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METHOD OF AND MEANS FOR PERMANENTLY WAVING HAIR

Original Filed Jan. 21, 1932

Fig. 1.

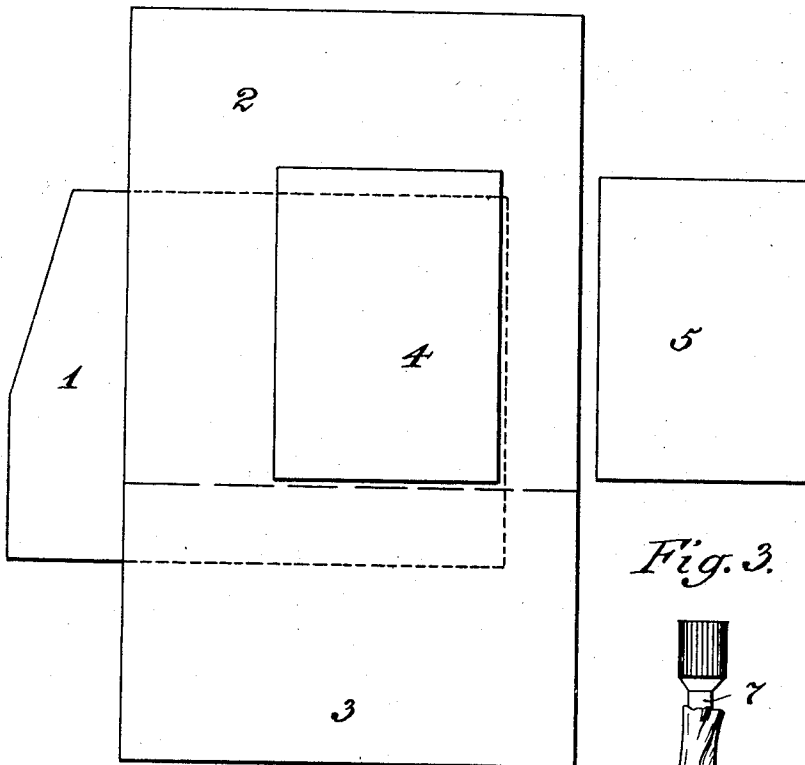


Fig. 2.

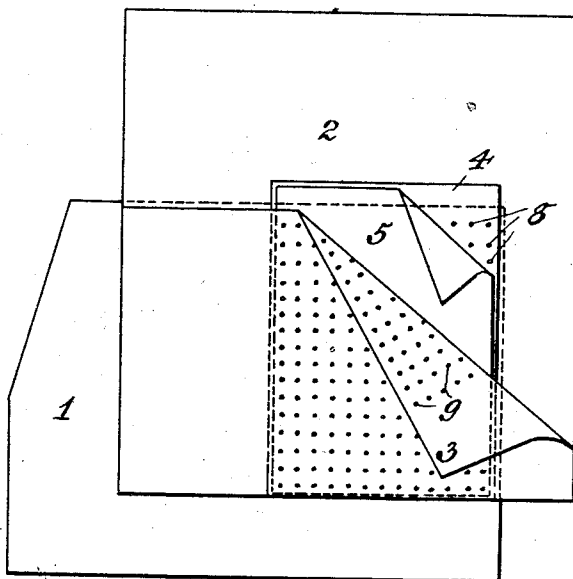


Fig. 3.

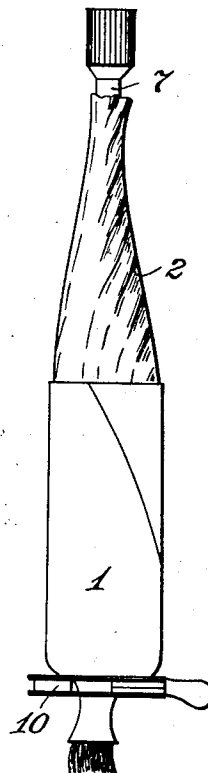
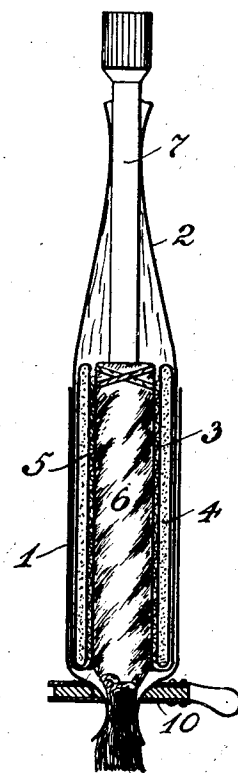


Fig. 4.



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METHOD OF AND MEANS FOR PERMANENTLY WAVING HAIR

Original application filed January 21, 1932, Serial No. 587,890. Divided and this application filed November 10, 1932. Serial No. 641,979.

This invention relates to that class of hair waving in which a so called permanent wave is imparted to a pre-formed tress of hair by subjecting the tress to the action of a heating chemical, such as calcium oxide, which, when moistened, will of itself generate sufficient heat to impart a permanent wave to the said tress.

This invention comprises a novel method of controlling the development of the heat generated by the self heating chemical wherein certain materials are used to delay the development of the heat over a longer period of time than could be done by the heating chemical itself.

I have discovered that by delaying the development of the heat generated by the exothermically acting chemical I am enabled to ensure the effective waving of the hair with a minimum liability of burning the hair or the scalp of the subject being treated and with the least possible discomfort to the subject.

I have found that the development of the heat generated by the reaction of the self heating chemical with its moistening solution may be delayed in several effective ways.

One way to delay the development of the heat is to combine certain salts, such as ammonium sulphate with the solution which is used to moisten the heating chemical. Still another way would be to use soluble neutral materials, such as sugar and dissolving the sugar in the solution which is used to moisten the heating chemical, to control its exothermic action. Still another way the heating action may be delayed would be to use a basic substance, such as ammonium hydroxide.

It is to be understood that the heating chemical may be used in its dry powdered state or that it may be pressed into easily friable cakes, in which case a suitable binder, such as dry glycerin, etc. may be used.

An example of a hair waving pad embodying my invention is represented in the accompanying drawing, in which:

Fig. 1 represents an inside plan view of the pad in its unwrapped condition, the inner absorbent sheet being shown at the side of

the pad and the inner wrapper sheet being shown unfolded;

Fig. 2 represents an inside plan view of the pad in its unwrapped condition after the inner wrapper flap has been perforated and the inner face of the chemical containing envelope has been perforated, the inner absorbent sheet being shown interposed between the inner face of the heating chemical containing envelope and the inner wrapper flap;

Fig. 3 represents a side view of the pad wrapped around a wound tress as in use; and

Fig. 4 represents a longitudinal central section through the wrapped pad.

The outer wrapper of the hair waving pad is denoted by 1 and is preferably made of non-absorbent material, as for instance paper. The inner wrapper is denoted by 2 and is preferably made of metal foil.

This inner wrapper is provided with a foldable flap 3. An envelope 4 composed of a perforable impervious material, such as metal foil, is attached to the inner face of the inner wrapper 2, which envelope contains a heating chemical, such as calcium oxide in powdered form, which chemical, when moistened, will of itself generate sufficient heat to impart a so-called permanent wave to a pre-formed tress when enclosed within the pad.

An inner removable sheet 5 of absorbent material, such as cotton fabric is arranged to be moistened and inserted between the flap 3 and the envelope 4 after the inner face of the envelope 4 and the folded over flap 3 of the inner wrapper have been perforated. The pressing of the flap back into place will squeeze the moisture from the wetted inner sheet into the envelope containing the heating chemical.

In practice, the tress 6 is wound as usual around a mandrel 7. The tress may be moistened either before or after it is wound, by a suitable waving solution, such for instance as an ammonia solution. The inner face of the impervious envelope 4 containing the hair waving chemical is perforated as shown at 8, and the folded over flap 3 of the inner wrapper may be perforated at the same time as shown at 9. The inner sheet 5 is moistened by water or by a suitable hair

waving solution, such as that used for moistening the tress 6.

The water or solution may be treated to produce the results hereinbefore set forth.

5 The pad is then wrapped around the pre-formed tress and is preferably secured in position at the scalp end of the tress by a suitable scalp protecting guard of well known or approved form, such for instance
10 as the self locking guard 10 shown in the accompanying drawing. The outer end of the pad may be secured around the mandrel 7, as for instance by twisting the outer wrapper of the pad around the same. The
15 exothermic action starts at once because of the application of moisture by the wetted inner sheet 5 of the pad to the self heating chemical through the perforations in the inner face of the impervious envelope. A
20 regulable heat is then set up within the pad in order to impart a so called permanent wave to the pre-formed tress without requiring application of heat from an outside source. It will be seen that the outside wrapper of the
25 pad serves to confine the heat to a large extent within the pad, the steam generated by the combination of the treating solution with the chemical being permitted to escape through the crimped outer end of the outer
30 wrapper.

This application is a division of my co-pending application filed January 21, 1932, Serial No. 587,890, entitled Method of and means for permanently waving hair.

35 What I claim is:

1. Imparting a permanent wave to hair by subjecting the hair to heat generated by the reaction of an exothermic material with a moistening medium, the natural develop-
40 ment of the heat being delayed by combining a suitable medium with the moistening medium.

2. Imparting a permanent wave to hair by subjecting the hair to heat generated by the
45 reaction of an exothermic material with a moistening medium, the natural development of the heat being delayed by combining a solution of a salt with the moistening medium.

3. Imparting a permanent wave to hair by
50 subjecting the hair to heat generated by the reaction of an exothermic material with a moistening medium, the natural development of the heat being delayed by combining ammonium sulphate with the moistening me-
55 dium.

4. Imparting a permanent wave to hair by subjecting the hair to heat generated by the reaction of an exothermic material with a moistening medium, the natural develop-
60 ment of the heat being delayed by combining a solution of a neutral substance with the moistening medium.

5. Imparting a permanent wave to hair by subjecting the hair to heat generated by
65 the reaction of an exothermic material with

a moistening medium, the natural development of the heat being delayed by combining a solution of sugar with the moistening medium.

In testimony, that I claim the foregoing as
70 my invention, I have signed my name this 28th day of October 1932.

RALPH L. EVANS.

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