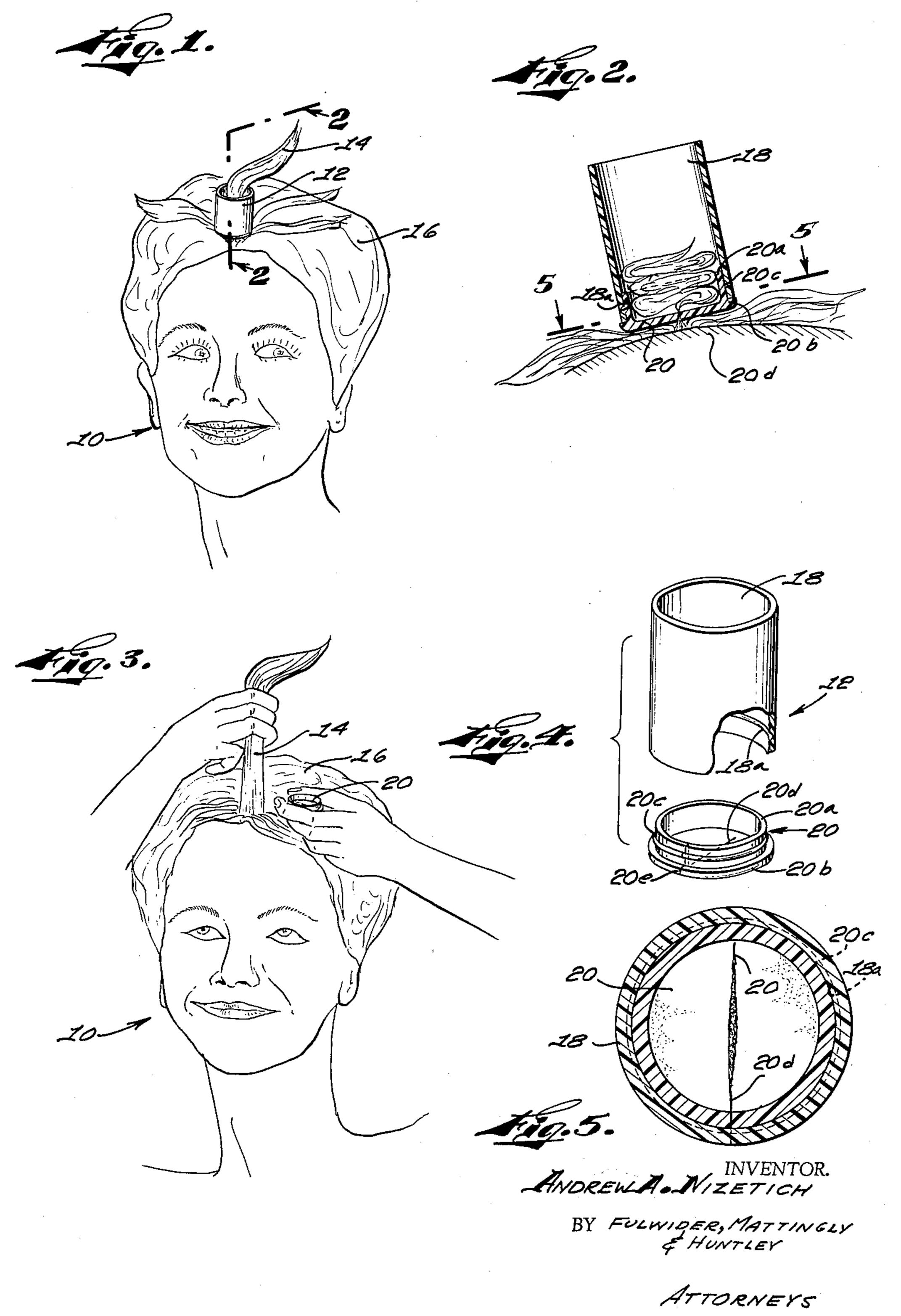
HAIR COLORING APPARATUS

Filed April 10, 1961



1

3,101,724
HAIR COLORING APPARATUS
Andrew A. Nizetich, 811½ Oro Terrace,
San Pedro, Calif.
Filed Apr. 10, 1961, Ser. No. 101,865
1 Claim. (Cl. 132—9)

The present invention relates generally to hair coloring apparatus, but more particularly to devices for use in providing a given body of hair with streaks of bleached or dyed strands of hair.

It has become popular today in the field of cosmetology to control the color of a person's hair so as to complement the person's features or general skin coloring. That is, hair stylings and hair coloring today are frequently 15 personalized to the particular individual so as to bring out to a maximum extent the individual's natural and inherent attractiveness. This often necessitates the use of bleaching and/or coloring chemicals for controlling the color or shade of an individual's hair.

In accordance with the present trend, it has become increasingly popular to bleach or color only a specific portion of the entire body of hair. Often certain strands of hair are provided with a color or shade which differs from that of the main body of hair as a means of en- 25 hancing the person's attractiveness.

Heretofore, it has been necessary in the process of streaking the body of hair, to wrap the individual strands of hair in a piece of sheet material such as aluminum foil wherein is also included the bleaching or dying chemicals. 30 The aluminum foil is wrapped around the strand of hair and is permitted to remain in this condition for a given period of time to permit the necessary chemical reaction to take place between the chemical substances and the coloring pigments of the strand of hair. Aluminum foil has been used for this process due to the fact that aluminum is substantially impervious to the harsh chemical ingredients normally found in the bleaching and dying compounds.

However, this manner of streaking a body of hair has 40 been beset with certain disadvantages particularly due to the fact that the aluminum foil has not been a good container for the hair and chemicals. Such use of aluminum foil has been particularly messy, and frequently, through no fault of the cosmetologist or beauty operator, has resulted in part of the chemicals spilling over onto some of the hair not included in the strand to be colored. That is, frequently during the wrapping process portions of the strand of hair have inadvertently fallen out of the aluminum foil and have carried some of the chemicals to the body of hair not intended to be colored. Also, after the chemicals have been permitted to react with the strand of hair for the proper length of time, it is necessary to wash or shampoo the strand of hair in order to neutralize the chemicals and to wash them away. During this shampooing operation, it frequently occurs that the dying or bleaching chemicals are inadvertently washed into the main body of hair thereby altering the color thereof.

A further disadvantage in the use of aluminum foil as heretofore prevalent in the art, is that the preselected strand of hair could be readily lost into the main body of hair. That is, frequently, in order to provide the desired color or tone thereof, it is necessary to apply a given chemical to the hair, and then, after a predetermined period of time shampoo such chemical away and then apply a second but different chemical to the particular strand of hair. In the course of such repeated operations, it frequently occurred that some of the individual hairs of the strand were lost in the main body of hair between the several chemical operations on such strand.

2

When this happened, the only way to remedy the matter was for the beauty operator to spend a considerable amount of time and effort trying to locate the partially bleached or dyed hairs. As will be realized this is very time consuming, but the only alternative heretofore has been to permit the partially colored hairs to remain in the body of hair. This latter result has been wholly undesirable.

In view of the foregoing it is an object of the present invention to provide hair coloring apparatus for isolating the particular strand of hair to be colored.

Another object of this invention is to provide hair coloring apparatus capable of retaining the particular strand of hair and the necessary chemicals for providing the desired color.

Another object is to provide hair coloring apparatus as characterized above which can be produced of plastic materials presently available.

Another object of this invention is to provide apparatus as characterized above which comprises a hollow tubular member to which is attached an end wall member having an opening for receiving the strand of hair to be colored.

Another object of this invention is to provide hair streaking apparatus affording a container or receptacle having an end wall which is formed of resilient material and which is so connected with a main body member that the strand of hair is sealingly clamped within the end wall of such container.

Another object of this invention is to provide apparatus as characterized above wherein the tubular main body member telescopically fits over a portion of the end wall member to thereby cause said end wall to firmly grip the strand of hair.

Another object of this invention is to provide apparatus as characterized above, including snap acting connection means between the main body member and the end wall member to facilitate quick and easy assembly and disassembly thereof.

Another object of this invention is to provide hair coloring apparatus as characterized above which is simple and inexpensive to manufacture and which is rugged and dependable in operation.

The novel features which I consider characteristic of my invention are set forth with particularity in the appended claims. The device itself, however, both as to its organization and mode of operation, together with additional objects and advantages thereof, will best be understood from the following description of specific embodiments when read in connection with the accompanying drawings in which:

FIGURE 1 is a front elevational view of the head of a person to which is attached the hair coloring device according to the present invention;

FIGURE 2 is a longitudinal sectional view of the device of FIGURE 1 taken substantially along line 2—2 thereof;

FIGURE 3 is a front elevational view of the person of FIGURE 1 shown applying the hair streaking device to a strand of hair;

FIGURE 4 is a perspective view of the hair coloring device showing the main body member and the end wall member in separated relative positions; and

FIGURE 5 is a sectional view of the end wall member of the receptacle taken substantially along line 5—5 of FIGURE 2.

Like reference numerals identify corresponding parts throughout the several views of the drawings.

Referring to FIGURE 1 of the drawings there is shown therein a subject person 10 having in her hair a coloring device 12 fastened to a strand 14 of a large body of hair generally designated with numeral 16.

Referring to FIGURE 4 of the drawings, the hair coloring device 12 of FIGURE 1 comprises a tubular main body member 18 and a closure member 20 constituting an end wall for tubular member 18. End wall or closure member 20 is provided with a short cylindrical 5 portion 20a having an outside diameter such as to snugly fit within an open end of main body member 18. In operation, as will hereinafter be explained in more detail, cylindrical portion 20a is telescopically fitted within an open end of tubular member 18 to a position where an 10 annular ledge 20b formed in member 20 abuts against the end of body member 18.

To facilitate firm engagement between body member 18 and end wall member 20, there is provided snap-acting connection means which may comprise an annular raised 15 portion or rib 20c formed on cylindrical portion 20a of member 20, and a complementally formed annular notch or groove 18a in the inner wall of member 18. It is contemplated that the members 18 and 20 will be formed of plastic materials which are pliable such that when main 20 body member 18 is telescopically fitted over the cylindrical portion 20a of end wall member 20, the former expands slightly while the latter contracts to enable the notch 18a to engage the annular rib 20c. In this manner the two parts of the device can be firmly and quickly 25 assembled and can be disassembled with equal facility merely by manually separating the members.

As shown most clearly in FIGURES 4 and 5, end wall member 20 is provided with an opening or slot 20d which may extend diametrically of member 20 from the peripheral edge of annular ledge 20b as shown at 20e to a point short of the cylindrical portion 20a on the opposite side. Opening 20d may be of any desired size or configuration to receive and clampingly retain any desired strand of hair to be colored. However, due to the inherent elasticity of the plastic materials out of which the members 18 and 20 are to be formed, any given size opening 20d will be suitable for various sizes of hair strands as will hereinafter become more apparent.

The opening 20d extends to the outer periphery of annular shoulder 20b of end wall member 20 to enable the preselected strand of hair to be inserted from the side. The inherent elasticity of the material of which end wall member 20 is formed will enable opening 20d to be opened sufficiently for admission of the strand of hair. FIGURE 3 of the drawings shows a preselected strand of hair being provided with the end wall member 20 as described.

Once the end wall member 20 is positioned on the body of hair 16 such that the strand 14 of hair to be colored is within the opening 20d thereof, the tubular main body portion 18 is telescopically fitted over the cylindrical portion 20a until the notch 18a engages the annular rib 20c. This will cause main body member 18 to tightly grip cylindrical portion 20a of end wall member 20 so as to bias member 20 into sealing engagement with the strand of hair. Due to this arrangement, a tight seal is afforded between end wall member 20 and the strand of hair so as to prevent the bleaching or dying chemicals, to be subsequently applied to the strand of hair, from running out of the bottom of the device.

Once the main body member 18 is attached to end wall member 20, the strand of hair 14 is loosely curled or positioned within the container thus formed. It is then a simple matter to add thereto the necessary bleaching or drying chemicals which may be either powder or liquid in form as desired.

As will be readily apparent to those persons skilled in the art, after the necessary chemical reaction has taken place it is a simple matter to remove the main body portion 18 from end wall member 20 to thereby expose the strand of hair for purposes of shampooing and the like. It will also be noted, that throughout the entire operation the particular strand of hair is firmly held within the opening 20d of member 20 due to the inherent elasticity of the latter member, thus insuring that such strand is not "lost" in the main body of hair 16.

Should it be desired to expose such strand of hair to other chemicals, it is a simple matter to reinsert the tubular member 18 over the end wall member with the strand of hair within the container or receptacle formed thereby.

Although the hair coloring device 12 is shown in the drawings and is described above as having a generally cylindrical configuration, it is contemplated that the main body member 18 may take substantially any appropriate form such as to have a square or rectangular cross-section rather than the circular one shown herein. In such event, end wall member 20 would be changed accordingly so as to properly mate with the main body member.

It is further realized that other forms of connection means may be used in place of the annular rib 20c and notch 18a without departing from the spirit of the invention. In this regard, it may be found desirable to provide cylindrical portion 20a of end wall member 20 with a tapered outer surface so that insertion thereon of main body member 18 will cause the opening 20d to be decreased for tightly gripping the strand of hair positioned therewithin. Such tapered surface and its cooperation with the main body member may, under some circumstances, be sufficient to firmly retain such body member in assembled relation on the end wall member.

It is thus seen that the present invention provides a receptacle for use in dying or bleaching certain preslected strands of hair of a body of hair to afford certain desirable results as set forth above.

Although I have shown and described certain specific embodiments of my invention, I am fully aware that many modifications thereof are possible. The invention itself therefore is not to be restricted except insofar as is necessitated by the prior art and by the spirit of the appended claim.

## I claim:

Apparatus for use in streaking a strand of human hair in situ on the scalp with streaking chemicals, comprising: a closure member having a generally flat end wall of resilient material formed with a slit that extends inwardly from one of its sides whereby the underside of said end wall may be positioned closely adjacent the scalp and that portion of the strand of hair closely adjacent the scalp may be urged into said slit from said one side of said end wall, said closure member also being formed with a generally vertical portion that extends away from said end wall when said end wall is positioned closely adjacent said scalp; and a tubular body member that is open at both ends, the lower end of said body member removably, telescopically engaging the vertical portion of said closure member in a liquid-tight manner whereafter the sides of said slit are biased into sealing engagement with said strand and said closure member and body member cooperate to prevent streaking chemicals applied to said strand from contact with the remaining portion of hair on said scalp, the upper end of said body member affording means to visually inspect the progress of the strand streaking operation, and the engagement of said strand by said closure member maintaining said tubular member with its longitudinal axis substantially normal to said scalp at the point of attachment of said closure member to said strand.

## References Cited in the file of this patent UNITED STATES PATENTS

1,745,275	Shelton	Jan.	28,	1930
2,781,763	Casey et al		•	
2,819,722	Spilo et al.	Jan.	14,	1958