Sept. 4, 1951 L. FRIEDBERG 2,566,722

COSMETIC STICK AND THE LIKE

Filed June 26, 1946

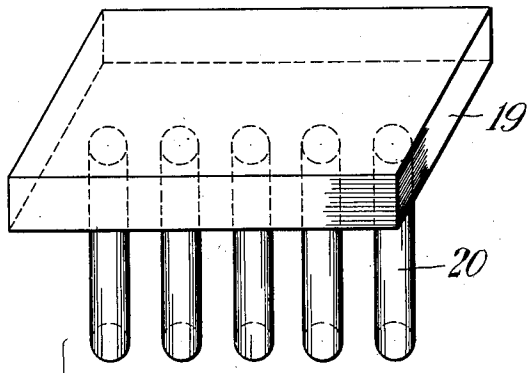



Fig. 3.

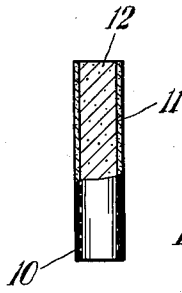



Fig. 1.

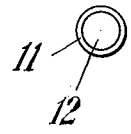
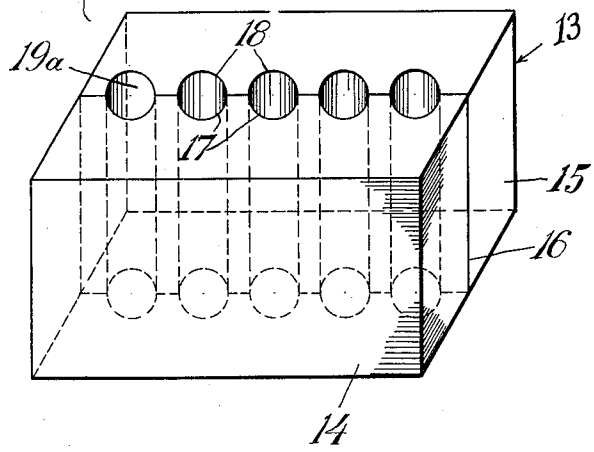



Fig. 2.



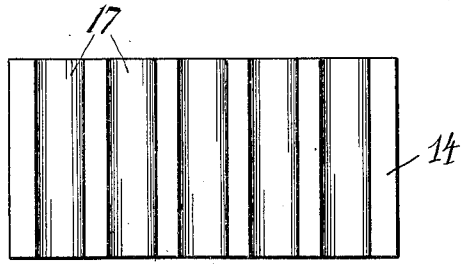




Fig. 4.

LEONARD FRIEDBERG.
INVENTOR.

BY: Julian J. Wittel

His ATTORNEY.

Patented Sept. 4, 1951

2,566,722

# UNITED STATES PATENT OFFICE

2,566,722

## COSMETIC STICK AND THE LIKE

Leonard Friedberg, New York, N. Y.

Application June 26, 1946, Serial No. 679,393

2 Claims. (Cl. 91—54.7)

1

This invention relates to cosmetic products, particularly lipsticks and perfume sticks, and has for its main object to provide a lipstick in which more color may be contained than in lipsticks at present in use or proposed, and also to provide perfume sticks which will have more perfume content than such devices now known, and still both of these devices will have the same, or even superior desirable qualities as to appearance, storage, and use, as those used at present.

Lipsticks, and also perfume sticks, used at present, are based on certain compositions, which must resist the summer heat as well as winter cold, and remain during such changes of temperature, approximately of the same hardness, and of the same rubbing quality, and still they should take as much color, or perfume material, as possible while retaining said qualities of hardness and application, and they also should show a uniform homogeneous appearance on the skin.

There are many other requirements and characteristics desired in compositions indicated for the purposes mentioned, and the present lipstick and perfume stick mixtures, well known in this art, as a rule, substantially answer such requirements.

The present cosmetic sticks, like lipsticks and perfume sticks, and all other cosmetics in stick form, are made of mixtures of waxes, fats, emollients, and oils, forming the base for the product. Certain specific colors are added to the base, in the case of lipsticks, or concentrated essential perfume oils, for the perfume sticks. The resulting stick is a homogeneous compound of some predetermined desired hardness, and adapted to withstand the mentioned high or low temperatures.

The composition, and the method of production, of lipsticks, or perfume sticks, at the present time, will greatly limit the amount of color to be introduced into the lipstick and the amount of perfume material to be placed in a perfume stick. This is mainly due to the fact that both, the color and the perfume material, must be added to the mentioned basic compound or mixture in liquid solutions, for instance, for the lipstick a color mixture in castor oil. If too much of such oil solution of color is added to the mentioned base mixture of the lipstick, the same will become too soft and can not be used in summer temperatures. The same condition applies to the perfume stick, as the perfume extract must be added in a liquid solution, and only a very limited amount can be introduced into the stick, in order not to make it too soft. The reasons why the

2

desired colors, or perfume extracts, cannot be added in any other form than of an oil, or other liquid, solution, to the final cosmetic sticks, are well known to those versed in this art, and there is no need to further enlarge on them.

My invention mainly aims to produce lipsticks of the desired hardness, staying, wearing and application qualities, and still adapted to receive more of the selected attractive colors, in a desired homogeneous product, of the desired rubbing and application qualities, than is the case with lipsticks used at present.

Similarly, with respect to the perfume sticks, my invention mainly aims to provide a stick of the mentioned desired qualities, which will contain a greater amount of perfume material than could be added to perfume sticks now in use, and still retain the hardness, staying, and rubbing qualities desired in a perfume stick, and also to provide a perfume stick which will be substantially colorless in a rubbing application.

With the mentioned, and other, objects in view, my invention mainly consists in providing an outer hollow jacket, covering or shell for the lipstick or perfume stick, said shell being substantially of the same material as such lipsticks or perfume sticks are made at present, so as to have the same staying, wearing, and application qualities. These shells I then fill with my novel color or perfume mixture, which also will have the desirable rubbing, application, and appearance qualities, but which will contain a much larger percentage of color, respectively perfume material, than the shell. Upon the application of my novel lipstick or perfume stick, the outer shell will be rubbed, like usual, and, obviously, my novel inner filling will rub still easier, being softer in consistency, for the reasons explained hereinbefore, and well known to those experts versed in this art. The outer and inner materials of my improved lipstick or perfume stick will also be adapted to homogeneously mix with each other upon the usual application of such sticks by rubbing an end thereof on the skin or on a desired other object, and will produce a coating on the skin, or on another object, which will have a greatly superior color effect, in the case of the lipstick, and a higher perfume effect, in the case of the perfume stick.

I also attach drawings to this specification, to illustrate, in a diagrammatical manner, the construction of my novel lipstick or perfume stick, and one method of manufacturing the same, and in said drawings:

Fig. 1 is an elevational view of my novel lip-

stick, a portion of the same being broken away, and

Fig. 2 is a plan view thereof;

Fig. 3 illustrates a tool or die which I employ in manufacturing my improved lipstick or cosmetic stick; and

Fig. 4 shows a portion of the die in a position after the ready lipstick jackets have been removed from the same.

In this specification, I will describe in detail the parts, composition, and methods of manufacturing, with reference to lipsticks, and it will be obvious that a perfume stick, or any other similar cosmetic product, may be manufactured in a similar manner.

In producing my novel lipstick, I use for the shell, indicated in the drawing by the numeral **10**, a more or less standard, well-known, usual composition. Such present compositions for a lipstick have a base mixture, which I also use as a base for the mixture of my outer shell **10**. For this base I may use, as an example, one of the following two compositions, the parts thereof being given in percentages of weight:

*Base mixtures for the shell*

| | |
|---|---|
| 1. Ozokerite | 18 |
| Beeswax | 36 |
| Carnauba wax | 2.5 |
| Spermaceti | 6 |
| Cocoa butter | 8 |
| Butyl stearate | 8 |
| Lanolin | 16 |
| Castor oil | 5.5 |
| 2. Ozokerite | 19 |
| Beeswax | 35 |
| Carnauba wax | 3.5 |
| Cetyl alcohol | 5 |
| Cocoa butter | 6 |
| Butyl stearate | 10 |
| Lanolin | 15 |
| Castor oil | 6.5 |

To this base, at present, a color mixture is added, for the mixture of the lipstick, and I also use a similar color mixture to be added to the said base for my outer shell. This color mixture may be as follows, the percentages again being for weights:

3. *Color mixture for the shell*

| | |
|---|---|
| Castor oil | 76 |
| Colors | 24 (maximum) |

The colors used are all well known in this art, and preferably are the so-called certified D C colors, or lake colors for the lipstick. These colors are known as Drug and Cosmetic colors, and used in the manufacture of lipstick.

It is the usual practice now to take the base mixture for lipsticks, which, as I mentioned, is similar to that I use for the shell in my device, as indicated hereinbefore, and take the mentioned color mixture in equal quantities, mix them, and in this manner produce the lipstick now used. It will be seen that such lipstick will contain 13% color material, as a maximum. It is, namely, to be understood, and is well known in this art, that no more than 24% to 26% color material can be introduced in oil into the lipstick by the manufacturing methods now in use, since over that too much oil would be carried into the lipstick, and the same would become too soft, or not sufficiently resisting the summer heat. Indeed, usually, there is less than 12% color material in the lipstick, as manufactured at present.

In manufacturing the outer jacket or shell for my novel lipstick, I use the shell mixture or mixtures mentioned hereinbefore, being similar to the base mixtures used at present for manufacturing lipsticks, and I mix into it the mentioned color mixture—castor oil and color material in the proportions described—so that my shell material will be similar to the lipsticks as manufactured today, and will have about 13% of the desired color material therein.

I, however, employ a second mixture in which a much higher percentage of color is included, said mixture to be used for the filling or core of the mentioned shell.

A few of the compositions for the filling or core portion of my novel lipstick may be given as follows, the proportions again being percentages in weight:

*Formulae for core mixtures*

| | |
|---|---|
| 4. Cetyl alcohol | 5 |
| Beeswax | 7 |
| Castor oil | 66 |
| Colors | 22 |
| 5. Cocoa butter | 7 |
| Carnauba wax | 5 |
| Castor oil | 66 |
| Colors | 22 |
| 6. Spermaceti | 3 |
| Ozokerite | 5 |
| Castor oil | 69 |
| Colors | 23 |
| 7. Canauba wax | 4 |
| Castor oil | 72 |
| Colors | 24 |

This mixture, as has been mentioned, will contain a larger percentage of colors but will be much softer and easier in reacting to higher temperatures than the material of the shell. However, when the same is filled into the shell, the resulting combination stick can be used as a usual lipstick, the shell having the necessary hardness and resisting quality to heat, and the shell also protecting the inner core or filling against any other atmospheric influences.

The core or inner shell is indicated in the drawing at **11**, and it will be seen that when it is desired to use my novel lipstick, a selected end, as, for instance, the one indicated at **12**, will be rubbed on the lip, and in such rubbing, the material of the shell and of the inner core will be thoroughly mixed and applied in about their proportions in the lipstick, whereby a homogeneous coating is obtained, having stronger and more desirable color effect than the effect produced when made entirely of the shell material, as is the case with present lipsticks.

Generally, as mentioned, I propose to employ about equal amount of material in the shell and in the core, whereby the combined application of the two will result in said higher color effect.

In producing my novel lipstick, I may employ a casting die, generally indicated by the numeral **13**, having a left hand part **14**, and a right hand part **15**, and having the registering plane surfaces **16**, when placed one against the other. A plurality of half cylindrical casting recesses **17** are provided in the left hand die member **14**, and registering semi-cylindrical recesses **18** are formed in the right hand die member **15**.

I also employ a third member **19** for my die, having the depending core pins or plungers **20**, registering with the holes **19a** formed by the semi-

cylinders 17 and 18 in the respective left hand and right hand members of the die.

The pins 20 will be smaller in diameter than the holes 19a, so that the difference between the two will produce the desired thickness in the wall of the shell.

The base material for the shell, with its color mixture in castor oil, will be heated to about 160 or 170 degrees Fahrenheit, and the holes 19a will be filled with this molten material, up to the necessary height.

The upper member 19 of the die will be chilled, particularly its pins 20, and these pins will be inserted into the holes 19a, whereby the shell will be formed, as will be understood, and its material will be quickly chilled. After such chilling the top member 19, with the form pins or plungers 20, will be removed, a lower member laid flat, as, for instance, member 14 being underneath member 15, and said right hand member 15 will be lifted off the left member 14, and then the shell removed from the recesses 17 in the lower member by pushing them out axially.

The mentioned core mixture will be prepared, as usual for cosmetic preparations, and well known in this art, and will be filled into the shells, whereupon my novel lipstick will be ready for use.

It will be obvious that a perfume stick may be made in an entirely similar manner, having a core with considerably more concentrated perfume extracts than is the case with perfume sticks now in use. Mixtures for perfume sticks are well known, and I only use fillings of higher perfume extract content in the shells of usual compounds in my novel stick.

It also will be understood that the principles of my present invention will be employed, in general, for cases, where a certain material is to be applied by rubbing or smearing, and where, for any reason, it is desired to protect the material to be rubbed. In such cases, my invention may be employed by providing an outer protecting shell, which will co-operate with the material therein, and upon rubbing, they will produce a compound effect.

In case of lipsticks, and similar cosmetic devices, the outer shell may even be employed simply to protect the inner material against atmospheric and other influences, and said outer shell may then be made of a character to resist such influences, and to keep the inner filling or core fresh and substantially intact for a long time, or even indefinitely, while permitting the use thereof, the protecting shell or jacket being of a self-consuming nature, and being rubbed away while the inner core is applied by rubbing.

While I have shown preferred embodiments of my invention, it is to be understood that changes and variations may be resorted to in the elements, constructions and combinations of my invention, and I reserve my rights to such changes and variations as are within the spirit of this specification, and the scope of the claims hereunto appended.



What I claim as new, and want to protect by Letters Patent of the United States, is:

1. A cosmetic stick comprising a hard outer shell and a soft inner core, said outer shell and inner core each being composed of hard and soft wax materials, soft oily material and cosmetic material, the soft inner core being composed of a smaller quantity of hard wax material and larger quantities of the soft wax, oily and cosmetic materials, respectively, than said outer shell, the quantity of cosmetic material in said outer shell being a maximum of approximately 12 per cent, and the cosmetic material in said inner core being substantially above 12 per cent but below a maximum of approximately 24 per cent.

2. A lipstick composed of hard and soft wax materials, soft oil materials, and coloring materials, an outer shell comprising a larger part of said hard wax materials and smaller parts of the soft wax, oil and coloring materials, respectively, and an inner filler core for said shell carrying a smaller part of the hard wax materials and larger parts of the soft wax, oil and coloring materials, respectively, whereby said shell portion will act as a protector for said core portion and these two portions of the lipstick may be simultaneously used by rubbing and then produce a predetermined desired effect of a lipstick of all the ingredients, said shell and said core being each composed of substantially equal amounts of material by weight, the color content of the shell portion being substantially twelve per cent of its weight, and the color content of the core portion being about twenty-four per cent of the weight thereof.

LEONARD FRIEDBERG.


## REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

| Number | Name | Date |
|---|---|---|
| 26,780 | Morfit | Jan. 10, 1860 |
| 1,286,651 | Kendall | Dec. 3, 1918 |
| 2,162,584 | Kole | June 13, 1939 |

FOREIGN PATENTS

| Number | Country | Date |
|---|---|---|
| 173,767 | Great Britain | Jan. 3, 1922 |