

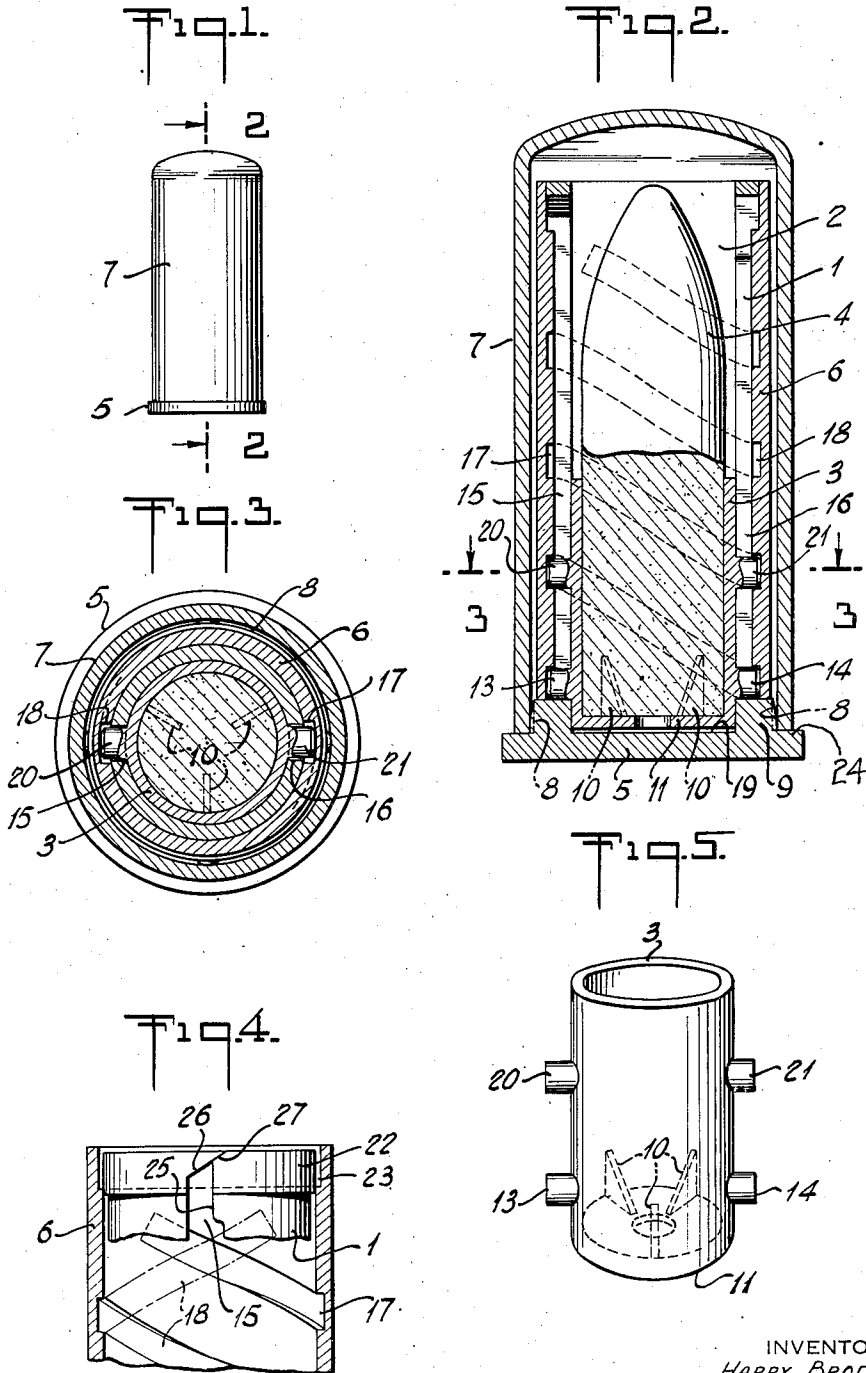
May 10, 1949.

H. BRODER

2,469,631

LIPSTICK HOLDER WITH FOUR-PIN CUP

Filed Nov. 17, 1945



INVENTOR
HARRY BRODER

BY
Morrison, Kennedy & Campbell
ATTORNEYS.

L-191

UNITED STATES PATENT OFFICE

2,469,631

LIPSTICK HOLDER WITH FOUR-PIN CUP

Harry Broder, New York, N. Y.; William Feistner,
Leonard Broder, and Joseph F. Berlinger ex-
ecutors of said Harry Broder, deceased

Application November 17, 1945, Serial No. 629,291

4 Claims. (Cl. 206-56)

1

This invention relates to a lipstick holder of the type which includes concentric inner and outer cylindrical shells, the inner shell presenting a longitudinal bore to receive a carrier for the lipstick cartridge, and the carrier being provided with opposed laterally extending pins to cooperate with two longitudinal slots in the inner shell and two helical guideways in the outer shell. The arrangement is such that as the inner shell, for instance, is rotated relatively to the outer shell in one direction, the carrier will be moved longitudinally along the bore to project the lipstick cartridge, when its use is desired; whereas, when the parts are relatively rotated in the opposite direction, the carrier will be moved in the reverse direction to retract the lipstick cartridge into the bore, as when it is not to be used. It is also customary to provide such a lipstick container with a cover or cap to prevent access to the lipstick of contaminating foreign matter, as well as to prevent the lipstick itself from coming into contact with and soiling other articles.

It frequently happens, that, in lipstick holders of this type, the carrier for the lipstick cartridge will wobble when projected from and into the inner shell. This wobbling may result in the lipstick being pressed against the adjacent wall of the inner shell, smearing the latter, or it may result in staining the fingers of the user, or both these undesirable results may happen. A further and even more serious result is that the lipstick, which is carefully made to give the best service in use, may be deformed and thus rendered less serviceable, if not entirely unfit, for use. Indeed, in many instances the lipstick holders are rejected because of such faulty operations.

With the foregoing defects in view, a prime object of the invention is to produce a lipstick holder whose rotatable parts will be so constructed and arranged that the lipstick or cartridge carrier can be projected into and out of its housing shell easily and quickly and without any wobbling or swaying or other deviation from a true course.

Another object of the invention is to make a lipstick holder of the character described which shall be simple in design and construction and composed of a minimum number of parts, and which shall yet be certain and reliable in operation.

These and other objects of the invention will in part be obvious and in part be more fully set forth in the following description, when read in

2

connection with the accompanying drawings, of which

Fig. 1 is an elevation of a lipstick holder, embodying the present improvements;

Fig. 2 is an enlarged vertical sectional view on line 2-2 of Fig. 1;

Fig. 3 is a horizontal sectional view on line 3-3 of Fig. 2;

Fig. 4 is a partial vertical sectional view through the top portion of the outer shell during the assembly of the inner shell therewith and just before the inner shell has seated in its final position; and

Fig. 5 is a perspective view of the cartridge carrier.

The lipstick holder, when assembled for use, includes an inner cylindrical shell 1, having a bore 2, serving as a guide for a cylindrical lipstick cartridge receptacle or carrier 3, containing a lipstick cartridge 4. The shell 1 is formed integrally with a base member 5. An outer shell member 6, concentric with the inner shell 1, encircles the latter with the exception of the base member 5. The lipstick holder further includes a cap 7, which completely encircles the outer shell 6 and which engages tapered projections on the outer cylindrical surface 8 of a reduced portion 9 of the base 5, see Fig. 2. The lipstick holder as a whole or its different elements may be made of any desired materials, as metals or plastics. The embodiment herein shown and described is preferably molded of nylon, in whole or in part.

The cartridge carrier 3 is open at the top to receive the lipstick cartridge 4 which, when inserted in the carrier, is suitably held against turning, as by triangular prongs 10 rising from a base plate 11. It is to be understood that the lipstick cartridge is relatively soft and must be pushed down into the carrier when the device is loaded to become impaled on the prongs 10. The carrier is also formed, as usual, with a pair of diametrically opposed pins 13, 14, integral with and projecting laterally from its outer cylindrical surface, and which pins are located near the bottom of the carrier.

The inner shell 1 is divided above its base 5 into two sections, semi-cylindrical in form except that their edges are cut away to present a pair of diametrically opposed vertical slots 15, 16, through which the pins 13, 14, respectively, extend. These pins project beyond the slots and into a pair of helical grooves 17, 18, presented by the inner wall of the outer shell 6. The grooves 17, 18, start at the bottom of the shell, at dia-

3

metrically opposed points, and terminate slightly below the top thereof.

According to the foregoing arrangement, when the carrier 3 is in its lowermost position, as determined by the banking of the pins 13, 14, against the base 5 of the inner shell (which, it may be noted, is recessed as at 19 to accommodate that portion of the carrier 3 below the pins 13, 14), the lipstick cartridge will be located entirely within the confines of the bore 2. However, assuming that the cap 7 has been removed, when the inner shell 1 and the outer shell 6 are relatively rotated, as by holding the outer shell and rotating the base portion of the inner shell in one direction, the carrier 3, by virtue of the engagement of its pins 13, 14, in the helical grooves 17, 18, respectively, of the outer shell, and the vertical slots 15, 16, of the inner shell, will be moved upwardly to project the lipstick beyond the bore 2 so that access to it may be had; and, conversely, when the inner and outer shells are relatively rotated in the opposite direction, the carrier 3 will be moved downwardly to retract the lipstick cartridge within the confines of the bore.

As has been stated, in constructions of the foregoing character, it frequently happens that there is a wobbly or unsteady movement of the carrier 3 in its movements to and fro in the inner shell 1, with the adverse results heretofore described. In accordance with a prime feature of the invention, therefore, means are provided to overcome or avoid such wobbly or unsteady movements of the carrier and for insuring at all times that the lipstick carrier in its movements shall pursue a true and even course. To furnish such means preferably and as shown, see Fig. 5, the carrier 3 is provided with two additional pins 20, 21 integral with and projecting laterally from its outer cylindrical surface. These additional pins are arranged on opposite sides of the carrier and in vertical alignment with the pins 13, 14, respectively, and, projecting through the slots 15, 16, extend into the grooves 17, 18, all in like manner as the pins 13 and 14. It will be observed that the vertical slots 15 and 16 are diametrically opposed in position and that the pins 13 and 14 and 20 and 21, while travelling along the helical grooves 17, 18, must proceed vertically upward in the said slots 15 and 16. It is also pointed out that the vertical distance between the axial plane of the pins 20 and 21 and the axial plane of the pins 13 and 14 is preferably equal to the pitch of the convolutions of the helical grooves 17, 18, although if desired said distance could be made equal to one-half of said pitch. In the first instance, the upper and lower pins 20 and 13 will travel in one groove 17 or 18, as the case may be, while the upper and lower pins 21 and 14 will travel in the other groove; in other words, the two pins located on the same side of the carrier will travel in one and the same groove. In the second instance, the upper and lower pins 20 and 14 will travel in one groove 17 or 18, as the case may be, while the upper and lower pins 21 and 13 will travel in the other groove; in other words, the two pins located on the same side of the carrier will travel in different grooves. Thus equipped, the carrier 3 in its up and down movements within the inner shell 1 will at all times maintain its stability or keep on a true course.

The inner shell 1 is formed at the top with an external annular boss 22 which fits into a complementary recess 23 formed in the inner face of the outer shell 6, the boss 22 and the recess 23 presenting interengaging shoulders in

4

a plane perpendicular to the axis of the container. At its lower end the outer shell 6 engages the base 5 of the inner shell. This construction at the opposite ends of the shells effectively locks them against relative longitudinal movement, while permitting free relative rotative movement, once the parts are assembled.

When the cap 7 is in place with its lower end engaging an annular shoulder 24 presented at the top of the larger portion of the base 5, it completely encloses the outer shell 6 and is frictionally locked to said base in a well known manner. The friction, however, is not so great but that the user readily will be able to assemble the cap.

Since the cap 7 when in service engages the base member of the inner shell 1 and since there is full clearance between the cap and the outer shell, relative rotation between the inner and the outer shells is impossible and there will be no danger of the lipstick cartridge being crushed against the top of the cap.

As shown in Fig. 4, there is formed in one edge of each slot 15, 16, near the top, a protrusion 25 which acts as a stop to limit the upward movement of the cartridge carrier since it stands in the path of the upper pair of pins 20, 21. Also, the opposed walls of each slot terminate at the top in complementary bevelled portions 26 and 27 which, when the parts are assembled, overlap one another, giving an optical illusion of continuity except for a slight line which is unnoticeable unless attention is directed particularly to it. The illusion is further enhanced by beveling oppositely the different edges of each shell section so that the slots appear to be cut along a common diameter.

As the inner shell is molded, the walls of the slots 15 and 16, respectively, flare outwardly toward the top. In this manner, there is provided an adequate opening at the upper ends of the slots readily to admit the protruding pins on the opposite sides of the carrier, which is the first step in the assembly of the parts. It will also be noted that such construction facilitates removal of the shell from the molding core.

After the cartridge carrier 3 has been placed in the inner shell 1, the latter is inserted endwise into the outer shell 6. In performing this operation, the two cylindrical sections are pressed together against their natural tendency to maintain their molded form and entered into that end of the outer shell which is opposite the recess 23, the entry being facilitated by an internal bevel formed at the lower end of the outer shell 6. Thereafter, the inner shell is pushed up into the outer shell until the upper pair of pins 20 and 21 are entered into the lower open ends of the helical grooves 17 and 18 which, as before stated, are disposed 180° apart. Then the two shells are given a complete rotation, one relatively to the other, to enter the lower pair of pins 13 and 14 into the lower open ends of the two helical grooves. By this same rotation of the two shells, the base portion 5 of the inner shell is brought up against the lower end of the outer shell. At that time, the boss 22 at the top of the inner shell comes into register with the annular recess 23 in the outer shell, whereupon the sections of the inner shell, being under stress, will spring out and seat in the recess, thereby locking the parts together in assembled relation.

While two pairs of pins are herein shown, variations in the number and locations of the pins may be made, if desired. For example, two pins might be employed in one slot, with only one pin in the

opposite slot. In such case, an improvement in operation would be manifested over the operation of structures of the prior art. However, in order to achieve the best results, two pairs of pins as herein shown and described should be employed, such an arrangement serving at all times to maintain a uniform resistance to any force tending to disturb the stability of the carrier in its up and down movements.

The invention in its broader aspects is not limited to the precise construction shown and described, as many changes may be made in the details thereof without departing from the main principles of the invention or sacrificing its chief advantage. For instance, if the parts were made of metal, as they could be, then the outer shell 6 would be made in two parts, instead of one, in order that one part could be formed with helical slots and the other fitted over it to close the slots at their outer sides or convert them into grooves to receive the carrier pins. These are features of manufacture and do not in any sense limit the scope of this invention.

Having thus described my invention, what I claim is:

1. A lipstick holder including, in combination, a cartridge carrier having three laterally projecting pins, two located on one side but at relatively different levels and the other at the diametrically opposite side and at a level corresponding to that of one of the opposite pins, an inner shell member presenting a bore to accommodate said carrier and formed with two longitudinal guide slots for the carrier pins, and an outer shell member formed with two helical grooves of equal pitch and disposed 180° apart to receive and make a close fit with the carrier pins, said shell members being relatively rotatable, in one direction to project the lipstick cartridge outwardly from the bore for use and in the opposite direction to retract the lipstick cartridge into the bore.

2. A lipstick holder including, in combination, a cartridge carrier having two pairs of laterally projecting pins, the pins of each pair being located diametrically opposite, with one pair at one level and with the other pair at a different level, an inner shell member presenting a bore to accommodate said carrier and formed with two longitudinal guide slots for the carrier pins, and an outer shell formed with two helical grooves of equal pitch and disposed 180° apart to receive and

make a close fit with the carrier pins, said shell members being relatively rotatable, in one direction to project the lipstick cartridge outwardly from the bore for use, and in the opposite direction to retract the lipstick cartridge into the bore.

3. A lipstick holder as in claim 2 characterized in that the distance between the pin levels is equal at least to one-half the pitch of the convolutions of the two helical grooves in which they travel.

4. A lipstick holder including, in combination, a cartridge carrier having two pairs only of laterally projecting pins, the pins of each pair being located diametrically opposite, with one pair at one level and with the other pair at a different level, the two pins at each side being disposed in vertical alignment with each other, an inner shell member presenting a bore to accommodate said carrier and formed with two diametrically opposite longitudinal guide slots only through which the aforesaid pins project, the two pins at one side riding in one of said slots and the two pins at the opposite side riding in the other of said slots, and an outer shell member formed on its inner face with only two helical grooves of equal pitch and disposed at 180° apart to receive and make a close fit with the projecting ends of said carrier pins, the two diametrically opposite pins of each pair being disposed in said grooves, respectively, said shell members being relatively rotatable, in one direction to project the lipstick cartridge outwardly from the bore for use, and in the opposite direction to retract the cartridge into the bore, by the cooperation of the two said helical grooves and the two said pairs of pins.

HARRY BRODER.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
1,464,853	Roach	Aug. 14, 1923
2,302,459	Noel	Nov. 17, 1942
2,351,395	Broder	June 13, 1944

FOREIGN PATENTS

Number	Country	Date
210,681	Great Britain	Feb. 7, 1924
267,678	Germany	Nov. 27, 1913