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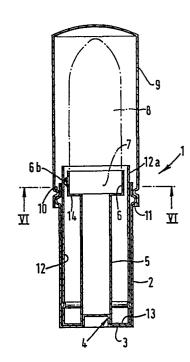
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## (54) Stick holder device.

(5) A stick holder device for holding a stick of solid consumable material, such as cosmetics material, e.g. lipstick.

To protect the stick held in a conventional device during placement and removal of a cap, it is known to provide an axially movable cap in which the stick is seated and a mechanism for retracting the stick into a base tube. However, such arrangements are complex and somewhat unstable mechanically

In the device of the invention a cover sleeve is axially movable relative to a handle in which the stick will be fixedly held selectively to conceal or expose the stick. The sleeve is itself manually engageable and can be manipulated as required for said axial movement. The construction is simple and effective and provides firm and stable mounting of the stick



## STICK HOLDER DEVICE

The present invention relates to stick holder devices of the type adapted to hold a stick of solid consumable material, such as cosmetics or other toiletry materials. The invention is particularly, but not exclusively concerned with lipstick holders

Such stick holders commonly comprise a base member which carries the stick and a tubular cap which fits onto the base member to cover the stick when it is not being used. To avoid accidental damage to the stick during removal of the cap from the base, and replacement of the cap onto the base, it has been known to form the base member as a tube and to arrange for the cosmetics stick to be withdrawn into the base tube before replacement of the cap. In a known construction for achieving this mode of operation, the stick is seated in a cup which is axially movable within the base tube. To produce the required axial movement of the cup, it is known to provide a mechanism by which relative rotation of two interconnected parts of the base tube causes this required axial movement of the cup.

However, a number of problems are associated with this and other similar known stick advance/retract constructions.

Firstly, the twist-advance mechanism in the known construction is relatively complicated and requires a large number of cooperating parts. For example, there are commonly two coaxial and relatively rotatable plastics sleeves disposed one inside the other within and additional to the two-part base tube, further means being necessary to cause the stick-carrying cup to advance and retract axially when the inner plastics sleeve, which is fixed to the end part of the base sleeve, rotates within the outer plastics sleeve, which is fixed inside the upper part of the base sleeve. Furthermore, to ensure proper operation of arrangement the component parts must be made to a relatively high tolerance so that they fit together precisely. Also, a relatively complicated procedure is required for assembling the numerous components of the device. This generally results in high manufacturing costs which necessarily are passed on as a high purchase price to the consumer.

In this known arrangement, the stick itself moves, and in the construction necessary to produce this movement there is inevitably a degree of instability of the stick in the projected position. It should be

borne in mind that the base sleeve into and from which the stick is axially movable acts as the handle by which the user will hold the device and since the cup holding the cosmetics stick moves relative to this base sleeve, this consequential instability can cause problems in the use of the device for application of the cosmetics material. Even where, as is known, means is provided for locking the stick in the extended and retracted position, this instability is not fully cured; moreover, the locking mechanism further complicates the construction.

An alternative construction which deals with this latter problem has been proposed in published UK Patent Application 2,063,825. In this known arrangement the stick is seated in a cup which is fixed inside an outer cylindrical tube and a cover sleeve disposed coaxially within this outer tube is arranged to be axially driven, again by a twist advance mechanism, between retracted and projected positions. The twist advance mechanism includes a further tube which is rotatably disposed but axially fixed within the outer tube and which projects therefrom so as to be manually engageable. This further tube has helical slots in which projections on the cover tube locate to convert the rotation of the further tube into axial movement of the cover tube.

However, because this construction incorporates a similar twist advance mechanism, as used in the aforementioned stick advance/retract devices, it suffers the same problems of complexity and cost.

Moreover, because of the necessity for relative rotation of certain parts in the above described devices, their overall construction must be circular cylindrical; non-circular cross sections cannot be employed.

The present invention seeks to alleviate, at least partially, the outstanding disadvantages of the known arrangements.

According to the present invention, there is therefore provided a holder assembly for a stick of consumable material; e.g. a cosmetic, the assembly comprising a handle member including a portion for holding an end portion of a said stick, and a cover member movably connected to said handle member in such a way that it can be manually engaged and manipulated so as to be moved relative to said handle member axially of the stick for selectively concealing and exposing said stick.

In this arrangement, the cosmetics stick is held firmly and immovably in the handle portion, and the

cover member, which is preferably a sleeve, is itself manipulated, there being no separate twist advance mechanism to complicate the structure.

Moreover, where the arrangement is such that the selective exposing and concealing of the stick is produced by a simple linear push-pull movement of the cover member, the interconnecting parts can be made non-circular in cross-section, thereby greatly increasing the design possibilities.

Although an arrangement providing the abovementioned simple linear push-pull action for movement
of the cover may be preferred, the interconnection of
the cover and handle members may alternatively be such
as to provide a twist-and-pull action whereby the cover
will be simultaneously twisted and pulled to advance it
to the stick-concealing position. This may prove more
acceptable to the consumer, now long accustomed to
using a twisting action in the above-described
conventional twist-advance lipstick devices.

According to the present invention there is also provided a holder assembly for a cosmetics stick, the assembly comprising a handle member including an outer tube and fixed therein a portion for holding an end portion of a cosmetics stick element, and a sleeve connected to said handle member so as to be movable relative to said handle member axially of the cosmetics

stick for the selective exposure and concealment of said stick, wherein said tube and said sleeve are of corresponding non-circular cross-section.

The handle portion preferably comprises an outer tube and a stem or column extending centrally and coaxially within the tube, one end of the stem being adapted, or carrying a cup which is adapted, to receive and firmly hold an end of the cosmetics stick. In the disclosed embodiment, this stem is fixed at its other end to an end base wall of the outer tube.

The displaceable sleeve may be fitted within the outer tube of the handle so as to be axially movable from a first retracted position in which it lies substantially wholly within the outer tube of the handle, but with an end portion projecting therefrom so as to be manually engageable, and in which the cosmetics stick is fully or substantially fully exposed, and an extended position in which it projects substantially from the open end of the outer tube to conceal and protect the cosmetics stick.

There is preferably a cap which fits onto the end of the outer tube and which is of sufficient length to accommodate the cosmetics stick when concealed by the sleeve in its extended position.

Preferred embodiments of the invention will now be described by way of example with reference to the accompanying drawings, in which:

Figure 1 illustrates schematically and in longitudinal cross section the construction of a cosmetics stick holder device in accordance with the present invention;

Figure 2 illustrates the device with a stickprotective sleeve thereof in its extended position;

Figures 3 and 4 illustrate in perspective, and with the cap and cosmetics stick itself removed, the holder device of Figures 1 and 2, showing the protective sleeve thereof respectively in its retracted and extended positions;

Figure 5 illustrates in longitudinal cross section a modified construction of a cosmetics stick holder device in accordance with the present invention; and

Figures 6 and 7 illustrate different non-circular cross-sectional configurations of two further embodiments, taken at axial positions corresponding to the line VI-VII in Figure 1.

With reference to Figures 1 to 4 of the drawings, a stick cosmetics holder assembly 1 comprises a tubular

base member 2 which is closed at one end by an end wall 3. At its other end, the base tube 2 is open. The end wall 3 is formed centrally with an internal cylindrical projection 4 onto which the base end of a central cylindrical stem, or column 5 is a tight push-fit. By this means, the column 5 is rigidly fixed to the base cylinder 2. At its upper end, the column 5 is formed with an enlarged cylindrical cup 6 into which the base portion 7 of a cosmetics stick element 8 can be firmly seated. Accordingly, the base tube 2 and the central column 5 fixed therein together constitute a handle for the device in which the cosmetic stick 8 is firmly held.

A cylindrical cap 9 push fits onto the open end of the base cylinder 2 to provide a closed cylindrical container for the cosmetics stick. To define the relative axial position of the cap 9 on the base tube 2, the cylindrical wall of the cap 9 may be formed adjacent its lower open end with an internally projecting circumferential bead 10 which abuts against corresponding bead, or a plurality circumferentially spaced projections 11 adjacent the upper open end of the base tube 2 to limit the degree to which the cap 9 can be pushed telescopically onto the base tube.

To protect the cosmetics stick 8 from being damaged when the cap 9 is removed from and replaced onto the handle, there is provided a protective sleeve 12 which is of slightly lesser diameter than that of the base tube 2 and which fits telescopically therein so as to be axially slidable relative thereto. sleeve 12 is a close fit to the handle so that it can firmly retain any axial position relative thereto. provide this close fit, for example, the sidewall of the cup may be formed with a cut-out 6a defining an outwardly biased spring finger 6b which resiliently bears on the inner surface of the sleeve 12. The force with which this finger so bears, and the resulting resistance to movement of the sleeve can be preset as required by the pre-stressing of the finger.

In Figures 1 and 3 the sleeve 12 is shown in its fully retracted position in which, when the cap 9 is removed, the stick 8 is fully exposed.

At its lower end, the sleeve 12 is provided with a radially inwardly projecting annular flange 13 which limits the outward movement of the sleeve from the base tube 2, so as to inhibit mutual separation of these two components and thereby retain their interconnection. Figures 2 and 4 illustrate the arrangement when the sleeve 12 is fully extended so as to conceal and protect the cosmetics stick 8. In this position, the

flange 13 abuts against the lower annular surface 14 of the cup 6 so as to prevent further outward movement of the sleeve 12. The sleeve 12 is moved from the retracted position of Figure 1 by holding the base tube 2 with one hand and gripping and axially pulling the exposed end portion 12a of the sleeve 12 with the other hand. As can be seen from Figure 2, the sleeve 12 in its fully extended position conceals the whole length of the cosmetics stick 8 to provide full protection therefor, and the cap 9 fits onto the base tube 2 over the extended sleeve.

When not in use, the device will normally be stored with the sleeve fully extended and the cap 9 in position. When it is desired to use the device, the cap 9 will be removed and the sleeve 12 retracted by gripping the portion 12a and axially pushing the sleeve 12 into the base cylinder 2 either fully so as to expose the whole of the cosmetics stick, or partly so as to expose an end portion thereof of suitable length.

In the arrangement shown in Figures 1 to 4, the sleeve 12 is moved by a simple push-pull action. The arrangement could be modified, for example by providing a helical groove or slot in the column 5 and a spigot projecting inwardly from the inner edge of the flange 13 into the groove or slot, so as to cause sleeve 12 to be guided into a simultaneous axial and rotational

movement relative to the base tube 2. modification, the sleeve 12 and inside of the base tube would necessarily be circular cylindrical whereas in the arrangement of Figures 1 to 4 these components may be made of any desired cross-sectional shape, e.g. elliptical, square, hexagonal etc. as no relative rotation of these parts is required. Figures 6 and 7 illustrate two such non-circular cross-sectional configurations. In each of these further embodiments all of the interconnected components are corresponding cross-sectional shapes, though it will be appreciated that from the design aspect it is the shape of the base tube 2, cap 9 and cover sleeve 12 which is most important.

It will be appreciated that the above described structure is both simple and effective in both operation and construction as the only moving part is the sleeve 12. Furthermore, the arrangement is operationally advantageous as the cosmetics stick 8 is firmly fixed to the handle comprising the base cylinder 2 and the central column 5.

The device is simple to assemble, the assembly procedure comprising the steps of inserting the sleeve 12 into the base tube 2 and then positioning the column 5 axially within the sub-assembly and pushing it firmly onto the base projection 4. The cosmetic stick 8 can

then be firmly pushed into the cup 6, and finally the cap 9 placed over the assembly.

In the above described arrangement, since there are fewer tubular elements disposed about the cosmetics stick 8 than in the earlier described conventional arrangements, the overall diameter of the device can be reduced, thereby making the device more compact.

In a proposed modification, the above described-device can be made tamper proof whilst still allowing the cosmetics stick to be viewed for colour etc. This can be accomplished, for example, by providing an annular tear-off strip 15 shown in Figure 2 around the base of the sleeve 12. This strip is temporarily fixed by means of an annular groove adjacent the base of the sleeve, and projects radially outwardly sufficiently to abut the upper edge of the open end of base tube 2 so as to prevent the sleeve 12 being moved from its fully extended position whilst still allowing the end of the cosmetics stick 8 to be viewed when the cap 9 is removed. After purchase, this strip 15 can be removed to allow the sleeve to be retracted for exposure of the stick.

It should also be noted that since there are no unsightly screw-advance components in the illustrated arrangement, the handle and sleeve may be made transparent without the device becoming visually unattractive.

Figure 5 illustrates a construction incorporating some modifications to the construction of Figures 1 to 4.

Firstly, the base tube 2 and column 5 are moulded in one piece, a sealing disc 36, which may be integrally formed with the base of the tube 2, optionally being provided to seal the lower opening of the cylindrical column.

Secondly, the cup 6 is initially formed as a separate element and is shaped so as to snap-fit, or be otherwise assembled to the top of the column 5.

Thirdly, the above-mentioned helical groove 37 in the outer wall of the column 5 and the spigot 38 on the flange 13, providing simultaneous axial and rotational movement of the sleeve, are shown in dashed lines.

The column 5 need not be cylindrical; it could be of cruciform or other suitable cross-section. As in the embodiment of Figures 1 to 4, the Figure 5 arrangement can be made of non-circular cross-section, e.g. as in Figures 6 and 7.

While the invention is particularly applicable to lipstick assemblies, the cosmetic stick element may comprise other types of solid product, e.g. compressed coloured powders such as eye-shadow and facial blusher make up compositions, or non-cosmetic product, such as lip salve, shaving soap etc.

## CLAIMS: -

- 1. A holder assembly for a stick of consumable material, e.g. a cosmetic, the assembly comprising a handle member including a portion for holding an end portion of a said stick, and a cover member movably connected to said handle member in such a way that it can be manually engaged and manipulated so as to be moved relative to said handle member axially of the stick for selectively concealing and exposing said stick.
- 2. A holder assembly according to claim 1 wherein said cover member is connected to said handle member in such a way that it can be manually pulled and pushed relative to said handle member without twisting it relative to said handle member.
- 3. A holder assembly according to claim 1 wherein said cover member is movably connected to said handle member in such a way that said cover and handle members are relatively twisted as they are moved axially one relative to the other.

- 4. A holder assembly according to any preceding claim wherein said handle member includes an outer tube and fixed therein a portion for holding an end portion of the stick, the cover member comprising a sleeve connected to the handle member so as to move telescopically relative to said outer tube.
- 5. A holder assembly according to claim 4 wherein said portion of said handle member comprises a stem extending coaxially within said outer tube, one end of the stem being adapted, or carrying an element which is adapted, to receive and firmly hold an end of said stick.
- 6. A holder assembly according to claim 5 wherein said outer tube includes at one end thereof a base wall, and wherein said stem is fixed at its end opposite said one end thereof to said base wall of the outer tube.
- 7. A holder assembly according to any of claims 4 to 6 wherein said sleeve is fitted within the outer tube of the handle so as to be axially movable from a first retracted position in which it lies substantially wholly within the outer tube of the handle member, but with an end portion projecting therefrom so as to be manually engageable, and in which a said stick will be

fully or substantially fully exposed, and an extended position in which it projects substantially from the open end of the outer tube of the handle member to conceal and protect the stick.

- 8. A holder assembly according to claim 7 wherein said sleeve is formed with an annular recess at a point along its length which lies adjacent and outside the open end of said outer tube of the handle member in said extended position, for accommodating a ring which will have to be removed from the sleeve to allow the sleeve to be moved to its said retracted position prior to a first use of a said stick held by said handle member.
  - 9. A holder assembly according to claim 7 and further comprising a removable element which inhibits movement of the sleeve from its said exposed position to its said retracted position.
  - 10. A holder assembly according to claim 5 wherein said sleeve and said stem are inter-engaged so that they will be twisted one relative to the other as the sleeve is moved axially relative to the handle member.

- 11. A holder assembly for a stick of consumable material, e.g. a cosmetic, the assembly comprising a handle member including an outer tube and fixed therein a portion for holding an end portion of a said stick, and a sleeve connected to said handle member so as to be movable relative to said handle member axially of the stick for the selective exposure and concealment of said stick, wherein said tube and said sleeve are of corresponding non-circular cross-section.
- 12. A holder assembly according to claim 7 and further including a cap which is adapted to fit onto the end of the outer tube of the handle member and which is of sufficient length to accommodate the sleeve when in its said extended position.

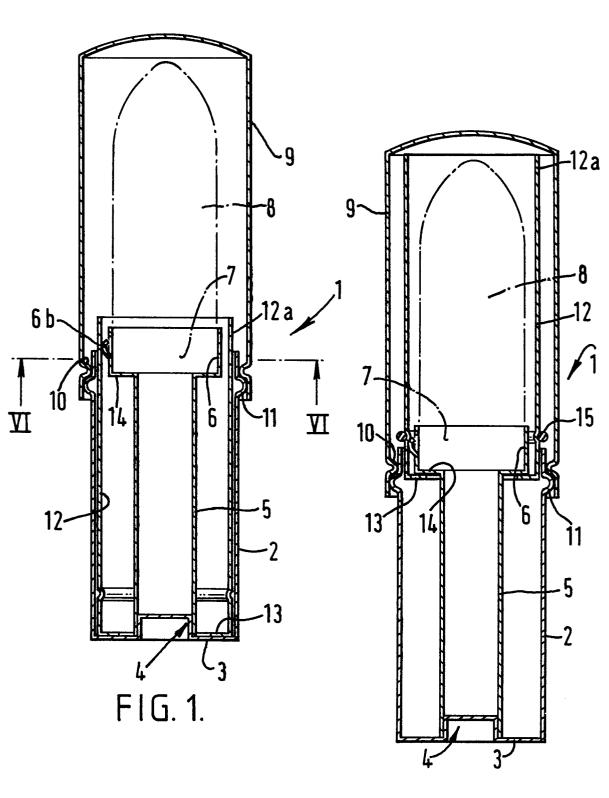
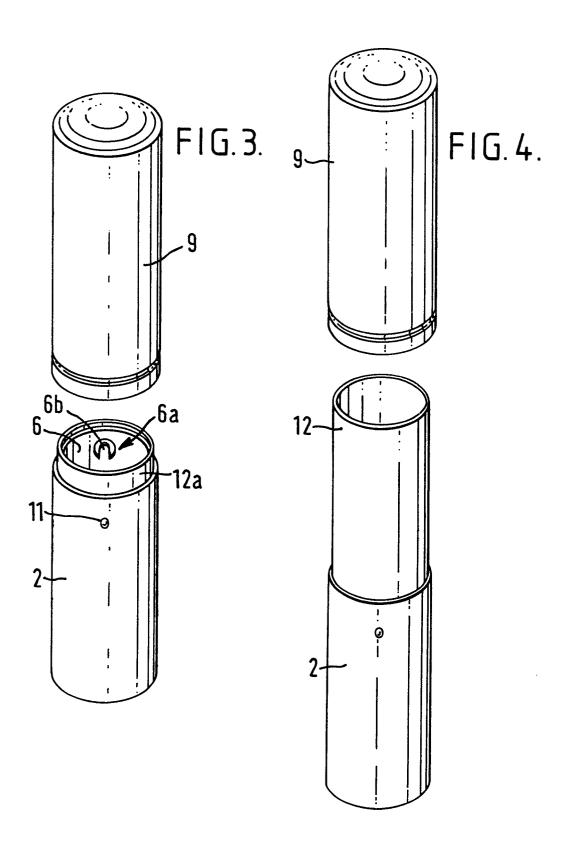


FIG. 2.



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