Oct. 9, 1962 L. I. FREEDMAN ETAL 3,057,364

HAIR-DRYING IMPLEMENT

Filed May 3, 1960

Fig. 1.

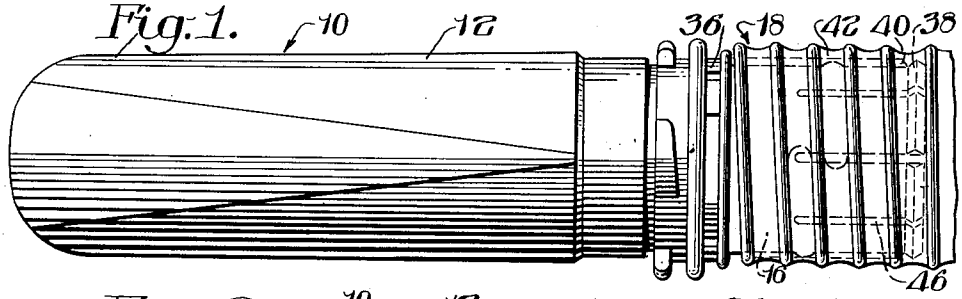


Fig. 2.

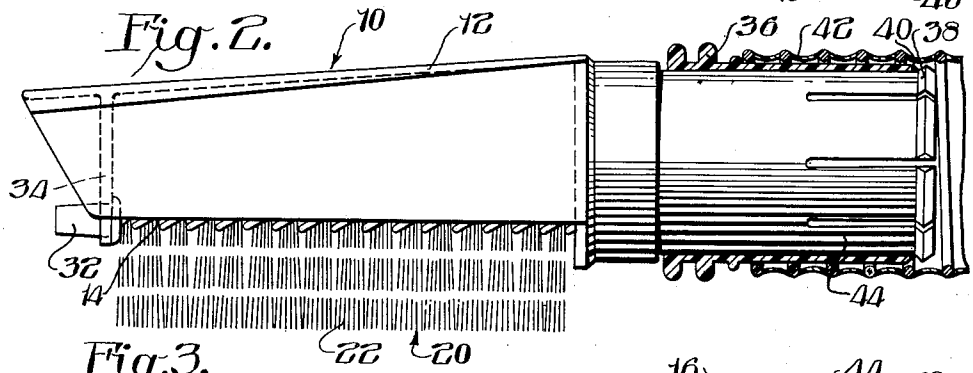


Fig. 3.

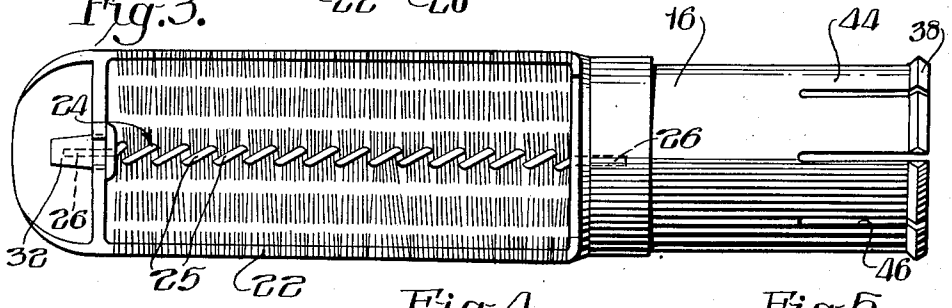


Fig. 4.

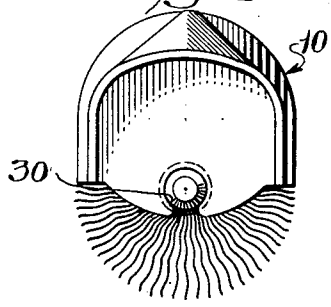
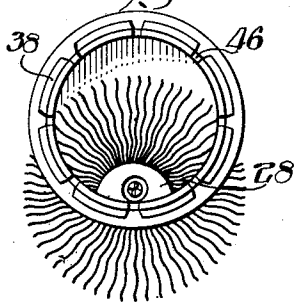


Fig. 5.



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3,057,364
HAIR-DRYING IMPLEMENT

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7 Claims. (Cl. 132—9)

This invention relates to an attachment which is connected to a source of heated air by means of a flexible hose, and it more particularly relates to an attachment of this type in the form of a brush.

Various comb and brush attachments are utilized in conjunction with hair dryers to provide a means for directing heated air through the hair as it is being combed or brushed. The principal requirements of such an attachment are uniformity of air distribution without undue obstruction of air flow by a unit of economical structure. The attachment should also be capable of free manipulation, and its operative elements should be easily cleaned, long wearing and conveniently replaceable.

An object of this invention is to provide an efficient type of hair-drying brush through which a stream of heated air is discharged.

Another object is to provide a simple and economical form of such a brush.

In accordance with this invention an elongated tubular casing with an open side is connected to tubular connecting element for coupling it to a hose assembly. An elongated brush insert incorporating a multiplicity of bristles is mounted within the open side of the casing with its bristles substantially filling the interior and open side for evenly distributing the air flowing through the casing over the entire working area of the brush. A convenient brush insert of this type has a multiplicity of bristles extending radially 360° about a longitudinal spine. This type of brush insert is detachably mounted in a manner which permits it to be rotated to position unworn portions outside of the casing. This mounting is conveniently provided by extending the spine past the ends of the bristles and inserting it within suitable apertures in the ends of the casing. Furthermore, a convenient free-wheeling means of connecting this brush to a hose is provided by splitting the end of the tubular connector remote from the casing into a number of fingers including projections upon their outer ends which rotatably lock it in back of a shoulder within a hose assembly supplying heated air.

Novel features and advantages of the present invention will become apparent to one skilled in the art from a reading of the following description in conjunction with the accompanying drawings wherein similar reference characters refer to similar parts and in which:

FIG. 1 is a plan view of one embodiment of this invention engaged with the end of a hose supplying a flow of heated air;

FIG. 2 is a side view in elevation of the embodiment shown in FIG. 1, partially in cross section;

FIG. 3 is a bottom plan view of the embodiment shown in FIG. 1;

FIG. 4 is a left-hand elevation of the embodiment shown in FIG. 3; and

FIG. 5 is a right-hand elevation of the embodiment shown in FIG. 3.

A hair-drying brush **10** is shown in FIGS. 1–5 incorporating an elongated tubular casing **12** having an open side **14**. A tubular conduit **16** is connected to one end of casing **12** for conducting a flow of heated air into it from a hose assembly **18** into which tubular conduit **16** is shown inserted in FIGS. 1 and 2. An elongated brush

insert **20** is shown in FIGS. 2 and 3 mounted within open side **14**. Insert **20** incorporates a multiplicity of bristles **22** which substantially fill the interior of casing **12** and open side **14** for evenly distributing the air over the entire working area of the brush. Bristles **22** of element **20** extend radially 360° about a longitudinal spine **24** which is, for example, made from a pair of twisted wires **25** which confine bunches of bristles **22** between their turns. These bristles are, for example, made of nylon to provide durability and ease of cleaning.

The ends **26** of spine **24** extend past the sides of bristles **22** to provide a convenient means for attaching insert **20** within the open side **14** of casing **12**. Ends **26** are accordingly inserted within a loop **28** shown in FIG. 5 and a slot **30** shown in FIG. 4. The end **26** inserted within slot **30** is confined within it by its prior insertion within a button **32** of a resilient material such as rubber or neoprene which resiliently engages one end of spine **24** within the undercut slot **30**. This mode of attachment permits the brush to be periodically rotated to position unworn portions outside the casing and greatly facilitates removal of the brush for cleaning and washing and eventual replacement when necessary.

The front wall **34** of the casing is, for example, perpendicularly arranged with respect to the longitudinal axis of casing **12** and this disposition helps distribute the air uniformly in conjunction with the guiding effect of the bristles disposed both inside and outside of the casing.

Tubular conduit element **16** provides a free-wheeling connection within coupling adapter **36** by virtue of its smooth outer surface which is locked within adapter **36** by projections **38** which snap behind shoulder **40** provided by the end of adapter **36** disposed within hose **42**. This snap type of engagement is provided by splitting the end of tubular conduit **16** into a number of fingers **44** separated by slots **46**. Since tubular conduit **16** together with casing **12** is made of a resilient material such as an impact resistant molded plastic, fingers **44** inherently flex sufficiently to engage behind shoulder **40** and maintain the connection between the brush and hose assembly **18** without preventing free rotation of the brush which highly facilitates its manipulation.

What is claimed is:

1. A hair-drying implement comprising an elongated tubular casing having an open side and an end wall, a tubular conduit element connected to the open end of said elongated casing for conducting a flow of heated air thereto and for connecting said implement to a source of heated air, a functional insert mounted upon said open side of said casing, axially slidable projection and loop means connecting one end of said insert within the open end of said open side of said casing, laterally interlocking projection and slot means connecting the other end of said insert to said end wall of said casing, said laterally interlocking projection and slot means including an undercut slot in said end wall, said laterally interlocking projection and slot means including a projection extending from an end of said insert, a button of elastic material being secured over said projection, and said button having a width which passes through the entrance to said undercut slot and expands within it for detachably securing its end of said insert to said end wall after said axially slidable projection and slot means is engaged thereby detachably securing said functional insert to said casing.

2. A hair-drying implement as set forth in claim 1 wherein said button is cylindrically formed and includes a shoulder which is disposed within said end wall when said insert is attached to said casing.

3. A hair-drying implement as set forth in claim 1 wherein said undercut slot includes a circular portion

and a smoothly curved entrance whose width is less than the diameter of said circular portion.

4. A hair-drying implement as set forth in claim 1 wherein said functional insert is a brush, and said brush insert incorporating a multiplicity of bristles which substantially fill the portion of the interior of said casing disposed adjacent said open side for evenly distributing said heated air over the entire working area of said open side of brush.

5. A hair-drying brush as set forth in claim 1 wherein said functional insert is a brush consisting of a longitudinal spine and bristles extending radially from said spine.

6. A hair-drying brush as set forth in claim 5 wherein said bristles extend radially 360° about said spine to provide a substantially cylindrical brush insert and the means mounting said brush insert are rotatable to permit selected portions of said brush to be positioned outside of said casing.

7. A hair-drying brush as set forth in claim 6 wherein said spine includes a pair of twisted wires, said bristles being confined between said twisted wires, and the ends of said spine extending longitudinally a short distance past both sides of said bristles to provide a portion of said rotatable means for mounting said brush insert within the open end of said casing.

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