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POMADE ASSEMBLY

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FIG. 1

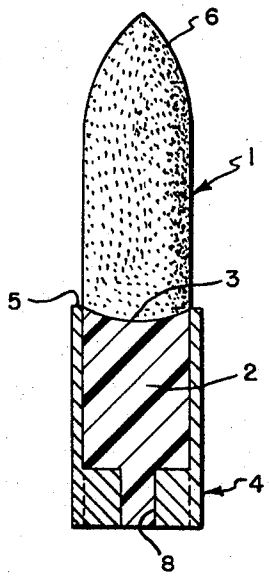


FIG. 2

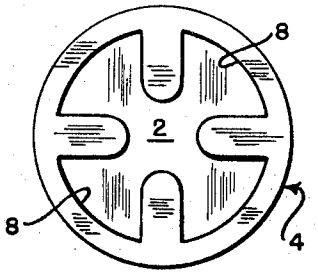
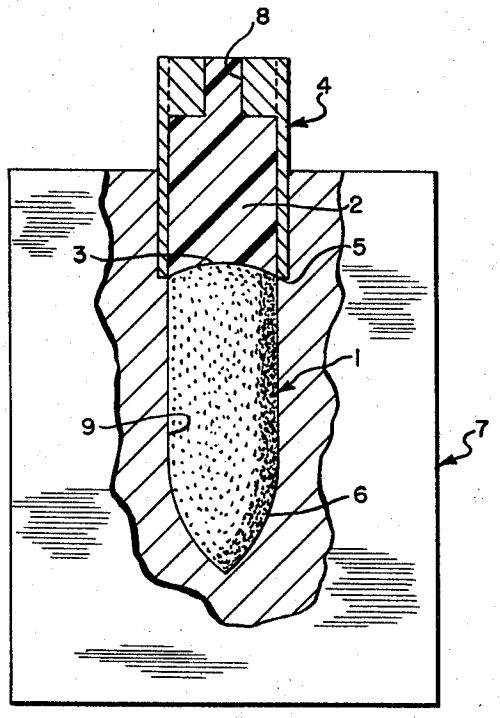


FIG. 3



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POMADE ASSEMBLY

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6 Claims

ABSTRACT OF THE DISCLOSURE

A lipstick assembly having a carrier cup and a lipstick pomade with a solid hard wax base bonded thereto, the base filling the cup and the pomade extending outwardly thereof.

The present invention relates to an improved pomade assembly and method of making same and more particularly to a lipstick pomade assembly constructed in such a manner whereby its breakage strength is made superior to that of conventional lipsticks without affecting the various cosmetic properties.

In conventional lipstick manufacturing processes, the lipstick pomade is first molded to the desired shape and placed in a supporting or carrier cup member. This assembly, namely the cup with the lipstick pomade supported therein, is then inserted into a suitable lipstick case or holder. With lipsticks constructed in this manner, the pomade, being inherently soft in nature, is susceptible to damage and contamination during the handling required in inserting it into the cup; and also the fit between the pomade and cup generally cannot be made firm due in part to the very fact that the pomade must be delicately handled. Furthermore, the pomade in lipstick assemblies constructed in this manner is prone to being broken during use due to the forces exerted as it is pressed upon the users lips. Generally, breakage occurs in the area where the lipstick pomade meets the upper edge of the carrier cup. When pressure is applied to the extending end of the lipstick, this edge of the cup acts as a fulcrum and the lipstick, because of its soft consistency and unfirm fit within the cup, breaks at this fulcrum point.

In accordance with the teachings of the present invention, the molding of the material to be carried by the cup is done directly in the cup. More particularly, the base end of the pomade, which in conventional lipsticks is to be held by the carrier cup, is replaced by a solid, hard wax which is bonded to the pomade and this wax is molded directly in the cup. Upon solidification, the solid wax presents a hard surface at the point of fulcrum with the cup and due to the fact that this wax is molded in the cup, a firm fit therewith is effected. With the lipstick assembly constructed in this way, direct handling of the pomade is avoided and thus damage or contamination eliminated. Also, the hard base with its firm fit within the cup results in a lipstick having a breakage strength which in some cases is 100% greater than conventional lipsticks; yet the appearance of the lipstick as well as its application properties and the extent to which the pomade may be used remain unchanged from conventional lipsticks.

A more complete understanding of the present invention will be obtained from a reading of the following detailed description thereof with reference being made to the accompanying drawings in which:

FIG. 1 is a cross-sectional view of the lipstick assembly constructed in accordance with the teachings of the present invention;

FIG. 2 is an enlarged bottom end view of the assembly of FIG. 1 showing the construction of the base of the carrier cup; and

FIG. 3 is a cross-sectional view of the lipstick mold showing the assembly of FIG. 1 molded therein.

As shown in FIG. 1, the lipstick assembly of the present invention generally comprises a lipstick pomade **1**, a solid wax base **2** bonded to the pomade at the juncture **3**, and a carrier cup **4** in which the base **2** is held. As shown, the wax base, at least along the inner wall surface of the cup, extends to the cup's upper edge **5**. Therefore, the wax **2** and not the pomade **1** will be pressed against the edge **5** of the cup upon the application of side pressure to the pointed end **6** of the pomade as the latter is pressed against the user's lips during use.

The wax material used for forming the base is one which will not only present a firm surface at the fulcrum point of the cup but one that can be bonded well to the pomade so that the pomade is not subject to separating from the wax along the juncture **3** upon the application of side forces to its extending end. One important requisite for forming a proper bond between the pomade and wax base is that the wax be miscible with the pomade. Since lipstick pomades in use today are varied in composition, some being of water miscible components and others of oil miscible components, the selection of a proper wax base is dependent on a knowledge of the pomade formulation. By using a wax which is miscible with the particular pomade employed, the wax will blend well with the pomade when in the molten state and thus form an integral strong joint.

In addition to using a wax material which is miscible with the pomade, the wax chosen is one having a slow solidifying action so that once poured onto the molten pomade, it has an opportunity to intermix with the pomade to form the desired strong, uniform bond. Also, another relevant characteristic of the wax chosen for the particular pomade is its specific gravity. Since in the production of the pomade and wax base as an integral unit, the wax is poured on top of the pomade, as explained more fully below, any substantial differences in the specific gravities of the two materials can influence the degree of mixing and subsequent bond formation. A wax having a specific gravity similar to that of the pomade, on the other hand, produces a good intermixing and strong bond.

A great proportion of the lipstick pomade being manufactured today are based on the utilization of castor oil. The various materials that may be combined to produce finished pomades which are acceptable to one versed in the lipstick art are set out in the following Table I with the various percentage proportions of the components being indicated.

TABLE I

Materials utilized in the preparation of lipstick pomades

Material:	Percent range
Beeswax	10–15
Candelilla wax	8–10
Carnauba wax	1–10
Cetyl alcohol	3.3–10
Micro crystalline petroleum wax	0.5–3.3
Ozokerite	0.5–13
Paraffin scale wax	13
Hydrogenated castor oil	8–9
Isopropyl palmitate	4–5
Vegetable oil triglyceride	9–10
Lanolin	4.5–5
Liquid fractions of lanolin	4.5
Isopropyl lanolate	10–11
Lecithin	0.2–0.25
Castro oil	54.5–65

In using pomades made in accordance with the formulations of Table I, it has been found that two waxes possessing the desired hardness and bonding characteristics are candelilla wax and beeswax. The ability of the candelilla wax and beeswax to form good bonds with the lipstick pomades and to produce a structure having greater breakage resistance than the pomades themselves is due to the fact that the miscibility of these waxes with the ingredients of most castor oil based pomades is excellent and thus permits a good blending of the two materials. Also, candelilla wax and beeswax set up in melted compositions slow enough and have specific gravities (0.98 and 0.95, respectively) which are close enough to the specific gravity (0.96) of castor oil based pomades to permit the desired intermixing with the pomade.

Table II below compares the relative breaking strengths of various pomades A–E prepared from the materials shown in Table I with the breakage strengths of these same pomades constructed with candelilla and beeswax bases.

TABLE II

Effect of wax bases on breaking strengths of various lipstick formulations

	Breaking strengths, grams at 70° F.
Pomade A	568
Pomade A+candelilla wax base	846
Pomade A+beeswax base	856
	Breaking strengths, grams at 63° F.
Pomade B	1653
Pomade B+beeswax base	1725
Pomade B+candelilla wax base	1711
	Breaking strengths, grams at 68–70° F.
Pomade C	1377
Pomade C+candelilla wax base	1597
	Breaking strengths, grams at 68–70° F.
Pomade D	837
Pomade D+candelilla wax base	1286
	Breaking strengths, grams at 68–70° F.
Pomade E	1137
Pomade E+beeswax base	1518
Pomade E+candelilla wax base	1917

The increase in breakage strength brought about by utilization of the solid wax base is particularly important at the higher temperatures to which the lipstick may be subjected during use and where, as a result of pomade softening, the incidence of breakage is greatest. Table III, set out below, shows the increase in breakage strength that can be obtained over a wide range of temperatures through the utilization of a solid candelilla base wax with a typical lipstick pomade made in accordance with the formulations of Table I. As indicated by Table III, the influence of the wax base is noticeably greater at the high end of the temperature range.

TABLE III.—EFFECT OF A SOLID CANDELILLA WAX BASE ON THE BREAKING STRENGTH OF A LIPSTICK POMADE AT DIFFERENT TEMPERATURES

	Breaking strength, grams at—				
	52° F.	63° F.	75° F.	82° F.	91.5° F.
Pomade	1,067	976	491	459	271
Pomade + Candelilla wax base	1,653	1,321	818	683	628

Although candelilla wax and beeswax possess the ability to form the desired bond and increase the breakage strengths of castor oil lipstick pomades, it is to be understood that other waxes possessing the same characteristics of these two waxes may also be suitable with particular pomade formulations. Furthermore, the properties of the waxes as discussed above with regard to their selection for castor oil based pomade compositions would also be applicable to the selection of waxes to be used for pomades based on mineral oil as well as those water miscible pomades that are basically polyethylene glycol compositions.

In the manufacture of the lipstick assembly, the carrier cup is first inserted into a suitable mold **7** with its base portion extending thereabove. As shown in FIG. 3, the mold at its open end is constructed to accommodate the carrier cup. This cup has a substantial portion of its base removed, as shown in FIG. 2, to provide a filling opening **8** through which the pomade and wax may be poured into the cavity **9** of the lipstick mold **7**. After the cup has been placed in the mold cavity, the molten pomade is then poured into the cavity through the opening **8** of the cup and immediately thereafter the wax is poured through the same opening and both materials allowed to solidify to form an integral molded assembly.

Satisfactory formation of a bond between the pomade and the wax base is best obtained by applying the molten wax to the pomade immediately after the molten pomade has been poured and is starting to set up or solidify. Also, as shown in FIGS. 1 and 3, the end of the pomade to which the wax is to be bonded may be formed with a convex surface to expose a maximum area for bond formation.

By placing the cup in the open end of the mold cavity and pouring the pomade and wax base materials into the cavity through the opening **8** of the cup, handling of the pomade is completely avoided and a firm fit of the wax base within the cup is attained. Also, by having the end of the cup extend out of the mold, removal of the assembly can be accomplished readily either by hand or machine and the assembly may then be placed directly into a suitable lipstick holder or case.

The procedure of direct molding within the cup as described above is also advantageous in forming a lipstick assembly comprised of a carrier cup and pomade without any wax base; and the breakage strengths of such pomades can also be increased in accordance with this method of production. The extent of breakage strength increase is dependent on the particular composition chosen for the pomade and the changes in consistency brought about by changes in temperature during use. The data in Table IV, set out below, show the increases in breakage strength that can be obtained with a typical pomade over a wide range of temperatures by pouring the pomade through the base of the cup and into the mold rather than by molding the pomade as a separate piece and inserting into the cup.

TABLE IV.—INFLUENCE OF POURING LIPSTICK POMADE THROUGH BASE OF THE LIPSTICK CUP ON THE BREAKING STRENGTH OF THE POMADE AT DIFFERENT TEMPERATURES

	Breaking strength, grams at—			
	52° F.	62° F.	80° F.	88° F.
Pomade inserted in carrier cup	1,240	662	373	281
Pomade poured through base of carrier cup	1,443	754	464	351

The above description of the present invention has been made with particular reference to castor oil based lipstick pomades and wax base materials of candelilla wax and beeswax. Nevertheless, it is to be understood, as indicated in the above description, that other pomade formulations and wax base compositions may be used where the resulting unit possesses the required bonding and strength characteristics without departing from the scope of the invention as set forth in the following claims. Also, it is to be understood that the method of constructing a stronger pomade assembly may be varied from the procedure described above without departing from the scope of the invention as set forth in the following claims.

We claim:

1. A lipstick assembly comprising:

(a) a carrier cup having a side wall and an open top defined by the top edge of said wall;
(b) a lipstick pomade; and
(c) a solid hard wax base bonded to one end of said pomade and filling said cup with said pomade extending outwardly beyond the open top thereof.

2. A lipstick assembly according to claim 1 wherein:
(a) said wax base is comprised of a material which is miscible with said pomade when said material and pomade are in the molten state.

3. A lipstick assembly according to claim 2 wherein:
(a) said one end of the pomade is convex in shape; and
(b) said wax base along the surface contacting the inner wall surface of said cup extends to a point substantially flush with the open top edge of said cup wall.

4. A lipstick assembly according to claim 2 wherein:
(a) said lipstick pomade and wax base both have specific gravities which are between about 0.95 and 0.98.

5. A lipstick assembly according to claim 4 wherein:
(a) said pomade is comprised of a castor oil based composition; and

(b) said wax base is comprised of candelilla wax.

6. A lipstick assembly according to claim 4 wherein:
(a) said pomade is comprised of a castor oil based composition; and
(b) said wax base is comprised of beeswax.

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LAWRENCE CHARLES, *Primary Examiner.*

U.S. Cl. X.R.

106—245; 132—88.7; 206—56; 401—49