HANNAH JACOBS & HARRY JACOBS.

HAIR WAVING APPARATUS.

APPLICATION FILED MAR. 23, 1916.

1,268,848. Patented June 11, 1918.

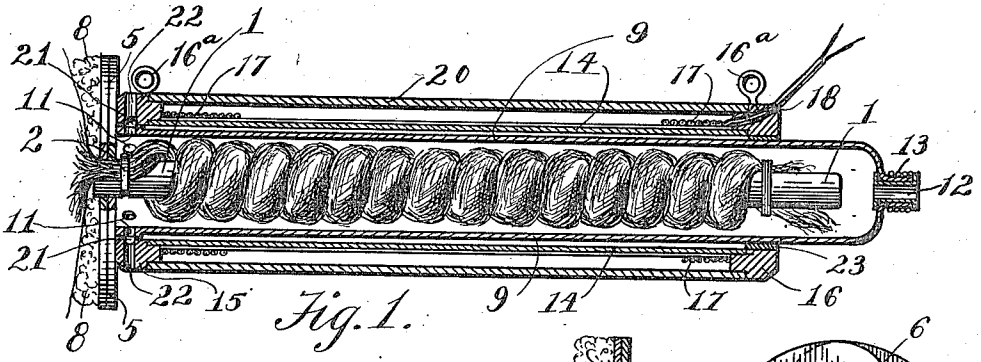


Fig. 1.

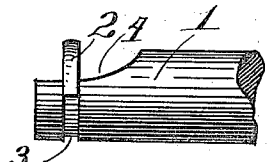


Fig. 2.

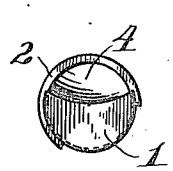


Fig. 3.

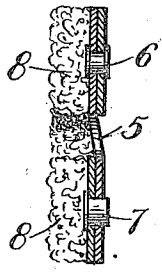


Fig. 4.

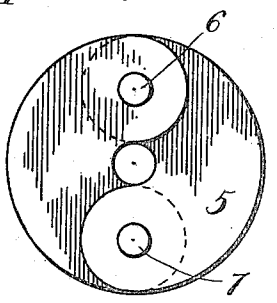


Fig. 5.

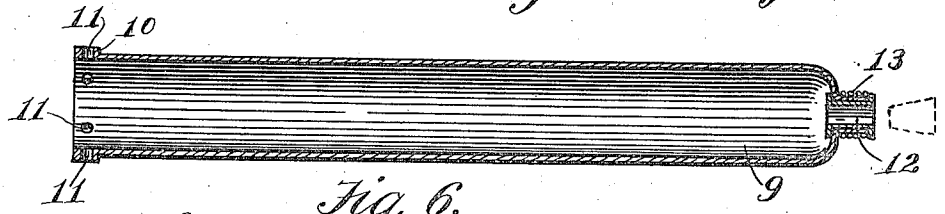


Fig. 6.

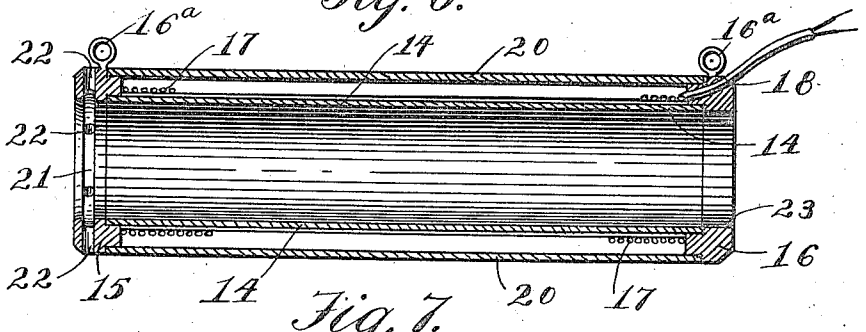


Fig. 7.

Witnesses:
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UNITED STATES PATENT OFFICE.

HANNAH JACOBS AND HARRY JACOBS, OF NEW YORK, N. Y.

HAIR-WAVING APPARATUS.

1,268,848. Specification of Letters Patent. Patented June 11, 1918.

Application filed March 23, 1916. Serial No. 86,199.

To all whom it may concern:

Be it known that we, HANNAH JACOBS and HARRY JACOBS, citizens of the United States, and residents of New York, in the county of Kings and State of New York, have invented certain new and useful Improvements in Hair-Waving Apparatus, of which the following is a specification.

This invention relates to improvements in hair waving or curling appliances and has particular reference to that class of apparatus which employs an electrical heating means.

The practice, in the employment of such devices is, first to wind a number of strands of hair about a stem, inclose this stem within a tube of paper or other material and then inclose this tube within a cylinder comprising an electrical heating element. This element through the medium of an electrical resistance heats the compartment, formed by the tube inclosing the hair, to a high temperature and dries out all the moisture in the hair and causes same to retain the curled shape in which it was wound upon the stem.

The said drying out process, (the hair having been moistened prior to winding) is greatly facilitated and the best results are obtained when a current of air is allowed to pass over the hair, which is curled upon the stem, while same is being heated. The various devices heretofore in use allowed only for the escape of gases or hot air; but no provision was made for permitting a flow of fresh air over the curl of hair.

In conjunction with other improvements we provide an apparatus wherein the heating or drying chamber is provided with an inlet and outlet passage for air, thereby allowing a free current of air to pass over the hair during the process of drying.

It is obvious that such a condition produces a natural drying process which is more beneficial to the hair than the methods in which such a circulation of air is not allowed.

A further advantage derived by the employment of our device, is the increased speed by which the hair may be waved.

Other features of advantage are embodied in our device which will be hereinafter fully described.

In the drawings Figure 1 is a sectional view of our device applied and in operation; Fig. 2 is an enlarged detailed side view of the end of the curling stem; Fig. 3 is an end view of same; Fig. 4 is a sectional detail of the shield which is applied against the head to protect same from the heat; Fig. 5 is rear view of same; Fig. 6 is a section of the hair inclosing tube which, with the aforementioned shield, forms the heating or drying chamber and Fig. 7 is a sectional view of the heat producing element.

Throughout the drawing, similar numerals refer to similar parts. 1 is the winding or curling stem about which the hair is wound, after having been moistened, 2 is a split sliding ring engaging in a groove 3 upon the stem 1. The said ring 2 is adapted to hold the strands of hair upon the stem 1, at the beginning of the winding, in the cut out portion 4 and eliminates the necessity of tying same at that point. The outer end of the coil of hair may be clamped by any suitable means or be fastened by a string in the usual manner.

A protecting shield 5, comprising two members pivoted at one point 6, and provided with any suitable snap catch 7, is employed as a protection to the head and is provided with an absorbent base 8, preferably sponge which may be moistened when in use.

The winding stem 1 with the attached hair is inclosed within a tube or casing 9, constructed of stiff non-absorbent material and formed with an annular reinforcing ridge 10 at one end, the said annular ridge 10 being provided with vents or air inlets 11. The other end of the said tube 9 is provided with a collar 12 which forms an air outlet passage and about which the outer end of the tube 9 is fastened as at 13.

The heating element consists of a hollow metal tube or cylinder 14 to which are secured the shoulders 15 and 16 which are in turn provided with the suspending hooks 16^a. A coil of insulated resistance wire 17 is wound about the metal cylinder 14 and having terminals extending through the shoulder 16 as at 18. A sheet of mica or asbestos may be interposed between the wire coil 17 and the cylinder 14. As a further heat insulator and protector we provide a casing 20 which may be of metal or fibrous material.

The shoulder 15 is formed with an annu-

lar internal groove 21 and radial openings or passages 22 extending from said groove 21 outwardly through said shoulder 15.

The shoulder 16 may be provided with a sealing band 23.

The said heating element engages over the aforesaid tube or casing 9 so that the groove 21 lines up with the vents 11 and provides an air inlet into the chamber formed by the said tube 9 and shield 5. The opening 12 forms the outlet passage.

The whole apparatus may be suspended in any approved manner from the ceiling or from a suitable frame.

By permitting a circulation of air over the hair during the process, the drying is quickened by permitting the displacement, by air, of the vapors in the compartment and after a reasonable time the opening 12 may be closed for a very short interval by means of a cork as indicated by dotted lines in Fig. 6 although this latter procedure, in most cases, is not very desirable.

It is obvious that we may embody various modifications without departing from the spirit of our invention; we do not therefore wish to be understood as limiting ourselves to the particular construction shown.

What we do claim and desire to secure by Letters Patent is:

In a hair waving and drying apparatus, a heating and drying chamber formed of non-absorbent walls and adapted to incase a winding stem having hair wound thereon, an electric resistance unit formed upon said non-absorbent wall and adapted to supply heat to the said drying chamber, a flexible heat insulating member adapted to close the open end of the drying chamber incasing the said stem and hair, and inlet and outlet air passages formed upon the said heating and drying chamber and provided to allow a current of air to pass over the hair on the stem while same is being heated.

Signed at Brooklyn, in the county of Kings and State of New York, this 20th day of March, A. D. 1916.

HANNAH JACOBS.
HARRY JACOBS.

Witnesses:
WILLIAM L. CHAMBERS,
JAMES A. CORBETT.