Nov. 30, 1965 I. JEPSON ETAL 3,220,119

HAIR DRYER

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Fig. 1.

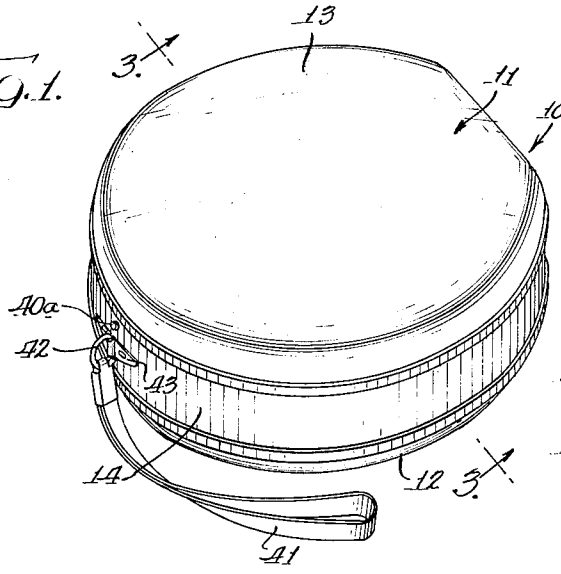


Fig. 8.

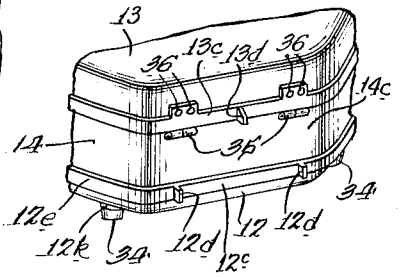


Fig. 2.

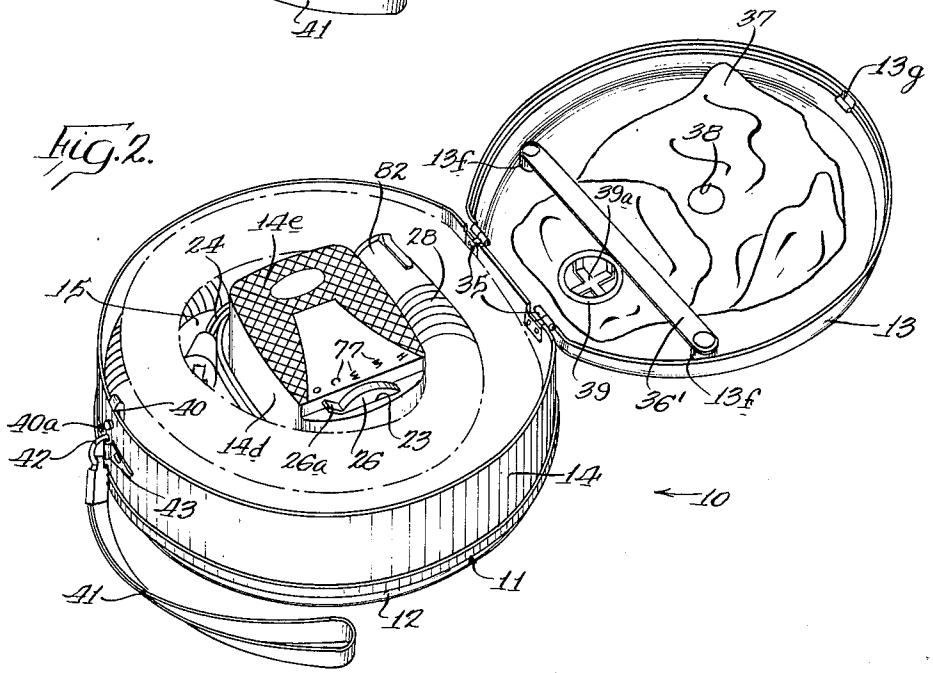
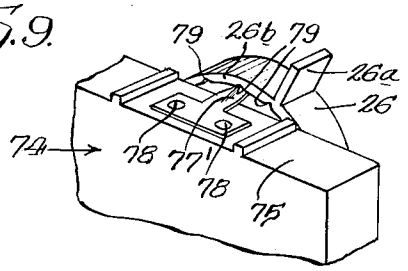


Fig. 9.



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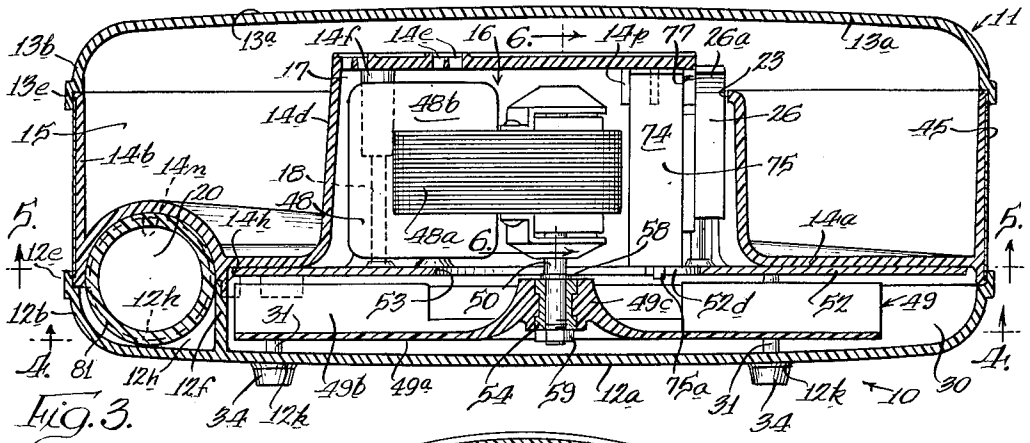


Fig. 3.

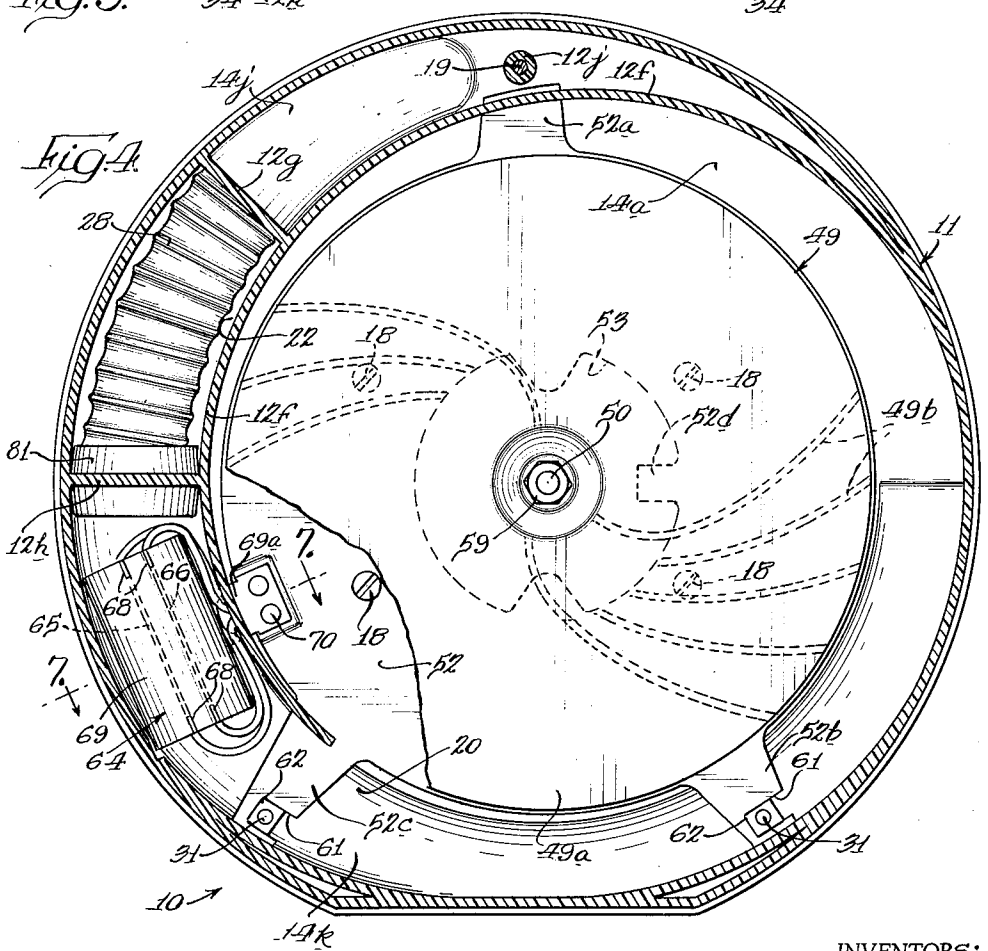


Fig. 4.

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Fig. 5.

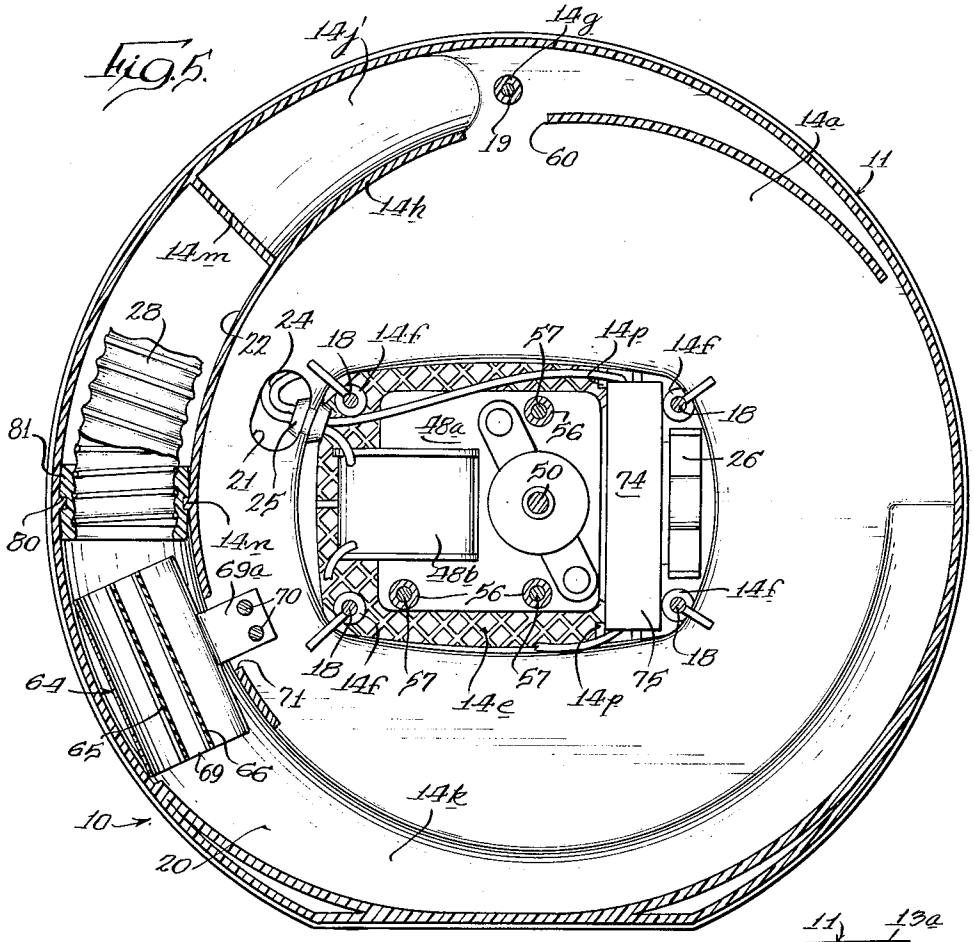


Fig. 6.

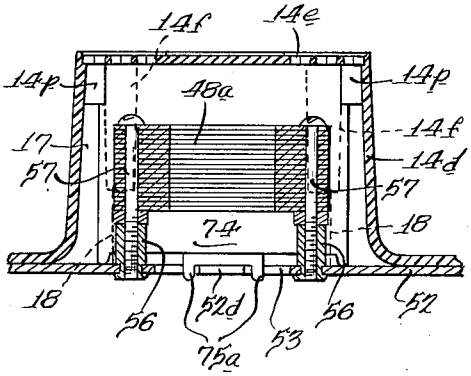
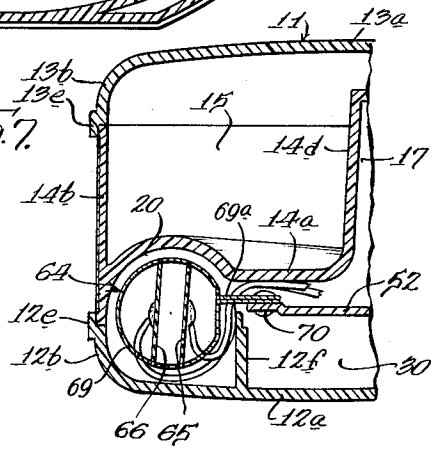


Fig. 7.



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United States Patent Office 3,220,119 Patented Nov. 30, 1965

3,220,119

HAIR DRYER

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Filed Apr. 6, 1962, Ser. No. 185,625
1 Claim. (Cl. 34—99)

The present invention relates to hair dryers of the portable type which obviously may have uses other than drying hair. Specifically, the present invention is in the nature of an improvement on Jepson Patent No. 3,006,079, granted October 31, 1961, and assigned to the same assignee as the instant application.

In the above-mentioned Jepson patent, three different types of hair dryers were discussed and the advantages of the type of hair dryer disclosed in the Jepson patent were set forth in detail. The hair dryer of this patent achieved great commercial success during the past five years and one could say that it was the start of a whole new industry. This hair dryer is a very compact device so that it can readily be stored in a small space which is important in this modern day when the householder has so many appliances to store. The hair dryer, at least for women, has become a necessity rather than a luxury and even when traveling is taken along as an essential item. Consequently, it is desirable for such hair dryers not only to be small and compact for storage purposes, but they should be designed so that they are easy to transport. It would be desirable to provide such a hair dryer in the form of a compact casing, such as a small piece of luggage, which casing in itself stores all the portions thereof, including the flexible cap or hood and the hose or conduit connecting the cap or hood to the source of drying air. Moreover, this casing, like a piece of luggage, should have no external knobs or other protrusions.

Accordingly, it is an object of the present invention to provide a new and improved hair dryer.

It is another object of the present invention to provide a portable hair dryer comprising a unitary casing in which all portions of the dryer are housed in the casing in operative condition.

It is another object of the present invention to provide an improved hair dryer which is compactly arranged comprising a light weight unit which is an integral part of a compact casing and which by itself may be readily transported like a small piece of luggage.

Further objects and advantages of the present invention will become apparent as the following description proceeds and the features of novelty which characterize the invention will be pointed out with particularity in the claims annexed to and forming a part of this specification.

For a better understanding of the present invention, reference may be had to the accompanying drawings in which:

FIG. 1 is a perspective view of the hair dryer of the present invention shown in the closed position for storage or for transportation from place to place;

FIG. 2 is a perspective view similar to FIG. 1 showing the hair dryer in open position ready for use and showing how the portions thereof are supported in a unitary structure;

FIG. 3 is an enlarged sectional view taken substantially

on line 3—3 of FIG. 1 but with the hose and cap removed from storage position;

FIG. 4 is a sectional view taken on line 4—4 of FIG. 3, assuming that FIG. 3 shows the complete structure but with certain portions cut away more clearly to illustrate the invention;

FIG. 5 is a sectional view taken on line 5—5 of FIG. 3, again assuming that FIG. 3 shows the complete structure;

FIG. 6 is a sectional view taken on line 6—6 of FIG. 3, assuming that FIG. 3 shows the complete structure, but with the armature of the motor omitted;

FIG. 7 is a fragmentary sectional view taken on line 7—7 of FIG. 4 with certain portions cut away, assuming that FIG. 4 shows the complete structure;

FIG. 8 is a fragmentary perspective view of a portion of the casing showing a flattened portion of the periphery thereof; and

FIG. 9 is a fragmentary perspective view of a portion of a switch housing and control knob of the hair dryer of the present invention.

Briefly, the present invention is concerned with a portable hair dryer which, when not in use, is a completely enclosed unit which has the appearance of a small piece of luggage, such as a small hat box, with the hair dryer built as an integral part of this unit. Moreover, like a piece of luggage, this unit has a pivotally mounted cover affording access to the controls of the dryer, the cap or hood to be placed over the user's head, and the hose disposed in connected position ready for use for conveying either heated or other air which is to be supplied to the cap or hood. The unit includes a motor driven fan and heating means together with various control means.

Referring now to the drawings, there is illustrated a hair dryer, generally indicated at **10**, which has the external appearance of a small piece of luggage commonly designated as a hat box. The portion of the hair dryer **10** which looks like a piece of luggage might be designated the casing, housing or container of the hair dryer and is generally designated by the reference numeral **11**. In accordance with the present invention, this hat box-type casing **11** is formed of three separate pieces, each of which is preferably molded from a suitable plastic material. As illustrated in the drawings, the casing **11** comprises a bottom **12**, a cover **13**, and a central casing portion **14**. Each of these elements has a generally circular configuration with a small segment of the circle being flattened so that the casing **11** may be supported by the flat surface defined by the flattened segment or means projecting therefrom. The bottom **12** is secured to the central casing portion **14** by means described hereinafter and similarly cover **13** is pivotally related to casing portion **14**, as described hereinafter. Each of the portions **12**, **13** and **14** includes a horizontal wall portion when viewed in the position of FIG. 3 of the drawings designated as **12***a*, **13***a* and **14***a*, respectively, to the periphery of which wall portions are integrally attached vertical wall portions **12***b*, **13***b* and **14***b*, respectively. These wall portions **12***b*, **13***b* and **14***b* include flattened sections **12***c*, **13***c* and **14***c*, respectively, as best shown in FIG. 8 of the drawings. So that the casing **11** may be supported from the flattened surface described, preferably a pair of spaced legs **12***d* (FIG. 8) project from bottom **12** and a single leg **13***d* projects from cover **13**, thus providing a tripod support. These legs are illustrated as molded integrally with the

corresponding casing sections **12** and **13**, respectively.

Considering now casing section **14** in more detail, the wall portion **14***a* thereof includes a centrally disposed raised housing portion **14***d* thereby defining an annular storage chamber **15** (FIGS. 2, 3 and 7) between wall portion **14***a* and central housing portion **14***d*. The top of housing portion **14***d* is flat and is provided with integrally formed grillwork **14***e* which defines an air intake for a motor driven fan unit **16** (FIG. 3), at least the motor of which described hereinafter is disposed within a chamber **17** (FIGS. 3, 6 and 7) defined by centrally disposed housing portion **14***d*. Depending within chamber **17**, as best shown in FIG. 5 of the drawings, are a plurality of posts **14***f* (FIGS. 3 and 5) integrally formed with casing section **14**. These posts **14***f* preferably contain tapped inserts for threadedly receiving suitable fastening means **18** (FIGS. 3, 4 and 5) by means of which the motor driven fan unit **16** and the bottom **12** may be secured in assembled relationship therewith. For a similar purpose, a post **14***g* (FIG. 5) also containing a tapped insert depends from the wall section **14***a* near the periphery thereof for receiving a fastening means **19**.

To define a scroll-shaped air outlet from the fan chamber described hereinafter, there depends from the underside of wall portion **14***a* a spiral wall portion **14***h* which cooperates with a similar wall portion projection **12***f* from wall portion **12***a* of the bottom **12** to define a spiral or scroll-shaped air outlet chamber **20**. The wall portion **14***a*, when viewed from the bottom, as shown in FIG. 4 of the drawings, includes near the periphery a short convex section **14***j* and a concave section **14***k* which latter defines the upper surface of air passageway **20**.

Defined in the wall portion **14***a* are a plurality of openings, designated as **21**, **22** and **23**, not considering the plurality of openings provided by the integral grillwork **14***e*. The opening **21** is merely for the purpose of permitting a conventional electric power cord **24**, which is normally housed within the casing **11**, to enter the motor chamber **17**. Actually, the opening **21** (FIG. 5) is provided with a notch extending into one of the walls defining central housing portion **14***d* for receiving a strain relief member **25** secured to the power cord **24**. The opening **22**, on the other hand, is disposed between wall portions **14***j* and **14***k* (FIG. 5). Actually, one end of the opening **22** is defined by a depending integral wall portion **14***m*, as best shown in FIG. 5 of the drawings, which is at the end of the convex section **14***j*, and the other end of this opening is defined by a semicircular flange **14***n* also integrally formed with the casing section **14** and depending into passageway **20**. The opening **23** (FIGS. 2 and 3) is actually defined in housing portion **14***d* and permits a switch knob **26**, described hereinafter, to project therethrough so that it may be manipulated by the user.

Considering the bottom **12** in more detail, it is generally in the form of a shallow vessel of circular configuration except for flattened section **12***c*. The wall portion **12***a* defines the bottom of casing **11** when the casing is disposed in the positions of FIGS. 1, 2 and 3 of the drawings. The wall portion **12***b* terminates in an offset flange **12***e* to define a continuous shoulder for receiving one edge of the wall portion **14***b* of casing section **14**, as clearly shown in FIGS. 3 and 7 of the drawings. Projecting upwardly from the bottom **12** is an integral wall portion **12***f* of spiral configuration, as best shown in FIGS. 3, 4 and 7 of the drawings, which mates with the spiral wall portion **14***h*, thereby defining the air passageway **20**. The wall portion **12***f* covers slightly more than half of the circumference of the bottom **12** and at one end is joined with the outside wall **12***b* and at the other end is spaced a substantial distance therefrom, as clearly indicated in FIG. 4 to provide the desired scroll or tangential air passageway **20**. Preferably the abutting edges of spiral wall portions **12***f* and **14***h* are provided with interlocking portions, as clearly shown in FIG. 3 of the drawings so that when the bottom **12** is assembled to the section **14**, the wall portions **12***f* and **14***h* abut in interlocking relationship to define the tangential air passageway **20**. The bottom **12** is also provided with a pair of spaced wall portions **12***g* and **12***h* integrally formed therewith which are spaced so as to be disposed at the ends of the opening **22** defined in the casing section **14** described above. As a matter of fact, the wall portion **12***g* is a partition which abuts with the wall portion **14***m* to define the terminus of the tangential air chamber **20**. The wall portion **12***h*, on the other hand, is a semicircular flange like the flange **14***n* and when casing sections **12** and **14** are assembled, these flanges **12***h* and 14n define a circular flange (FIG. 3) for making an effectively airtight connection with a flexible conductor air hose **28**, described hereinafter. The space within the bottom **12** exclusively of the air passageway **20** might be designated as the fan chamber and is indicated in FIGS. 3 and 7 by the reference numeral **30**. An integral tubular projection **12***j* from casing section **12** (FIG. 4) is disposed in the same position as the projection **14***g* from the casing section **14**, so that when the sections **12** and **14** are assembled these projections **12***j* and **14***g* are coaxially arranged so that the fastening means **19** may pass through the projection **12***j* and engage the tapped opening defined in the insert molded within the projection **14***g*.

For support purposes, the outside of the bottom or casing section **12** is provided with a plurality of integral projections **12***k* having an opening defined therein for receiving suitable fastening means, such as **19** and **31** (FIG. 4), which fastening means preferably secure suitable feet, such at **34**, to the bottom **12**. As best shown in FIG. 3 of the drawings, the fastening means **19** and **31** not only secure the feet **34** in position, but simultaneously secure the bottom **12** either directly to the casing section **14** or to other means secured to this casing section. The feet **34** may be made of a resilient material, such as rubber or one of the plastics. With this arrangement, the hair dryer **10** may be disposed either on its legs **12***d* and **13***d* or its feet **34**. In FIGS. 1, 2 and 3, the hair dryer is illustrated as being supported on the feet **34**. In a device built in accordance with the present invention, three feet **34** were employed, two of them being disposed at either ends of the flattened portions **12***c* **13***c* and **14***c* of casing **11**, as indicated by the position of the screws **31** in FIG. 4 of the drawings, and the third foot disposed coaxially with the fastening means **19** shown at the upper end near the top of FIGS. 4 and 5 of the drawings.

The cover or lid **13** is preferably formed of the same molded plastic as the casing sections **12** and **14**, and in many respects is very similar to the section **12**, described above. The wall portion **13***a* is obviously the top of casing **11**, as viewed in the drawings. Like the bottom **12**, the circular wall portion **13***b* of cover **13** is provided with a continuous offset flange **13***e* corresponding to the flange **12***e* for engaging the upper edge of the wall portion **14***b* of the casing **11**, as clearly indicated in FIGS. 3 and 7 of the drawings.

For the purpose of pivotally relating the cover **13** to the casing section **14**, a pair of hinges **35** are provided having corresponding portions thereof riveted or otherwise secured to the flat portion **14***c* of the casing section **14**, as best shown in FIG. 2 of the drawings, and also having corresponding portions thereof riveted as by rivets **36** (FIG. 8) to the flattened portion **13***c* of cover **13**. Preferably the hinges are of the well known type which permit disconnection by moving the cover **13** along the axis of the pivot pins of the hinges **35** whereby cover **13** may be bodily separated from the remainder of the hair dryer **10**. In accordance with the present invention, the cover **13** is provided with a pair of integral posts

13*f* for supporting a resilient strap 36' for retaining a cap or hood 37 of the hair dryer within the cover, as clearly shown in FIG. 2 of the drawings when not in use. The particular construction of the hood or cap 37 forms no part of the present invention, but may be like that disclosed and claimed in Jepson Patent No. 3,006,079. Such a cap will include an air discharge opening 38, which may be identical with the corresponding air discharge opening in the above-mentioned Jepson patent, identified in the patent by the reference numeral 32, and an air inlet passageway defined by a suitable rigid grommet or other means 39 and located essentially in the same position as that disclosed in Jepson Patent No. 3,006,079. As illustrated in FIG. 2 of the drawings, the grommet may be formed of a molded plastic and to provide the desired rigidity may include integral cross shaped reinforcing members 39*a* engaging the periphery of a rigid grommet 39 which reinforcing members also limit the insertion of the cap end of the air hose 28 described hereinafter.

In order that the cover may be latched in a closed position, the inside wall of the circular wall portion 13*a* opposite the hinges 35 is preferably provided with a latch projection 13*g*, for making latching engagement with a hook-shaped latching member 40 (FIG. 2 of the drawings) suitably mounted on a resilient leaf spring, not shown, secured to the interior of wall portion 14*b* as by suitable rivets or the like. Preferably latching member 40 is provided with an integral fingerlike projection 40*a* extending through an opening in the wall portion 14*b* which may be depressed by the user to deflect the leaf spring, not shown, and unlatch the cover 13 from the remainder of the hair dryer casing 11.

So that the user may readily carry the hair dryer 10 to any desired place, a suitable loop-type handle or strap 41 is provided connected to a suitable ring 42 which may be secured in any suitable manner to the casing 11 as by a metal strap 43 riveted or otherwise secured to the casing 11. Also, for aesthetic purposes, the exterior of the wall portion 14*b* may be covered with a suitable decorative member, designated by the reference numeral 45 (FIG. 3), which in an embodiment built in accordance with the present invention involved a thin layer of material giving the appearance of gold. For matching purposes, the strap or handle 44 may also have a similar layer on the exterior thereof of corresponding color. Obviously, the decorative or asethetic features of the hair dryer of the present invention form no part of the present invention.

Considering now the motor driven fan unit 16 for producing a flow of air for drying the hair, it includes an electric motor 48 and a fan 49 drivingly connected thereto. The motor 48 is disposed in motor chamber 17, while the fan 49 is disposed in fan chamber 30. The motor might be similar to that disclosed in the above-mentioned Jepson patent but preferably comprises a shaded pole motor of conventional form having a field structure 48*a*, a field winding 48*b* and a motor shaft 50 drivingly connected to fan 49. In accordance with the present invention, the motor and fan chambers 17 and 30 are separated by a metal mounting plate 52 from which all of the electric parts are supported. Thus, the motor 48, fan 49 and a switch and heater, described hereinafter, together with mounting plate 52 comprise a subassembly. The mounting plate 52 includes a central opening 53 which defines an axial air inlet opening to the fan chamber 30. The fan 49 is preferably molded from a suitable plastic including a disklike plate 49*a* having curved blades 49*b* projecting upwardly therefrom. These blades extend from the periphery of disk 49*a* to the edge of axial inlet 53. Fan 49 also includes an integral central upstanding hub portion 49*c* into which is molded a suitable bushing 54.

In order that motor 48 may be secured to mounting plate 52 with the motor shaft 50 extending through axial air inlet 53, a plurality of tubular rivets and spacing members 56 (FIGS. 5 and 6) are secured to mounting plate 52 so as to extend upwardly therefrom into motor chamber 17 when the hair dryer is assembled as shown in the drawings. These rivets are provided with tapped openings for receiving suitable fastening means 57 shown as extending through the field structure 48*a* of the motor 48. These rivets 56 also space the motor 48 above the mounting plate 52. The lower end of motor shaft 50 is threaded and the fan 49 is secured to the subassembly including the mounting plate 52 by inserting the motor shaft 50 into the bushing 54 of the fan until one end of the bushing engages the C-ring 58 (FIG. 3) secured to the motor shaft 50, whereupon the fan 49 is clamped by a clamping nut 59 in the position shown in FIG. 3 of the drawings against the C-ring 58.

The subassembly comprising the motor fan unit 16 and the mounting plate 52 is secured to the casing section 14 by the fastening means 18 described above (FIGS. 3, 4 and 5), which fastening means extend through the mounting plate 52 and engage the tapped openings in the inserts molded into the posts 14*f*. For properly orientating the mounting plate 52 and so that the casing section 12 and the associated feet 34 may be secured to the remainder of the casing 11, the mounting plate 52 is provided with peripheral projections 52*a*, 52*b* and 52c which are disposed in the plane of the disklike mounting plate 52. The spiral wall portion 14*h* (FIG. 5) is provided with a discontinuous portion defining a notch 60 for receiving the peripheral projection 52*a*, thus properly orientating the mounting plate 52. The projections 52*b* and 52*c* are provided at one edge with notches 61 for receiving suitable U-shaped speed nuts 62. Moreover, the projections 52*b* and 52*c* are provided with openings aligned with the threaded portion of the speed nuts 62 for receiving the fastening means 31. Since the mounting plate 52 is rigidly secured to the casing section 14, the fastening means 31 then secure the associated feet 34 and the casing section 12 to the mounting plate. Moreover, the fastening means 19 secures the other foot 34 to the casing section 14 as well as aids in securing casing section 12 to casing section 14.

From the above description, it will be apparent that air drawn through the axial fan inlet 53 and into the fan chamber 30 must enter the motor chamber 17 through the grillwork 14*e* and, hence, will serve to cool the electric motor 48. Also, the mounting plate 52, being of large area, provides a heat dissipating structure for heating means described hereinafter, and the air passing over the motor 48 will also tend to cool the mounting plate 52, and hence, protect the plastic casing 11 from being subjected to high temperatures. The fan 49 will discharge the air tangentially into the passageway 20 and cause it to flow toward the circular opening defined by the flanges 12*h* and 14*n* which are provided for making an airtight connection with the flexible conduit 28 as described above.

In order to provide heating means so that warm, medium or hot air may be supplied to the hose 28 for drying purposes, there is provided a suitable multiheat heater unit, generally designated at 64 (FIGS. 4, 5 and 7), which heater unit is disposed within the air passageway 20 adjacent the inlet to the air hose 28. The heater unit 64 comprises a pair of heater elements 65 and 66 which may be identical with the corresponding heater elements of the above-mentioned Jepson patent which are designated as 85*a* and 85*b* in that patent. These heater elements each comprise an insulating card such as mica or the like having corrugated edges about which is wrapped a suitable resistance wire, the corrugations causing the turns thereof to remain separated. Preferably, one of the heater elements 65 or 66 is a higher resistance element than the other so as to produce a lower wattage output whereby different heating is obtained by selectively energizing one or the other of these resistors. In an embodiment built in accordance with the

present invention, one of the resistors had a resistance of between ninety-seven and one hundred three ohms, and the other had a resistance of between one hundred fifty-four and one hundred sixty ohms. For a purpose which will become apparent from the ensuing description, the insulating cards upon which the resistors are wound defining the heater elements **65** and **66** are provided at either end with edge projections **68**, best shown in FIG. 4 of the drawings, where the edge projections from one edge adjacent the ends thereof are shown. It will be understood that identical edge projections are provided from the opposite edge of the insulating cards defining heater elements **65** and **66**.

For the purpose of supporting the heater elements **65** and **66** within the fan outlet passageway **20**, and also to protect the casing **14** from the high heat produced when the electric heater elements **65** and **66** are energized, there is provided a combined support and shield element **69** which comprises a thin sheet of highly reflective material which is deformed to define a tubular sleeve with slits at the edges to receive the projections **68** and, hence, to support the heater elements **65** and **66** within an effectively open-ended tube in generally spaced parallel relationship. The ends of the support and reflector **69**, which are deformed into abutting relationship to define the tubular sleeve, are provided with integral supporting tab members **69***a* which are riveted as indicated at **70** to the mounting plate **52**. The spiral wall portion **14***h* is provided with a notch **71** to permit the tabs **69***a* to extend therethrough. It will be apparent that the heater unit **64** also comprises a part of the subassembly including the mounting plate **52** and the motor fan unit **16**. It will also be apparent that once the tabs **69***a* are riveted to the mounting plate the heater elements **65** and **66** are rigidly supported in the air passageway **20** by virtue of the projections **68** and corresponding slits in the sleeve **69**.

For the purpose of selectively controlling the motor **48** and the electrical heater unit **64**, and hence for selectively controlling the temperature of the air supplied to the hose **28**, there is provided a knob control switch generally designated at **74** of which the knob **26** described above is a part. The particular construction of this knob control switch **74** forms no part of the present invention and it preferably is identical with that disclosed and described in great detail in the above-mentioned Jepson patent. The present invention is primarily concerned with the mounting arrangement of this knob control switch **74** which comprises a rectangular housing **75**, best shown in FIGS. 3, 5, 6 and 9 of the drawings. As illustrated, the housing **75** is generally rectangular and is supported by a projection **52***d* of the mounting plate **52** extending into the axial fan inlet **53**, as best shown in FIGS. 4 and 6 of the drawings. The switch housing **75** is provided with a pair of depending fingers **75***a* (FIGS. 3 and 6) which are disposed one on either side of the projection **52***d*. Moreover, the upper portion of the switch housing **75** is supported by depending projections **14***p* integrally formed with the casing section **14**. When supported in this manner, the knob control switch **74** is disposed so that the knob **26** partially projects through the opening **23** and an index portion **26***a* of this knob cooperates with suitable indicia designated at **77** (FIG. 2) defined on the top of housing section **14***e*. In an embodiment built in accordance with the present invention, this indicia involved the words "OFF," "COOL," "WARM," "MEDIUM" and "HOT," thus indicating five operating conditions of the knob control switch **74**. In FIG. 2 of the drawings, the indicator portion **26***a* of the knob **26** is in the "OFF" position, which means that neither the motor **48** nor the heater unit **64** is energized.

In order selectively to retain the knob **26** in any one of the selected positions, there is provided a detent **77'** riveted to the top of the switch housing **75**, as indicated at **78** (FIG. 9), which detent extends beneath an annular rim **26***b* of the knob **26**. The inside of this annular rim is provided with a plurality of notches **79** for receiving the detent and, hence, selectively positioning the knob.

It will be understood that electrical connections between the power cord **24**, the motor **48** and the heater unit **64** are provided in a manner substantially identical with that disclosed in the above-mentioned Jepson patent so that unheated air or air of any one of three different temperatures may be supplied to the conduit **28**. The heater unit **64** will provide two different temperatures by energizing one or the other only of the heater elements **65** or **66** and a higher temperature is provided when both of these heater elements are energized in parallel.

From the above description, it will be understood that the support and shield **69** formed of highly reflective materials prevents the heat produced by the heater unit **64** from deleteriously affecting the casing **11**. Furthermore, the tab members **69***a* conduct heat to the mounting plate **52** which forms a good heat dissipator for heat which is not supplied to the air flowing through discharge passageway **20**.

The flexible conduit **28** may be like that disclosed in the above-mentioned Jepson patent, comprising a corrugated hose reinforced by a spiral steel wire covered with a plastic material bonded to the hose. For the purpose of connecting this flexible conduit to the outlet of passageway **20**, which connection is permanently made, there is provided a hose coupling **81** of rigid molded material, as best shown in FIGS. 3, 4 and 5, which is provided with a peripheral groove **80** for receiving therein the circular flanges **12***h* and **14***n*, thus not only securing the flexible conduit **28** in operative position, but also providing an effective airtight connection between the discharge passageway **20** and the flexible conduit **28**. The other end of the air conduit **28** is preferably provided with a suitable coupling member **82** (FIG. 2) of molded plastic material for insertion into the air intake opening defined by the grommet **39**.

In view of the detailed description included above, the operation of the present invention will readily be understood by those skilled in the art and no further discussion thereof is included herein. It will be appreciated that the flexible conduit **28**, power cord **24** and cap or hood **37** can be stored in casing **11** as clearly indicated in FIG. 2 of the drawings. The conduit **28** is always connected to the outlet from fan chamber **30** so the user of the hair dryer need merely open the cover **13**, plug in the power, manipulate the controls and connect the conduit **28** to cap **37**.

While there has been illustrated and described a particular embodiment of the present invention, it will be understood that numerous changes and modifications may occur to those skilled in the art. It is, therefore, intended in the appended claims to cover all such changes and modifications as fall within the true spirit and scope of the invention.

What is claimed as new and desired to be secured by Letters Patent of the United States is:

A hair dryer comprising a casing including a first portion of substantial depth and a second cover portion pivotally related to said first portion, said first portion including integral means defining a false bottom spaced from the bottom of said first portion to define a fan chamber and a scroll-shaped discharge chamber for said fan chamber, said first portion including adjacent the center of said false bottom an integral raised section defining a motor chamber within said raised section and an annular storage chamber surrounding said raised section, a motor operated fan unit mounted in said first portion with the motor of said unit comprising an electric motor disposed in said motor chamber and the fan of said unit disposed in said fan chamber, a flexible conduit connected to said scroll-shaped discharge chamber

from within said annular chamber whereby said conduit may be stored in said annular chamber while connected to said discharge chamber, an electric power cord connected to said motor through said false bottom whereby said cord may be stored in said annular chamber when not in use, and control means for said unit accessible at the top of said raised section.

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