

# UNITED STATES PATENT OFFICE.

THOMAS GROSSERT, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO ERNST UNGER,  
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COMPOSITION FOR USE IN WAVING OR CURLING HAIR.

1,064,901.

Specification of Letters Patent. Patented June 17, 1913.

No Drawing.

Application filed August 2, 1912. Serial No. 712,977.

*To all whom it may concern:*

Be it known that I, THOMAS GROSSERT, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Composition for Use in Waving or Curling Hair, of which the following is a full, clear, and exact description.

My invention relates to a method of waving, or curling the human hair on the head, and an object of the invention is to form the hair into waves or undulations to last until the hair grows, and which will not be affected by washing, sea bathing or weather conditions, and which will at the same time not affect the health, growth or texture of the hair.

Outlining the steps in order, the hair is first combed straight and separated into strands, and each strand is treated in a manner hereinafter to be described, the description of the treatment of one strand being sufficient. The strand is wrapped about a rod or steel tube to form a tight curl or helix, and is then saturated with a supersaturated solution, or rather a paste, preferably of a salt, particularly one containing sodium, and for the purpose of this disclosure a mixture composed of three parts of sodium hyposulfite ( $\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O}$ ), sodium tetraborate 48 parts (borax  $\text{Na}_2\text{B}_4\text{O}_{10} \cdot 10\text{H}_2\text{O}$ ) and 17 parts of water is used. While this combination and proportioning of salts and solvent is found to be admirably adapted for this purpose, of course, the proportions may be varied, or the chemical equivalents of the ingredients enumerated may be substituted therefor.

The saturated wet hair is then wrapped in a covering, such as a flannel cloth; the cylinder thus formed is then inserted into a bag, preferably of paper or similar material, and about a teaspoonful of a dry powder formed of a mixture of sodium hyposulfite three parts and sodium tetraborate 48 parts is introduced, after which the bag is closed and the same inserted into a suitable heating tube. One form of tube

suitable for this purpose is disclosed in Patent 1,029,861, issued June 11, 1912 for a hair steaming device. To protect the head and scalp from the heating action of the tube a suitable protecting covering is placed on the head at the base of the strand of hair. The wrapped hair is there subjected to heat at a temperature of about  $800^\circ \text{F}$ . for about ten minutes, after which the heat is reduced to room temperature and the hair allowed to remain in the tube for about five minutes longer, after which it is removed from its wrappings, shampooed and dressed as desired. This process gives an undulation or curl which will remain until the hair grows.

While a heating step has been recited in this method, it must not be assumed that this is a drying step, for any drying that may take place is merely incidental, and, as near as applicant is able to determine, the action is an impregnating of the capillary tubes while the latter is in an abnormal or coiled position.

While the several steps have been recited in some detail, it may be understood that the steps can be abbreviated, such, for instance, as omitting the paper covering, or omitting the introduction of the dry powder, it being merely necessary as the basis of this invention to subject the hair when curled and confined to a wet heat in the presence of a salt.

Having thus described my invention, what I claim to be new and desire to protect by Letters Patent in the United States is:

1. A composition for use in waving hair comprising a mixture of sodium tetraborate and sodium hyposulfite.

2. A composition for use in hair dressing comprising sodium tetraborate 48 parts, sodium hyposulfite 3 parts and water 17 parts.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

THOMAS GROSSERT.

Witnesses:

G. LEHNERT,  
M. HUTH.