United States Patent

Spanel

[15] **3,640,288**

[45] **Feb. 8, 1972**

[54] COLOR APPLICATOR FOR HAIR

[72] Inventor: **Abram N. Spanel**, 344 Stockton St., Princeton, N.J. 08540

[22] Filed: **July 29, 1970**

[21] Appl. No.: **59,098**

[52] **U.S. Cl.** **132/9**

[51] **Int. Cl.** **A45d 24/24**

[58] **Field of Search** 132/9, 125, 163, 108; 424/362

[56] **References Cited**

UNITED STATES PATENTS

2,785,693 3/1957 Bova 132/163

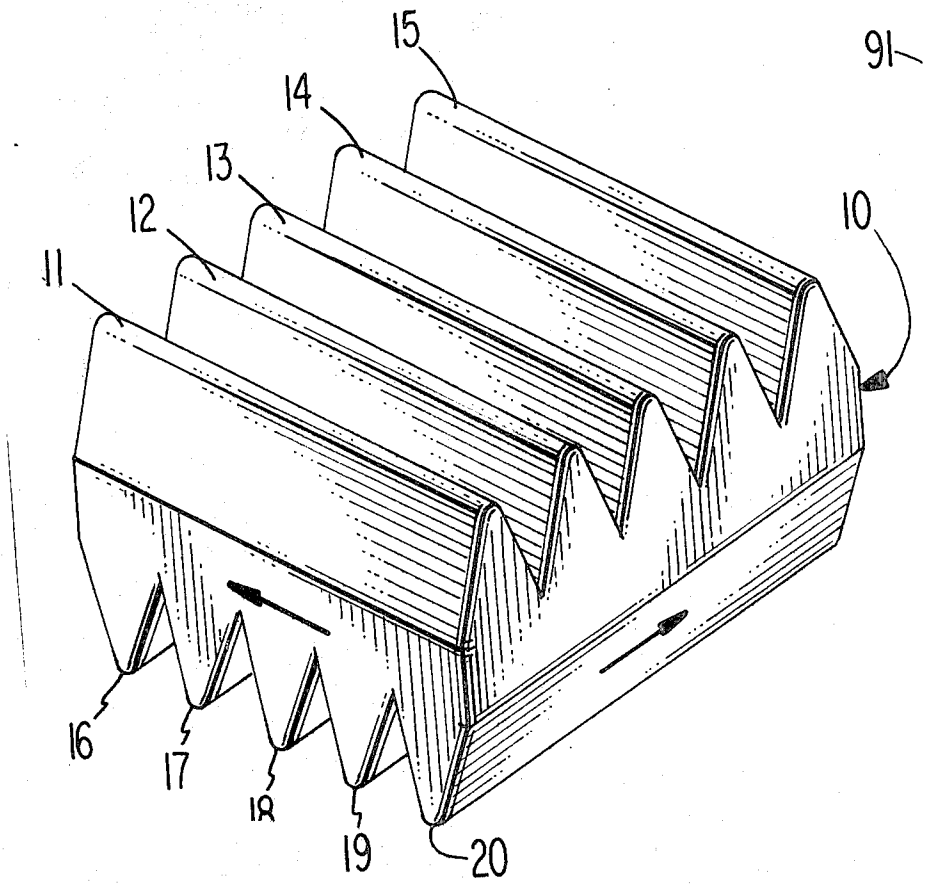
1,707,665 4/1929 Julien 132/125

Primary Examiner—Louis G. Mancene
Assistant Examiner—Gregory E. McNeill
Attorney—Woodcock, Phelan & Washburn

[57] **ABSTRACT**

In contrast with combs carrying coloring material in wet or dry form, there is utilized a block of wax in which the coloring matter is carried with the block having outwardly extending elongated and/or curved surfaces, some spaced one from the other for applying the wax and coloring matter to the hair with minimum deposit of either on the scalp.

12 Claims, 12 Drawing Figures



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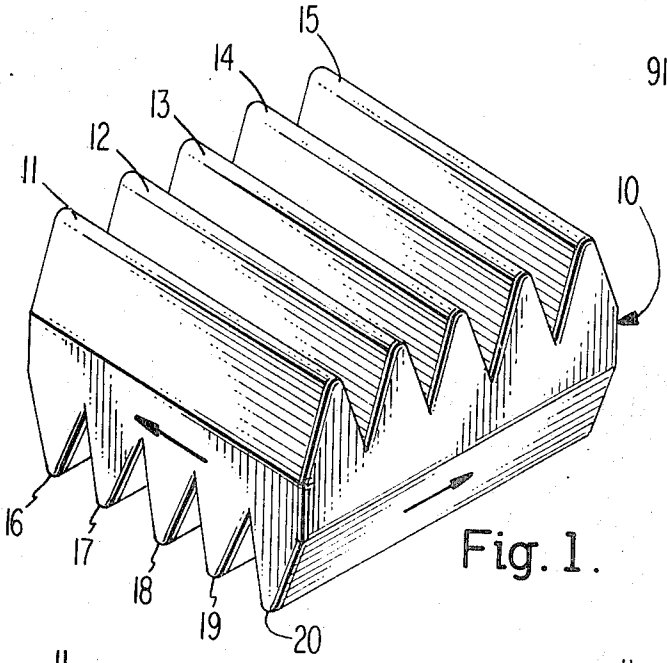

Fig. 1.

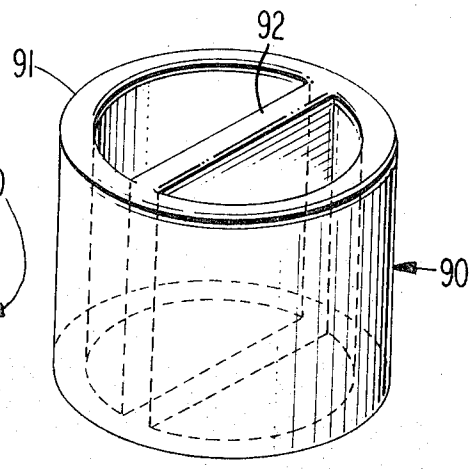

Fig. 1A.

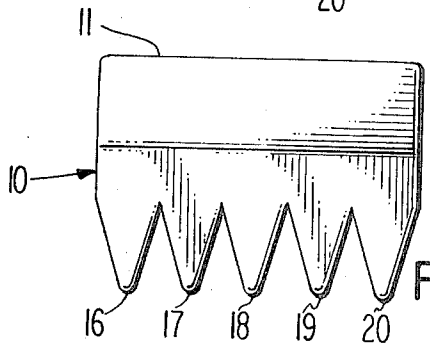

Fig. 2.

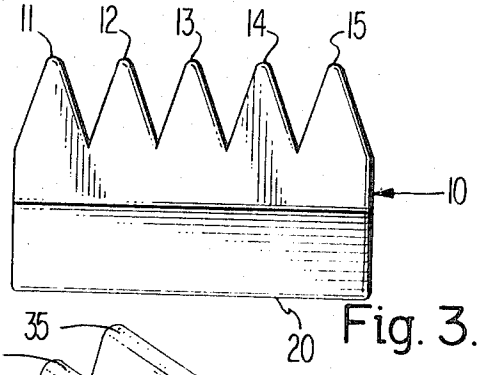

Fig. 3.

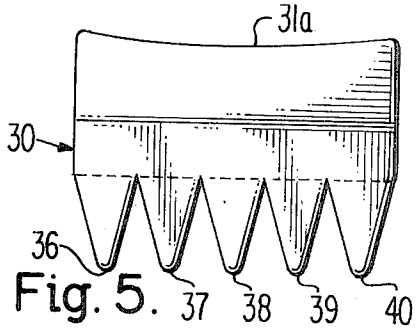

Fig. 5.

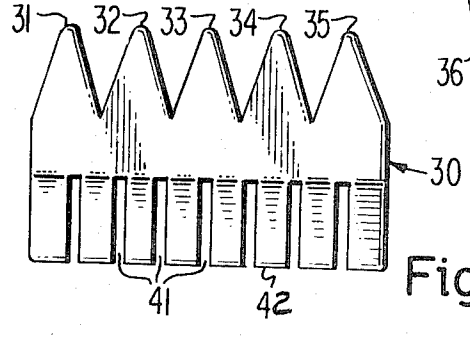

Fig. 6.

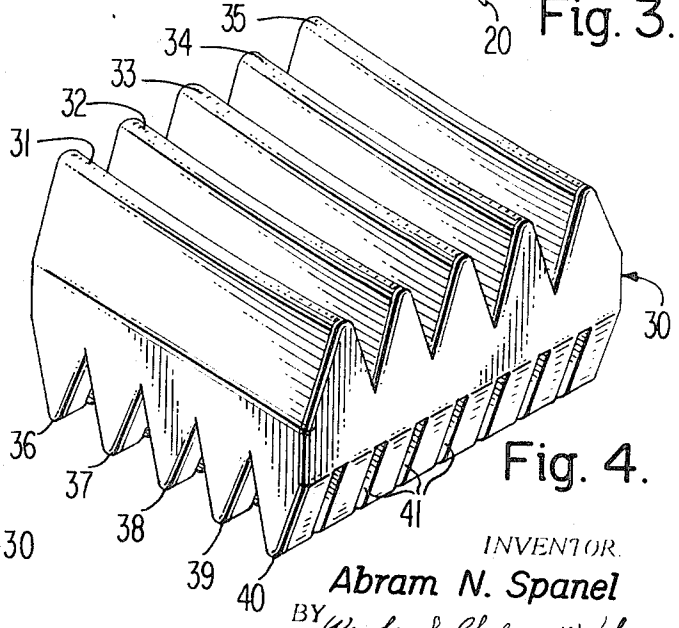

Fig. 4.

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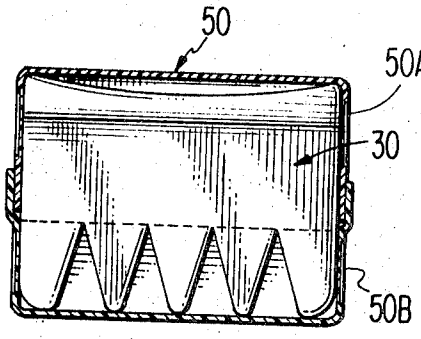

Fig. 7.

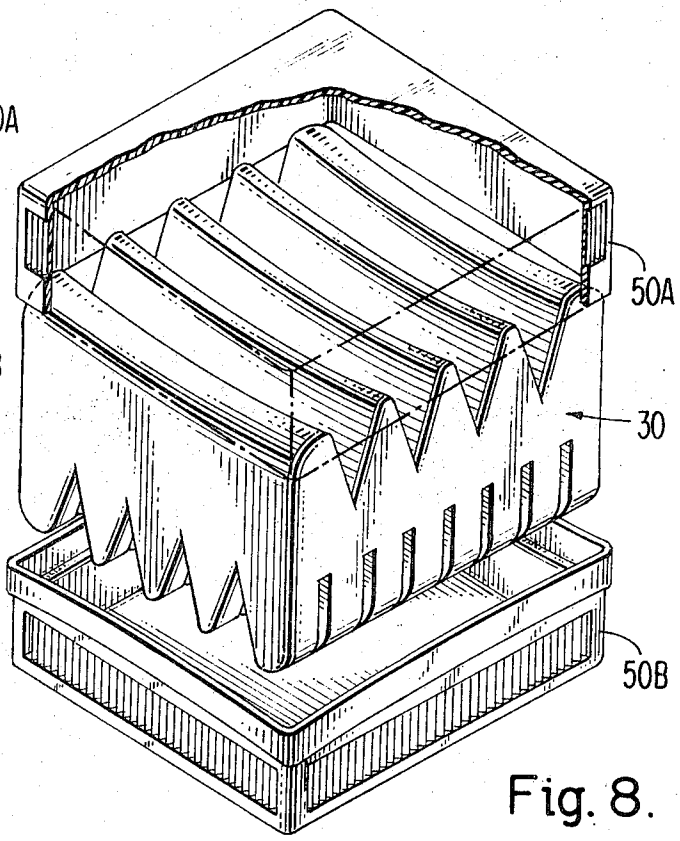

Fig. 8.

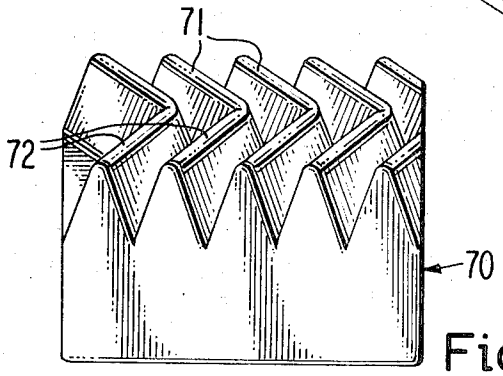

Fig. 10.

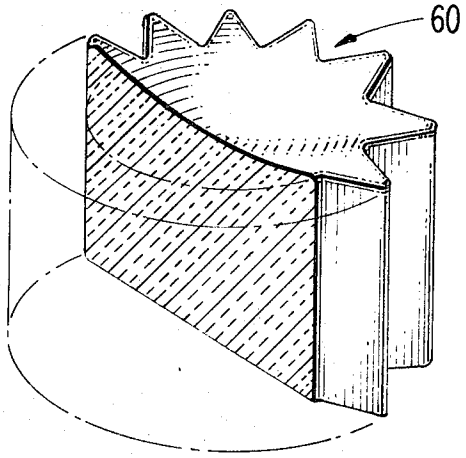

Fig. 9.

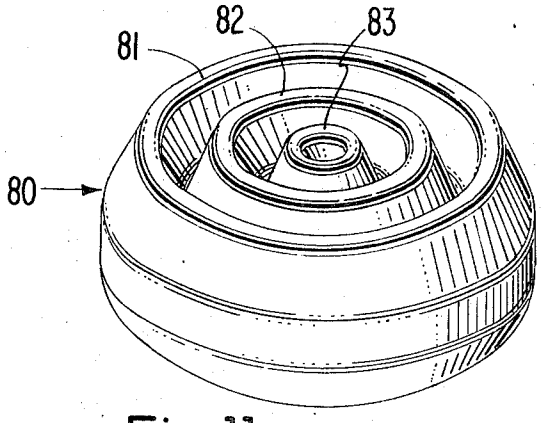

Fig. 11.

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COLOR APPLICATOR FOR HAIR

BACKGROUND OF THE INVENTION

This invention relates to color applicators for the human hair and has for an object the provision of a hair applicator in block form having continuous or discontinuous surfaces some having a plurality of spaced and elongated and/or curved surfaces for application of the color to the hair in avoidance of the hair penetrating and scalp massaging characteristics of the usual comb.

It has heretofore been proposed to utilize a comb made entirely of a mixture of pigments with stearic acid and diluent fillers such as in Bova U.S. Pat. No. 2,785,693. It has been proposed to add near the roots of the teeth-coloring material including wax such as Quisling U.S. Pat. No. 2,154,822. Combs have also been provided with a stick of crayon, generally wedge shaped, where the crayon fits within a compartment formed by the comb, as in Julien U.S. Pat. No. 1,707,665. These prior art disclosures all follow the comb concept; namely, that the applicator should be used as a comb thus with manipulation of the hair from the scalp outwardly. In the case of Bova the scalp will be thoroughly covered with the dye material whereas in Quisling and Julien it would seem next to impossible to apply the color to that most important part of the head; namely, that part of the hair adjacent the scalp in avoidance of coloring the scalp itself.

SUMMARY OF THE INVENTION

In accordance with the present invention there is provided a block of wax of a size which can conveniently be held in the palm of the hand. It is made of a mixture of wax and coloring material characterized by color applying elongated and/or curved surfaces which extend from one edge of the block to the other and for use by movement of these elongated surfaces mainly in direction normal to the length of the hair. Thus there is lacking the combing effect and instead there is utilized multiple surface color application so that each region in which the applicator is being used will be multiply exposed to, i.e., first to one and then to other of, the several surfaces to assure unexpected uniformity of coloring which of course enhances the appearance of the person who is seeking change in hair color.

In the preferred form of the invention the block will have the multiple, elongated plane surfaces on opposed faces thus to extend the useful life. As one side is worn down, it may be utilized for the gross application of color and the other side for the final finishing application of the color to the hair. It is important that the color not only be in dry form and carried in intimate mixture with the wax but also that it be a nontoxic and certainly lacking in any poisonous or in toxicity potential characteristic in respect of the user such as is found in most liquid hair-dyeing preparations now on the market.

BRIEF DESCRIPTION OF THE DRAWINGS

For further objects and advantages of the invention, reference is to be had to the following detailed description taken in conjunction with the accompanying drawings in which:

FIG. 1 is an isometric view of one form of the invention;

FIG. 1A is an isometric view of a different embodiment in which multiple surfaces are provided by an endless surface which is shown circular, though it can be of different configuration;

FIG. 2 and 3 are end and side views of the embodiment of FIG. 1;

FIG. 4 is an isometric view of a modification of the invention;

FIGS. 5 and 6 are respectively end and side views of the modification of FIG. 4;

FIG. 7 is a sectional view on reduced scale of the embodiment of FIGS. 4–6 together with the package for the device;

FIG. 8 is an enlarged isometric view illustrating the manner in which the package or enclosure is separable so that either half may be used as a partial container for the applicator when used to color the hair;

FIG. 9 is an isometric view partly in section of another embodiment of the invention;

FIG. 10 is an isometric view of a herringbone arrangement of the color applicators; and

FIG. 11 is an isometric view of a further embodiment of the invention with the color applicators of the endless type.

DETAILED DESCRIPTION

Referring now to the drawings of the invention, one form has been shown in FIG. 1 as comprising an applicator or block 10 rectangular in shape, having its longest dimensions about 2½ to 3 inches long and 2¼ to 2½ inches wide, it being understood that these dimensions are suggestive only. The block 10 is characterized by the provision of a plurality of surfaces 11–15 inclusive extending crosswise of the block and spaced one from the other lengthwise of the block. These coloring surfaces 11–15 can be formed by the sawtooth construction illustrated or by other configurations, the important point being that they will present a succession of spaced color-applying surfaces as the block is moved along the hair in the direction of the arrow 21 which is shown embossed on the block.

At the opposite surface of the block there are provided an additional set of color-applying surfaces 16–20 inclusive. These are shown as extending at right angles to the direction of the surfaces 11–15 inclusive. Again the direction of use will be normal to the direction of the color applicators 16–20. Though it is preferred that the color will be uniformly mixed throughout the wax composition forming the block as a whole, it is within the scope of the invention for the upper color applying surfaces 11–15 to carry one color and the opposite surfaces 16–20 to carry a different color.

For ease in construction it will sometimes be desirable to have the color-applying surfaces at one face of the block parallel to those of the other face. With this construction the block may be extruded as a single piece and then cut to the final dimension thus requiring but one severing operation per block.

As shown in FIGS. 4 and 5 the applicator or block 30 has the surfaces 31–35 concave downwardly in the direction of the body of the block. The curved line 31*a* of FIG. 5 of the surface 31 well illustrates this feature. With such curvature, the color-applying surfaces more nearly conform with the curvature of the head during use. The opposite color applying surfaces 36–40 may also be concave in the direction of the central portion of the block 30 if desired and may also be divided as by the succession of slots 41 which, it will be observed, are relatively narrow so that there will be retained the feature of substantially continuous color-applying surfaces. The narrow slots while useful do not materially detract from the color-applying areas utilized as shown in FIG. 6. Furthermore these color-applying areas 42 are sufficiently broad and blunt as to prevent penetration to the scalp with resultant unwanted striped coloring thereof. Such unwanted striped coloring imparted on the scalp would not only create a bizarre appearance for those with short hair, but would be completely objectionable to persons with partial baldness.

Referring now to FIG. 7 the color applicator 30 of FIG. 4 is shown within a container 50 consisting of an upper part and a lower part which may be separated one from the other. The upper part 50A and the lower part 50B are shown separated one from the other in FIG. 8. The package may be formed of transparent, translucent or opaque material, flexible, semiflexible, or rigid. It is preferred that each half may serve as a holder for the block 30 when it is to be used in coloring the hair, thus avoiding the effects of the heat of the hand on the wax applicator and resultant soiling thereof. A container with flexible walls is well suited for the stated purposes.

FIG. 9 illustrates an applicator block 60 which has a configuration ideal for extruding and yet retains the principal features of the invention as discussed above. Only half of the

block 60 is shown in detail. It includes a plurality of the color-applying surfaces extending lengthwise of the cylindrically shaped applicator. If desired, the applicator instead of being cylindrical may be oval shaped or other curvilinear configuration or of any extrudable shape in which there may be retained along the elongated color-imparting surfaces extending longitudinally thereof.

In FIG. 10, there has been illustrated an applicator device 70 having the color applying surfaces disposed in herringbone array along opposite faces, two of such surfaces 71 and 72 having been identified in FIG. 10. Instead of the herringbone device of FIG. 10, the color-applying surfaces may be disposed in concentric array, as shown in FIG. 11 for the applicator 80. Such color-applying surfaces 81–83 may be of any other pattern in which the surfaces are endless, each outer surface of greater length enclosing an inner surface of lesser length.

It is to be understood that any combination of the disclosed shapes may be utilized on opposite faces of the blocks and that the invention is not limited to the particular opposing combinations described in detail above.

While other formulations may be utilized, it is preferred that the block be made with its primary ingredient either saponified stearic acid or candelilla wax with beeswax, some carnauba wax and the desired coloring material thoroughly mixed therein. In place of the candelilla wax, paraffine or other suitable wax may be used.

The proportions to be utilized may be varied in proportion and ingredients. It is essential that the coloring material be harmless to human beings and lacking in toxicity or scalp irritant properties. It will be desirable to include in the mixture antibacterial and/or antifungal properties.

The preferred composition will be as follows:

Triple Pressed Stearic Acid	40 lbs.
Paraffine	45 lbs.
Beeswax	10 lbs.
Carnauba Wax	5 lbs.
Dry Color	to suit.

½ percent of an antifungal, antibacterial substance having an 80 percent cationic activity consisting of 68 percent of stearyl dimenthyl benzyl ammonium chloride and the balance in related cationics; such as is to be had in Triton X-400 made by Rohm and Haas.

The examples of differing coloring materials are as follows:

For red heads or brunettes, red ochre, burnt sienna, Tuscan red may be used as a pigment.	12 lb.
For blond color, one can use as the pigment golden ochre, yellow ochre, chrome yellow among others.	12 lb.
Titanium Oxide for silver grey and salt and pepper color	15 lb.
For black hair Carbon black	6½ lb.

As has been explained above, one of the features of the invention is the presentation to the hair of first one elongated surface of the applicator followed by a second elongated color-applying surface. Though in FIG. 11 these elongated surfaces take the form of the concentric circular projections 81, 82 and 83, it will be seen that if a single endless elongated surface were provided, for example, the circular element 82, there would be in effect available on the applicator one semicircular portion which would first contact the hair followed by the remaining semicircular portion which would then contact the hair. Thus a single endless color-applying surface will be satisfactory. As shown in FIG. 1A, the color applicator 90 comprises the block of color-applying wax with a single circular applying surface 91 but in addition may include a diametrically disposed color-applying surface 92 thus effectively providing three color-applying surfaces as the circular applicator is stroked over the hair, i.e., the two opposing sides of the circular surface 91 and the diametrically disposed surface 92.

The crossmember 92 forming a third color-applying surface may be of a thickness greater than, less than, or equal to that of the outer surface 91. The device of FIG. 1A like the device of FIG. 9 comprises an extrudable shape or configuration advantageous in mass production.

Though it is considered that the principal utility of the present invention will be in hand application, if it be desired to rotate the color-applying device, it will be seen that the embodiments of FIGS. 1A, 9, and 11 lend themselves to motor operation. In each case, the axis of rotation will be lengthwise of the illustrated color-applying devices.

While preferred forms of the invention have been illustrated and disclosed, it is to be understood that modifications may be made within the scope of the appended claims.

Where in the claims there is reference to an applicator or to a block of wax, I refer to the composition specified above or equivalents where the essential characteristics include the tenacious transfer of a coating of wax and color to the hair upon applying the block to the hair to color the same.

What is claimed is:

1. A dry-color applicator for pressure coloring human hair comprising:

a block of wax of substantial length, width and breadth having an unobstructed face providing spaced sides and ends and of size adapted to be held in the hand for stroking the outer surface of the hair including coloring material in intimate mixture therein characterized by the provision along said unobstructed face of a plurality of elongated and substantially continuous color-applying surfaces in spaced relation one from the other along said face of said block and extending from one side to an opposite side of said block for multiple transfer of color the hair with each stroke, first from one and then from another of said surfaces, said plurality of said substantially continuous elongated surfaces each being of sufficient length to avoid combing action.

2. The applicator of claim 1 which includes a container therefor, said container being circumferentially separable and having relatively flexible sidewalls so that a separated portion of the container containing said block may be held in the hand for manipulation of the exposed color-applying surfaces.

3. The applicator of claim 1 in which said color-applying surfaces and said block are in the form of an extrudable shape.

4. The color applicator of claim 1 in which said color-applying surfaces are disposed along at least one face of the block in herringbone pattern.

5. The color applicator of claim 1 in which said color-applying surfaces extending outwardly from at least one face of said block are continuous and in which the color-applying surfaces of lesser length are enclosed respectively by color-applying surfaces of greater length.

6. The color applicator of claim 1 in which said color-applying surfaces are effectively formed by an endless surface for presentation to the hair of the first half thereof followed by the application to the hair of the second half of the surface.

7. The color applicator of claim 1 in which there is disposed at least one crossmember providing an additional color-applying surface.

8. A dry-color applicator for pressure coloring human hair comprising:

a block of wax of an area of size adapted to be held in the hand including coloring material in intimate mixture therein characterized by the provision of a first set of a plurality of elongated outwardly extending color applying surfaces in spaced relation one from the other for guided movement by the user with pressure applied to the outer surface of the human hair for transfer of wax and coloring material to the hair to color the same, first from one of said elongated color-applying surfaces and then from

another of said elongated color-applying surfaces, said block of wax further having a second set of color-applying surfaces extending outwardly and in direction away from the first set of color-applying surfaces.

9. A dry-color applicator for pressure coloring human hair comprising:

a block of wax of an area of size adapted to be held in the hand including coloring material in intimate mixture therein characterized by the provision of a first set of a plurality of elongated outwardly extending color-applying surfaces in spaced relation one from the other for guided movement by the user with pressure applied to the outer surface of the human hair for transfer of wax and coloring material to the hair to color the same first from one of said elongated color-applying surfaces and then from another of said elongated color-applying surfaces, said block of wax having a second set of color-applying surfaces extending outwardly on the opposite side of said block from said first set of color-applying surfaces said second set of color-applying surfaces extending in longitudinal directions at right angles to said first set of color-applying surfaces.

10. A dry-color applicator for the coloring of hair, comprising:

a block of wax of substantial length and width having coloring material in intimate mixture therein which upon stroking the hair therewith transfers thereto a tenacious coating of the colored wax,

said block of colored wax having at least one edge portion extending from one side to an opposite side thereof to present at least one unobstructed elongated substantially continuous surface for color stroking the hair without a combing action, and

an open-ended enclosure within which the block of wax is disposed for both insulating the block from the heat of, and preventing transfer of color to, the hand during stroking of the hair by one or more of said elongated surfaces.

11. The dry-color applicator of claim 10 in which said container includes a closure to close its open end with the block of colored wax wholly disposed therein.

12. The dry-color applicator of claim 10 in which said unobstructed face of said block of colored wax is delineated by at least two opposing edge portions extending from one side of the block to another side thereof to present spaced elongated surfaces for stroking the hair.

* * * * *

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UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,640,288 Dated February 8, 1972

Inventor(s) Abram N. Spanel

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 3, line 41 change "1/2" to "1 1/2".

Column 4, line 37, after "color" add "to".

Signed and sealed this 13th day of June 1972.

(SEAL)
Attest:

EDWARD M.FLETCHER, JR.
Attesting Officer

ROBERT GOTTSCHALK
Commissioner of Patents