Dec. 22, 1925. 1,566,522

R. CARLES

PROCESS FOR CURLING HAIR

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Fig. 1.

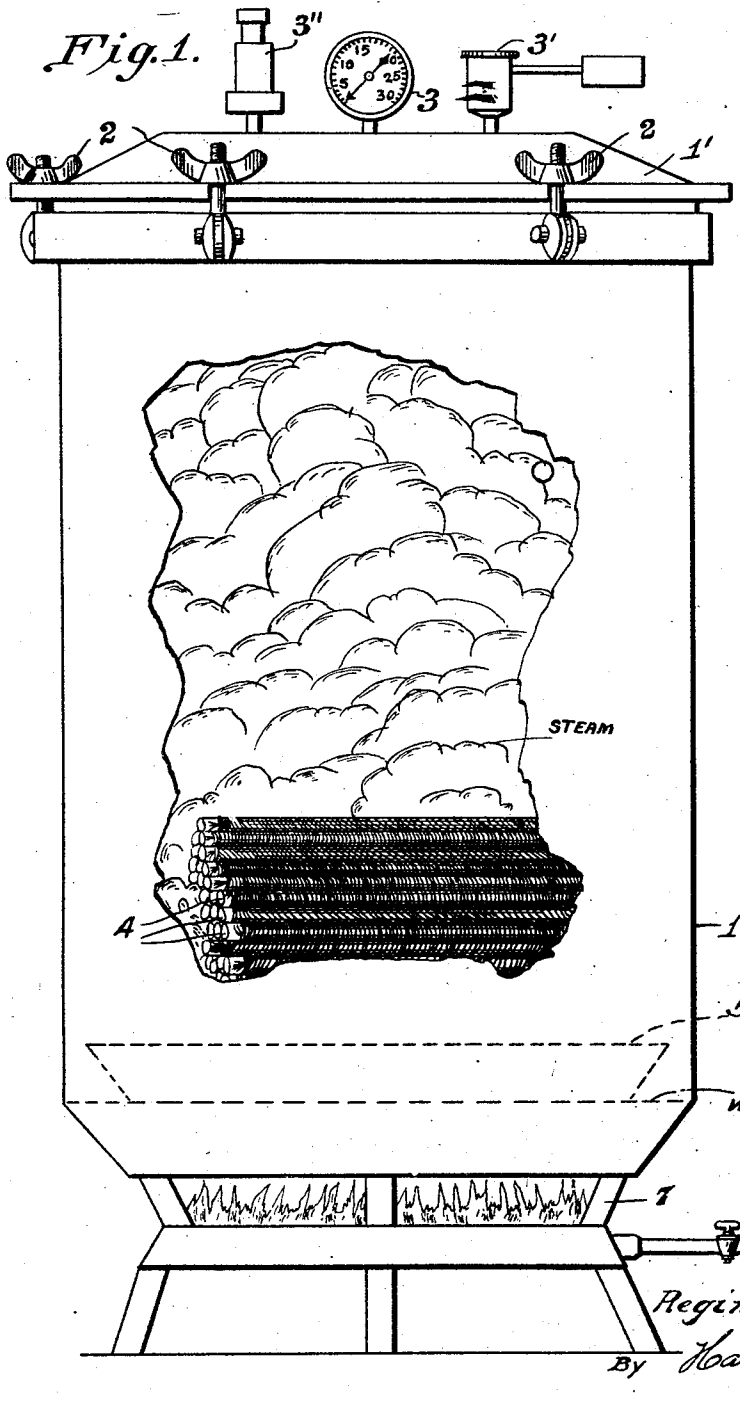


Fig. 2.





Fig. 3.

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REGINALD CARLES, OF SOUTH PORTLAND, MAINE.

PROCESS FOR CURLING HAIR.

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To all whom it may concern:

Be it known that I, REGINALD CARLES, a citizen of the United States, residing at South Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Processes for Curling Hair, of which the following is a specification.

My invention relates to the art of putting a permanent curl in the hair whether the same be human hair or otherwise.

It has long been known that hair wound tightly on a stick, pipe stem or the like when boiled for a long time in water will produce in the hair a permanent curl or wave.

This operation is known as "piping", a name which probably comes from the practice of winding the hair upon the pipe stems previous to boiling.

After the hair has been boiled several hours it has been the practice to subject it to a baking process in a suitable oven for drying it out and rendering the resulting curl a permanent one.

As a result the operation of curling hair by this process is one which consumes about all day and becomes expensive and in some cases impracticable.

I have discovered that by subjecting the hair wound closely on sticks, pipe stems or the like, tying it thereon and then subjecting it to the action of steam under considerable pressure as in a steam cooker, the process may be very much reduced in time and being in some respects superior to that of boiling.

My process, I find very superior in treating hair which is to be colored or dyed for when such is treated it is first dyed by submerging it in the boiling dye, being subsequently subjected to the action of steam under pressure which has the effect of driving the dye from the surface of the hair into the body of the same and giving a far better result than from simply boiling in the dye without exterior pressure as has been quite generally the practice.

When the hair is piped or wound on the sticks, pipe stems or whatever may be used for this purpose, it may be wound in various ways either wound directly, crossed or braided according to the result desired and tied into position so that it will not slip or unwind.

The effect on the hair is to exert both a longitudinal pull and a lateral pressure so that the hair becomes flattened and when it curls, it curls in the natural way, that is, flatwise of the hair instead of edgewise, thus making the hair permanently curled.

When the hair is curled and treated and dried it is unwound from the sticks and is then ready for the hair worker to use in the manufacture of hair goods.

It will thus be seen that my steaming process not only greatly reduces the time of curling the hair but it also enables me to use dye for coloring such curled hair to a much better effect than it could be used with the old boiling process.

My steaming process as indicated is equally useful on human hair, goats hair which is often woven into fabric and other animal hair which it is desired to permanently curl by steaming and flattening.

I have illustrated my invention by means of the accompanying drawing in which:—

Fig. 1, is an elevation of a steam cooker with a portion cut away showing the interior.

Fig. 2, is a cross section of a single hair greatly enlarged and,

Fig. 3 is a cross section of the same enlarged hair after being subjected to the action of the steam.

Referring to the drawing 1, is a steam cooker such as I prefer to use in my work, having a tight cover 1′ with clamping wing nuts 2 for making a tight joint, 3 is a steam gauge to indicate pressure, 3′ and 3″ are the relief valves and 4 represents the sticks having hair wound thereon.

5 is a pan or basin inside of the cooker into which a quantity of the wound sticks are placed to be subjected to the steam process.

6 represents an enlarged cross section of a single hair when in its natural condition, 6′ shows it after it has been steamed and flattened.

The operation consists in winding the hair on the sticks, glass rods or other devices on which the hair is to be placed tying them thereon so that they cannot become unwound and placing them within the steamer or steam cooker.

The wound sticks may be placed in the cooker in any desired position as long as they are under the influence of the steam. The whole is then placed on a gas heater 7

or any similar device which will convert the water placed in the cooker to steam.

The gas heater 7 is then lighted and the water in the cooker gradually raised in pressure and temperature to about 25 pounds when it is extinguished and the operation is complete so far as the steaming is concerned.

The wound sticks are now taken out, the hair is unwound from the sticks arranged in different styles as required.

I claim:—

1. The process of curling hair which consists of winding the hair upon a stick or the like, then subjecting the wound hair to the action of steam under relatively high pressure and subsequently removing it from the stick to form curls.

2. The process of curling hair which consists in tightly winding the hair about a stick or the like, securing it to the stick in such wound condition and then subjecting the hair to relatively high steam pressure in a closed container.

REGINALD CARLES.