W. B. VAN EPS.

SCALP SPRAYER.

APPLICATION FILED APR. 4, 1908.

910,884.

Patented Jan. 26, 1909.

Fig. 1.



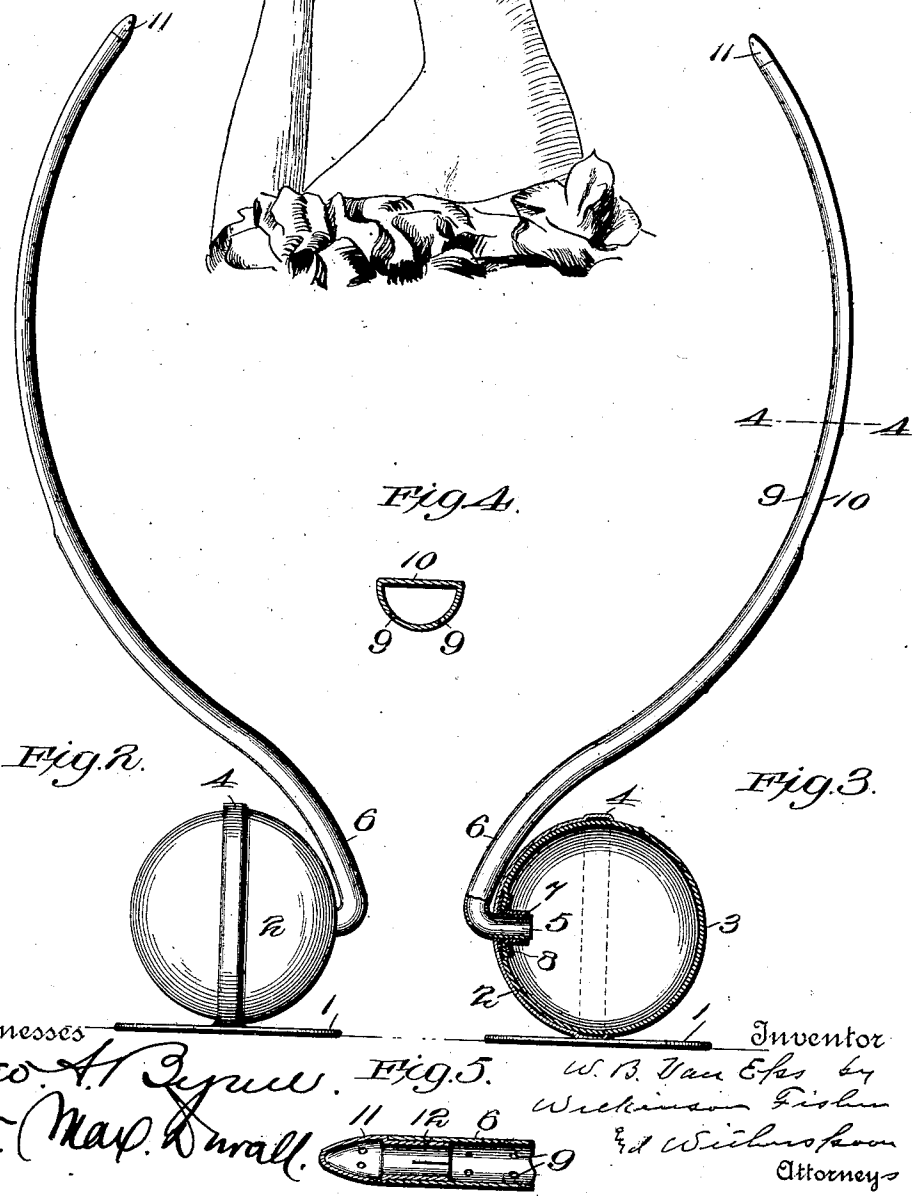


Fig. 4.

Fig. 2.

Fig. 3.

Fig. 5.

Witnesses

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SCALP-SPRAYER.

No. 910,884. Specification of Letters Patent. Patented Jan. 26, 1909.

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To all whom it may concern:

Be it known that I, WILLIAM B. VAN EPS, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Scalp-Sprayers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to sprayers for the scalp, and the object of my invention is to produce such a device which will be easily inserted under a heavy suit of hair, such as is usually worn by women, and will at the same time be capable of spraying the scalp with a hair tonic, or other lotion, without wetting the outside surface of the hair, and thereby rendering it necessary to dry the same.

To these ends my invention consists in the novel structure and combination of parts hereinafter more fully described and particularly pointed out in the claims.

Referring to the accompanying drawings forming a part of this specification in which like numerals indicate like parts in all the views;—Figure 1, illustrates the mode of using my improved scalp sprayer. Fig. 2, is an elevational view of the same as it sits upon a table or other support. Fig. 3, is a like view showing the compressible bulb and its connection with the pipe in section. Fig. 4, is an enlarged sectional view of the pipe along the line 4—4 of Fig. 3, and Fig. 5, is an enlarged detail sectional view of the tip end of the spraying pipe.

1, represents a base made of thin sheet metal; 2, a hollow semi-spherical shaped shell into which fits the spherical bulb 3, and which is provided with the flanged or beaded edge 4, as shown.

Through an orifice in the shell 2, projects the bent end 5, of the pipe 6, and over said end 5, snaps the bulb 3, as shown. For this purpose, the said bulb is provided with an orifice which is reinforced by the tubular piece 7, provided with the flanges 8, or by any other suitable means. The spraying tube 6, is provided with a double row of radial perforations 9, as best shown in Fig. 4, and is preferably flattened or otherwise restricted opposite these perforations in order that a greater pressure may be exerted upon the fluid while being ejected through said perforations 9. The end of the tube 6, may be closed in any suitable manner, but I prefer to provide the same with the frictionally held tip 11, best shown in Fig. 5, and which is provided with the split tongue 12, which snaps into the end of the tube 6, and is held there by the natural resiliency of said tongue. The structure is such that the tip 11, may be withdrawn at any time, in order to clean the tube, and yet the friction is sufficient to hold the said tube closed while the sprayer is in use. The curve in the tube 6, is made to conform to the natural shape of the scalp, and the said tube is sufficiently long to readily reach under a heavy suit of hair and to spray any portion of the scalp.

It is to be especially observed that the length of my tube, as well as its narrow dimensions, prevents any difficulty being experienced in readily reaching the surface of the scalp through a heavy suit of hair, without disarranging the same. This is a result that could not be accomplished by a comb like or other structure, that is not provided with a long reaching projection of sufficient dimensions to reach substantially any portion of the scalp when entered underneath the hair.

Another important feature of my invention likewise resides in the slim tube like structure, in that the single long tube enables the user, while holding the device as shown in Fig. 1, to insert the tube into a bottle or other necked receptacle containing the liquid to be applied, and by simply compressing and expanding the bulb to fill the tube, which can be then immediately applied to the scalp as illustrated. This avoids all annoyance heretofore experienced in getting the liquid from the bottle into the sprayer, and furthermore does not involve the soiling or even the wetting of the hands.

In operation the scalp sprayer rests upon the bureau or other support in an upright position, as shown, the user grasps the same between the thumb and fingers, inserts the tube under the hair, without disarranging or disturbing the same, ejects the fluid by compressing the bulb, and then, if more fluid is desired, merely inserts the tube into the bottle containing the hair tonic or other lotion, fills the same and applies the tube again under the hair to another portion of the head.

Of course I do not desire to be limited to the exact details of construction herein disclosed, since it is evident that the same may be varied within the scope of the appended

claims without departing from the spirit of my invention.

What I claim is:—

1. A scalp sprayer consisting of a base; a shell attached to said base; a compressible bulb in said shell; and a single tube substantially smooth on its exterior and curved to fit the contour of the head; provided with radial orifices attached to said bulb and adapted to reach under the hair and spray the scalp, substantially as described.

2. A scalp sprayer consisting of a base; a hemispherical shell attached to said base; a compressible spherical bulb in said shell; and a single tube curved to fit the contour of the head, and flattened for a portion of its length; provided with a double row of radial perforations attached to said bulb, and adapted to reach under the hair to spray the scalp, substantially as described.

3. A scalp sprayer consisting of a base; a hemispherical shell provided with a raised bead at its edge attached to said base; a compressible spherical bulb in said shell provided with a reinforced orifice; and a single curved tube provided with a double row of radial perforations attached to said bulb, and adapted to reach under the hair to spray the scalp, substantially as described.

4. A scalp sprayer consisting of a base; a hemispherical beaded shell attached to said base and provided with an orifice; a compressible bulb also provided with an orifice and having a tubular piece provided with flanges reinforcing said orifice; and a single curved tube having a bent portion connected to said bulb and passing through said orifices, and provided with a double row of radial perforations, said tube being of sufficient length to reach under the hair for spraying the scalp, substantially as described.

5. A scalp sprayer consisting of a base; a hemispherical beaded shell rigidly attached to said base, and provided with an orifice; a compressible spherical bulb closely fitting said shell, provided with an orifice having a reinforcing tubular piece provided with flanges fitting each side of said orifice; a single tube curved to fit the contour of the head, provided with a double row of radial spraying openings, and having a bent portion entering the orifices of said shell and bulb; and a detachable closure for the extreme end of said tube, substantially as described.

In testimony whereof, I affix my signature, in presence of two witnesses.

WILLIAM B. VAN EPS.

Witnesses:
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