mounted within said casing for forcing heated air outwardly through said opening, a closure member for said opening, hinged to said casing on a horizontal axis above said opening and capable of swinging to open position, and supplementary closure members at the sides of said opening movable from a retracted position to an extended position in which they support said first named closure member in its said open position, said closure members together forming an air-flow-directing hood.

5. In a hair drier, a casing having a lateral opening and an air inlet; means mounted within said casing for forcing heated air outwardly through said opening; a closure member hinged to said casing on a horizontal axis above said opening and arranged for movement from a lowered position across said opening to a raised position substantially at right angles to the plane of said opening, said closure member comprising main and auxiliary portions, said auxiliary portion being hinged to the main portion along a line parallel to and removed from the hinge connecting said closure member to said casing, whereby said auxiliary portion depends from the main portion when the closure member is in its raised position, and a pair of supplementary closure members hinged to said casing about vertical axes at opposite sides of said opening, said supplementary closure members lying inside of

said first mentioned closure member when all of said closure members are in closed position, and said closure members when in open position together forming an air-flow-directing hood.

6. In a hair drier, a casing having a lateral opening and an air inlet; means mounted within said casing for forcing heated air outwardly through said opening; a closure member hinged to said casing above said opening and arranged for movement from a lowered position across said opening to a raised position substantially at right angles to the plane of said opening, said closure member comprising main and auxiliary portions, said auxiliary portion being hinged along a line parallel to and removed from the hinge connecting said closure member to said casing, whereby said auxiliary portion depends from the main portion when the closure member is in its raised position; a pair of supplementary closure members hinged to said casing about vertical axes at opposite sides of said opening, said supplementary closure members lying inside of said first mentioned closure member when all of said closure members are closed and being adapted to support said first closure member in raised position when open; flaps hinged to the lower edges of said supplementary closure members, and means carried by the dependent portion of said first mentioned closure member for supporting said flaps in inwardly turned position when said closure members are in open position, said closure members and said flaps together forming an air flow directing hood when said closure members are open and said flaps inwardly turned.

7. In a hair drier, a casing having a lateral opening and an air inlet; means mounted within said casing for forcing heated air outwardly through said opening; a closure member for said opening, said closure member being hinged to said casing above said opening and adapted for swinging movement from a lowered position across said opening to a raised position; supplementary closure members movable from a retracted position to an extended position to support said first closure member, said closure members together forming an air-flow-directing hood when said first mentioned closure member is raised and supported by said supplementary closure members; fastening means carried by said first mentioned closure member; cooperating fastening means carried by said supplementary closure members, whereby said closure members



can be secured in open position, and additional fastening means carried by said casing and arranged to cooperate with said fastening means carried by said first mentioned closure member to secure the latter in closed position.

8. In a hair drier, a casing having a lateral opening and an air inlet; means mounted within said casing for forcing heated air outwardly through said opening; a closure member hinged to said casing above said opening and arranged for swinging movement from a lowered position across said opening to a raised position substantially at right angles to the plane of said opening, said closure member comprising main and auxiliary portions, said auxiliary portion being hinged along a line parallel to and removed from the hinge connecting said closure member to said casing, whereby said auxiliary portion depends from the main portion when the closure member is in its raised position; a pair of supplementary closure members hinged to said casing about vertical axes at opposite sides of said lateral opening, said supplementary closure members lying inside of said first closure member when all of said closure members are closed and being adapted to support said first closure member in raised position when open; first fastening means carried by said depending portion of said first mentioned closure member; cooperating fastening means carried by said supplementary closure members, whereby said closure members may be secured in open position, and additional fastening means carried by said casing and arranged to cooperate with said first fastening means to secure said first mentioned closure member in closed position.

LOU FLETCHER.


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