March 2, 1937. L. ABBOTTS 2,072,662

HOLDER

Filed Oct. 20, 1934 2 Sheets-Sheet 1

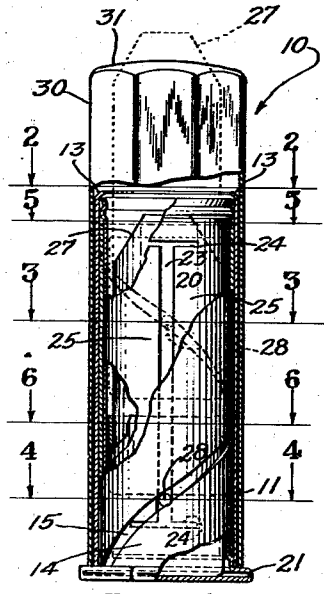

Fig. 1

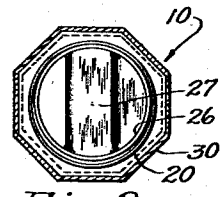

Fig. 2

Fig. 9

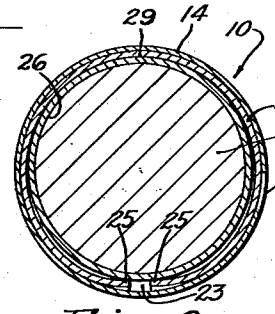

Fig. 6

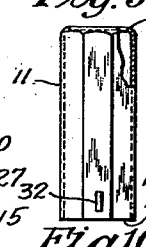

Fig. 10

Fig. 11

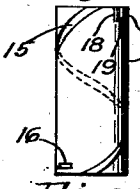

Fig. 12

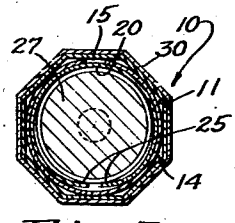

Fig. 3

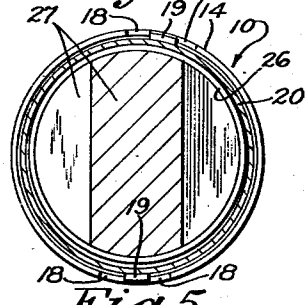

Fig. 5

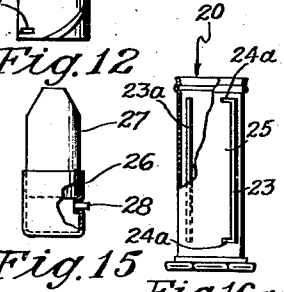

Fig. 15

Fig. 16a

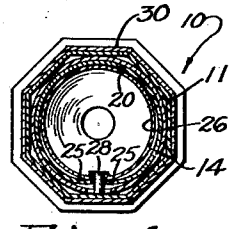

Fig. 4

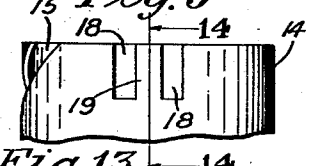

Fig. 13

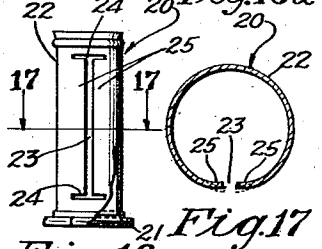

Fig. 16

Fig. 17

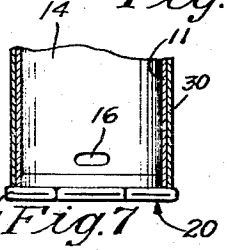

Fig. 7

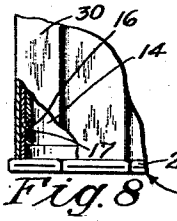

Fig. 8

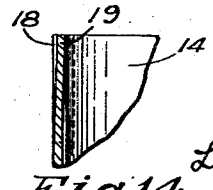

Fig. 14

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HOLDER

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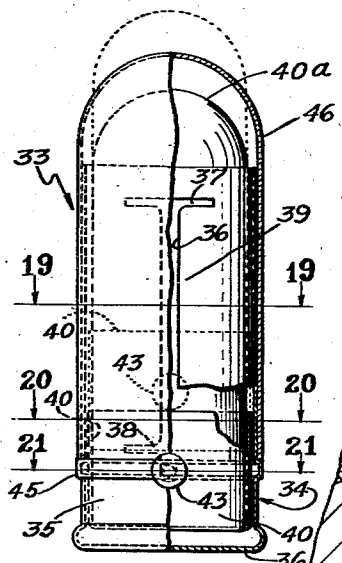

Fig. 18

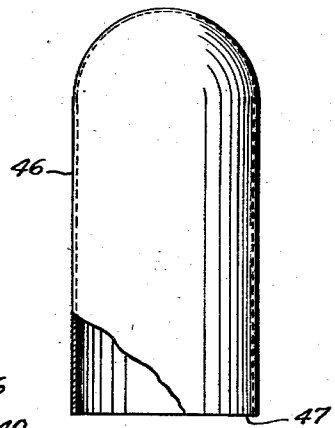

Fig. 22

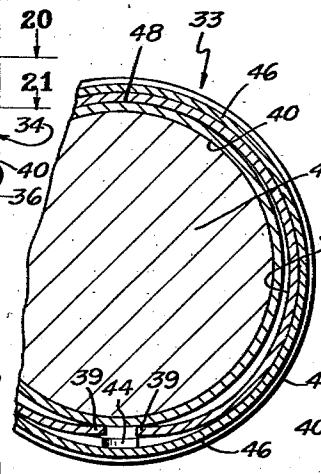

Fig. 20

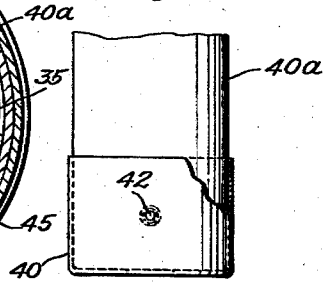

Fig. 23

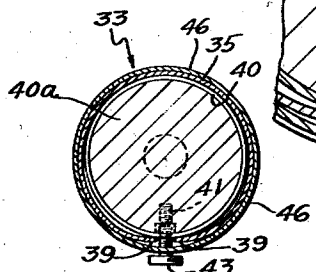

Fig. 19

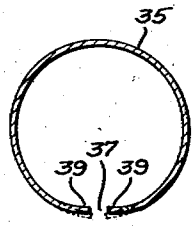

Fig. 25

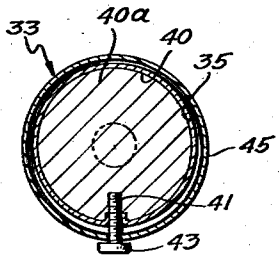

Fig. 21

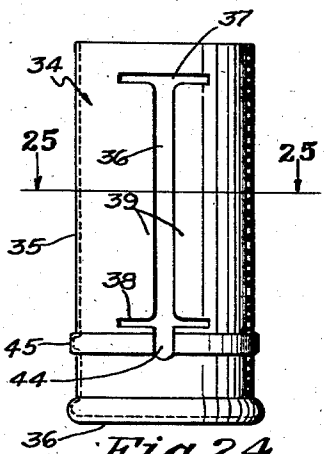

Fig. 24

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UNITED STATES PATENT OFFICE

2,072,662

HOLDER

Leonard Abbotts, Bridgeport, Conn., assignor to The Bridgeport Metal Goods Manufacturing Company, Bridgeport, Conn., a corporation of Connecticut

Application October 20, 1934, Serial No. 749,227

10 Claims. (Cl. 206—56)

This invention relates to new and useful improvements in holders and relates particularly to holders for cosmetics and similar materials such as lipstick, shaving stick, eyebrow pencil, etc.

An object of the invention is to provide a holder of the type including a casing having an open end and a carrier within and movable toward and from the open end of the casing, and wherein rattle and loose movements of the carrier in the casing is prevented.

Another object is to provide a holder of the type indicated and wherein the carrier for the lipstick or other cosmetic runs true and straight or parallel in relation to the walls of the casing.

A further object is to provide a holder as indicated and wherein the carrier has no loose or free movement relative to the casing and so cannot rattle or cant over or tip and must run straight or parallel with relation to the walls of the casing.

Other objects and advantages will become apparent from a consideration of the following detailed description taken in connection with the accompanying drawings wherein satisfactory embodiments of the invention are shown. However, it will be understood that the invention is not limited to the details disclosed but includes all such variations and modifications as fall within the spirit of the invention and the scope of the appended claims.

In the drawings:

Fig. 1 is an elevational view with parts broken away and showing somewhat enlarged a holder constructed according to the present invention;

Fig. 2 is a transverse sectional view taken substantially along the line 2—2 of Fig. 1;

Fig. 3 is a transverse sectional view taken substantially along the line 3—3 of Fig. 1;

Fig. 4 is a transverse sectional view taken substantially along the line 4—4 of Fig. 1;

Fig. 5 is a transverse sectional view on the further enlarged scale and taken substantially along the line 5—5 of Fig. 1 with the outer casing and cover omitted;

Fig. 6 is a transverse sectional view on the scale of Fig. 5 and taken substantially along the line 6—6 of Fig. 1 with the outer casing and cover omitted;

Fig. 7 is a detail view showing in section the slip cover and outer casing of the holder and showing in elevation an inner spirally slotted member employed;

Fig. 8 is a view partly in elevation and partly in section and taken at right angles to Fig. 7;

Fig. 9 is an elevational view with parts broken away showing the outer slip cover of the holder in actual size;

Fig. 10 is a similar view but showing the outer casing of the holder;

Fig. 11 is a detail view showing partly in elevation and partly in section, on the scale of Fig. 1, the frictional connection between the outer casing and slip cover of the holder;

Fig. 12 is an elevational view showing in actual size the spirally slotted sleeve of the holder.

Fig. 13 is an elevational view substantially on the scale of Fig. 5 and showing the upper portion of the sleeve of Fig. 12;

Fig. 14 is a vertical sectional view taken substantially along the line 14—14 of Fig. 13;

Fig. 15 is an elevational view with parts broken away showing in actual size the cosmetic elevator slide or carrier with a lipstick or the like therein;

Fig. 16 is an elevational view with a portion broken away showing in actual size a sleeve-like operating member of the holder;

Fig. 16a is a similar view showing a slight modification;

Fig. 17 is a transverse sectional view on the scale of Fig. 1 and taken substantially along the line 17—17 of Fig. 16;

Fig. 18 is a view partly in elevation and partly in section and showing on an enlarged scale a modified construction of holder embodying the invention;

Fig. 19 is a transverse sectional view taken substantially along the plane of the line 19—19 of Fig. 18;

Fig. 20 is a transverse sectional view on a further enlarged scale and taken substantially along the plane of the line 20—20 of Fig. 18;

Fig. 21 is a transverse sectional view taken substantially along the plane of the line 21—21 of Fig. 18;

Fig. 22 is an elevational view with a portion broken away showing detached the slip cover of the holder of Fig. 18;

Fig. 23 is an elevational view with a portion broken away showing the cosmetic elevator, slide or carrier with a lipstick or the like therein;

Fig. 24 is an elevational view of the outer casing of the modified construction of the holder; and

Fig. 25 is a transverse sectional view taken substantially along the line 25—25 of Fig. 24.

In Figs. 1 through 17 of the drawings, the invention is shown as incorporated in a holder of the type including a part adapted to be rotated in one direction to project a cosmetic for use and to be then rotated in the opposite direction to withdraw the cosmetic into the holder. This holder generally designated 10 includes an outer casing 11 shown as octagonal in transverse section, although it may be round or other shapes, open at its lower end 12 and having its upper end portion turned to provide an inwardly directed flange 13. Within the casing 11 is a sleeve 14 having a spiral slot 15. This sleeve is open at both ends and since the spiral slot 15 extends through both of its ends is constantly tending to

expand or flatten out and so frictionally engages the inner surface of the outer casing 11.

Also, the spirally slotted sleeve 14 is provided with an opening 16 into which enters a lug or projection 17 carried by the outer casing and entering into the opening 16 assists in preventing relative movement of the casing and sleeve. At its upper or outer end the sleeve 14 is notched or cut away as at 18 leaving a spring tongue or finger 19 which is pressed to incline slightly inwardly of the sleeve as shown in Fig. 14. This finger 19 presses frictionally against a tubular operating member 20 located within the sleeve open at its upper or outer end and closed at its inner or lower end as by a head 21. This head extends radially with respect to the tubular or body portion 22 of the member 20 and serves as a hand piece for rotating the member in the sleeve 14 as will later more fully appear. As the sleeve 14 is expanding against the inner wall of the casing 11 and as the finger portion 19 of said sleeve is pressing against the operating member 20 it will be clear that there are no loose movements between these parts and consequently they will not rattle one on the other. Also, the sleeve 14 is held against turning movements in the casing while sleeve 20 is held against accidental turning movements.

When the tubular body portion 22 of the member 20 is within the spirally slotted sleeve 14 and the latter is within the casing 11 the lower or inner ends of the casing and sleeve are closed by the head 21 of the operating member. This will be clear from an inspection of Figs. 1, 7, 8 and 11. In one side wall, the tubular portion 22 of the operating member 20 is provided with a longitudinally extending slot 23 and at the ends of said slot 23 or otherwise suitably located are cross slots 24. These may extend from the slot 23 on both sides or one side only as shown at 24a in Fig. 16a. The portion or portions 25 of the operating member at one or both sides of the slot 23 and between the slots 24 are pressed or bent to extend inwardly somewhat as best illustrated in Figs. 6 and 17 to form one or more spring or resilient portions to frictionally engage the cosmetic carrier 26. In actual practice the portions 25 are bent inwardly to an extent to secure the desired pressure on the carrier 26 for the cosmetic or similar material, but the clearance between the carrier and the tube is exaggerated in the drawings for the purpose of more clearly illustrating the invention, but sufficient clearance should be provided to permit proper movement of the carrier and allow for variations in dimensions incident to manufacture.

Within the operating member 20 is the carrier or elevator 26 open at one end and receiving the lower or inner end portion of a lipstick or other pencil-like cosmetic 27. Normally the carrier 26 is located at the inner or closed end of the operating member 20 so that the cosmetic 27 is wholly within the holder and is protected thereby. On proper manipulation of the member 20 the carrier is moved toward the open end of the holder so as to project the cosmetic for use, and after it has been used proper manipulation of the operating member will move the carrier in the opposite direction and shift the cosmetic inwardly into position within the holder.

To the end that the carrier may be shifted as described a pin or rivet 28 is suitably secured to or formed with the carrier and extends radially thereof through the longitudinal slot 23 in the operating member 20 and into the spiral slot 15 of the sleeve 14. With this construction it will be understood that as the member 20 is turned in one direction the pin will ride upwardly on the lower side or edge of the slot 15 so that the carrier is moved toward the open end of the casing, and on turning movement of the member 20 in the opposite direction the carrier is moved from the open end of the casing and the cosmetic withdrawn into the latter. The head 21 of the member 20 forms a finger grip to be used for turning said member. The pin 28, however, need not necessarily operate in the slot 23 but there may be an additional longitudinal slot 23a in the opposite side of this tube for the pin as shown in Fig. 16a. However, the single slot of Figs. 16 and 17 is preferred as it is simpler and requires fewer operations in manufacture. Any other suitable means may be provided for producing the spring or resilient friction on the carrier, it being noted that a particular feature of the invention is the friction on the carrier itself to hold it straight and to prevent loose movement.

When the carrier 26 is within the member 20 the inwardly pressed portions 25 of said member bear against one side of the carrier and the opposite side of said carrier is forced against the inner surface portion of the body 22 of the operating member at the side of said member opposite the longitudinal slot 23 thereof. This is as indicated at 29 in Fig. 6. As the portions 25 of the member 20 extend for the length of the slot 23 and therefore may extend for substantially the length of the member and the length of movement of the carrier it will be clear that such inwardly bent portions 25 engage the carrier 26 for a substantial portion of its length in all positions of the carrier. Therefore, in all its positions one wall of the carrier is held against the inner surface of the member 20 as suggested at 29 in Fig. 6 and the carrier is held against rattle and against loose movements.

The carrier may not move freely up and downwardly to the limits of its movements as controlled by movement of the pin 28 in the slot 15 and the carrier is held against sidewise movements. Therefore, as the carrier is moved toward and from the open end of the holder it will move in straight or parallel relation to the walls of the holder and cannot cant or tilt. It also cannot rattle or shake around. Since as above explained, the portions 25 need be bent inwardly only for a short distance and the clearance between the carrier and the sleeve or member 20 is much exaggerated in the drawings it will be appreciated that the carrier and the cosmetic or the like 27 will move outwardly through the open end of the holder in substantially concentric relation to the holder. As the friction is applied directly to the carrier in all its positions it will be clear that the present means will assist in preventing movement of the carrier rearwardly in the holder due to pressure exerted on the end of the cosmetic stick when using the latter. Attention is also directed to the fact that I have provided an arrangement for applying this friction directly to the carrier without the use of any additional parts.

The feature of the present invention may be applied to holders of any shape as round, square, oval, rectangular, etc. With the friction applied to the carrier there is no play between the carrier and the other parts and the carrier stays in adjusted position. The tension or friction on

the carrier may be adjusted at the factory to suit any particular distributor's requirements. That is, the friction on the carrier is controlled or adjusted by pressing or bending inwardly the portions 25 of the operating member to a greater or lesser degree as more or less friction is required. There is no play of the carrier and cosmetic in the holder and they slide or run straight or parallel with respect to the walls of the holder and cannot tilt or cant due to engagement between the carrier and the portions 25 of the operating member in all positions of the carrier.

It will be understood that any suitable closure or cover may be provided for the holder. In the drawings a cover 30 is illustrated and is a slip cover comprising a long tubular body closed at its outer end 31. The cover 30 is simply slipped over the open end of the holder and if desired a spring finger 32 may be lanced and pressed from the outer casing 11 so as to engage the cover 30 when it is in closed position and frictionally retain it in place.

Figs. 18 through 25 show a holder of a different type but having the invention incorporated therein. In these figures the holder generally designated 33 includes an outer shell or casing generally designated 34 and comprising a tubular body 35 open at its upper end but closed at its lower or inner end by a wall 36. In one side wall casing 34 is provided with a longitudinally extending slot 36 and with cross slots 37 and 38 of which the former is at the outer or upper end of the slot 36 while the latter is slightly above the inner or lower end of the slot 36. The portions 39 of the member 34 at the edges of the slot 36 and between the slots 37 and 38 are bent or pressed inwardly as shown best in Figs. 20 and 25 forming spring or resilient portions to frictionally engage the cosmetic carrier 40.

Within the casing 34 there is arranged a carrier 40 receiving the lower or inner end portion of a lipstick or other pencil-like cosmetic 40*a*. A screw, pin or the like 41 extends through the slot 36 of the casing and into or through an opening 42 in the carrier 40 so as to be rigid with said carrier. On the outer end of the screw or operating member 41 is a head 43 and it will be obvious that by manual manipulation of the member 41 in a direction along the slot 36 the carrier 40 will be moved longitudinally in the body portion 35 of the casing 34. Normally when not in use the carrier 40 is within the lower or inner end portion of the casing 34 so that the shank of the hand operating member 41 passes outwardly of the casing 34 through the portion 44 of the slot 36 which portion of said slot is through an outwardly pressed flange or ring 45 formed on the casing.

Any suitable means may be provided for closing the open end of the casing 34 and in the drawings a slip cover 46 is illustrated for this purpose. When the operating member 41 is within the slot portion 44 the cover 46 may be slipped over the open end of the casing 34 and the two parts telescoped until the lower or open end 47 of the cover engages the upper edge of the bead 45 of the casing. When the cosmetic is to be used the cover 46 is removed and the operator may press his thumb against the head 43 of the operating member 41 and by moving said member outwardly along the slot 36 the carrier 40 will be shifted to project cosmetic through the open end of the casing 34. After the cosmetic has been used a reverse movement of the operating member 41 will serve to withdraw the cosmetic.

The inwardly pressed spring or resilient portions 39 at the longitudinal edges of the slot 36 of the member 34 press against one side of the carrier 40 as best shown in Fig. 20 whereby the opposite side of the carrier is held against the inner surface of the wall portion of the casing opposite the slot 36 as shown at 48 in Fig. 20. With this construction the carrier is frictionally held against loose movement in the facing and so is prevented from rattling. Further, the carrier cannot cant or tilt in the casing but during its movements toward and from the open end of the casing must move in straight or parallel relation with the casing walls. Also, the carrier is frictionally held in adjusted positions so that normal pressure on the cosmetic incident to its use is not sufficient to force the carrier inwardly but it is held by the friction in position for use. It will be understood that the drawings exaggerate the clearance between the carrier and the casing 34 and the degree to which the casing portions 39 are bent inwardly. The clearance between the carrier and the casing should be sufficient to permit free sliding movement between them and allow for variations in dimensions incident to manufacture. As these portions are elongated they engage the carrier 40 in all its positions and so prevent loose movement of the carrier in the holder. It should also be understood that the friction applied to the carrier will tend to hold it in adjusted position, and that the friction applied may be adjusted to suit a distributor's requirement since to adjust the friction it is but necessary to bend the casing portions 39 more or less to give a greater or lesser friction.

It will be clear from the foregoing description that the operating member or pin 28 in Figs. 1 to 17 and 41 in Figs. 18 to 24 have the same function, that is of shifting the carrier, but that in the first form it is operated or shifted mechanically by cooperation with the straight slot 23 in rotating member 20 and the spiral slot in member 16, while in the second form of Figs. 18 to 24 it is operated directly by the hand of the user. In both forms the spring portions 25 and 39 act directly on the cosmetic carrier and prevent it from rattling, shaking or slipping around in the casing, and hold it and the lipstick straight and parallel with the casing so it cannot cant or tip over laterally. In other words at no time is there any rattle or loose movements of the carrier in the casing and it and the cosmetic come up straight with the casing. The form of Figs. 18 to 24 may also be made with the arrangement using the two slots 23 and 23*a* as shown in Fig. 16*a* if preferred, or any other suitable way of providing the desired spring or resilient friction on the carrier may be used.

Having thus set forth the nature of my invention, what I claim is:

1. In a holder, a casing having an open end, a tubular member in and turnable relative to the casing having a longitudinally extending slot in a wall thereof, a carrier in said member movable longitudinally thereof toward and from the open end of the casing, means for causing such movements of the carrier on turning movements of the member in the casing, and said member having its portions at an edge of said longitudinal slot pressed inwardly into engage-

ment with the carrier to prevent rattle and loose movement of the carrier in the member.

2. In a holder, a casing having an open end, a tubular member in and turnable relative to the casing having a longitudinally extending slot in a wall thereof, a carrier in said member movable longitudinally thereof toward and from the open end of the casing, means for causing such movements of the carrier on turning movements of the member in the casing, said member having its portions at a longitudinal edge of said slot pressed inwardly and engaging the carrier and forcing it against the opposite wall of the member, and said inwardly pressed portions of such length as to engage the carrier for a substantial portion of its length in all its positions whereby to prevent rattle and loose movement of the carried in the member and to cause the carrier to move parallel with the walls of the member.

3. In a holder, a casing having an open end, a tubular member in and turnable relative to the casing, means rigid with said carrier and exing slot in a wall thereof, a sleeve having a spiral passage at the outer side of said member, a carrier in the member and movable longitudinally thereof toward and from the open end of the casing, means rigid with said carrier and extending through said longitudinal slot and into said spiral passage whereby on turning movement of the member the carrier is moved longitudinally of the member, and said member having its portions at an edge of said longitudinal slot pressed inwardly into engagement with the carrier to prevent rattle and loose movement of the carrier in the member.

4. In a holder, a casing having an open end, a tubular member in and turnable relative to the casing and having a longitudinally extending slot in a wall thereof, means forming a spiral passage at the outer side of said member, a carrier in the member and movable longitudinally thereof toward and from the open end of the casing, means rigid with said carrier and extending through said longitudinal slot and into said spiral passage whereon on turning movement of the member the carrier is moved longitudinally of the member, said member having its portions at the longitudinal edges of said slot pressed inwardly and engaging the carrier and forcing it against the opposite wall of the member, and said inwardly pressed portions of such length as to engage the carrier for a substantial portion of its length in all its positions whereby to prevent rattle and loose movement of the carrier in the member and to cause the carrier to move parallel with the walls of the member.

5. In a holder, a casing having an open end, a tubular member in and turnable relative to the casing having a longitudinally extending slot in a wall thereof, a sleeve between the member and casing held against movement relative to the latter and having a spiral slot, a carrier in the member and movable longitudinally thereof toward and from the open end of the casing, means rigid with said carrier and extending through said longitudinal slot and into said spiral passage whereby on turning movement of the member the carrier is moved longitudinally of the member, and said member having its portions at an edge of said longitudinal slot pressed inwardly into engagement with the carrier to prevent rattle and loose movement of the carrier in the member.

6. In a holder, a casing having an open end, a tubular member in and turnable relative to the casing and having a longitudinally extending slot in a wall thereof and cross slots at the ends of said longitudinal slot, a carrier in said member movable longitudinally thereof toward and from the open end of the casing, means for causing such movements of the carrier on turning movements of the member in the casing, and said member having its portions at an edge of said longitudinal slot and between said cross slots pressed inwardly into engagement with the carrier to prevent rattle and loose movement of the carrier in the member.

7. In a holder, a casing having an open end, a carrier within and movable toward and from the open end of the casing, means to move the carrier, and means causing a frictional engagement between the casing and carrier to prevent rattle and loose movements of the carrier in the casing comprising a longitudinal slot in the casing and spaced transverse slots leading therefrom with the walls of the casing between the latter slots forming a resilient wall pressing the carrier toward the opposite wall of the casing, said resilient wall being of a length and always free to so press the carrier and provide said frictional engagement at all times and insufficient to prevent movement of the carrier by the carrier moving means.

8. In a holder, a casing having an open end, a tubular member in and turnable relative to the casing and having a longitudinally extending slot in a wall thereof, a sleeve between the member and casing and held against movement relative to the latter and having a spiral slot, means preventing loose movements of the member in the sleeve, a carrier in the member and movable longitudinally thereof toward and from the open end of the casing, means rigid with said carrier and extending through said longitudinal slot and into said spiral passage whereby on turning movement of the member the carrier is moved longitudinally of the member, and said member having its portions at the edges of said longitudinal slot pressed inwardly into engagement with the carrier to prevent rattle and loose movement of the carrier in the member.

9. In a holder of the character described, a casing having an open end, a carrier within and movable toward and from the open end of the casing, means to shift the carrier, said casing having a longitudinal slot with spaced transverse slots leading therefrom providing a longitudinal resilient wall frictionally engaging the carrier, said wall being of a length to engage the carrier in all positions and always free to engage the carrier to provide said friction, and the pressure of said wall being insufficient to prevent movement of the carrier by the carrier shifting means.

10. In a holder of the character described, a tubular member having an open end and a longitudinal slot in a side wall, a carrier in said member and movable longitudinally thereof toward and from said open end, means for shifting the carrier, and the wall of said member at one side of said longitudinal slot being pressed inwardly into engagement with the carrier to provide a yieldable resilient engagement between the carrier and member to prevent rattle and loose movement of the carrier in the member.

LEONARD ABBOTTS.

CERTIFICATE OF CORRECTION.

Patent No. 2,072,662. March 2, 1937.

LEONARD ABBOTTS.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 3, second column, line 12, for "facing" read casing; page 4, first column, line 18, claim 2, for "carried" read carrier; and lines 23-24, claim 3, strike out the comma and words ", means rigid with said carrier and ex- ing slot" and insert instead and having a longitudinally extending slot; and that the said Letters Patent should be read with these corrections therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 6th day of July, A. D. 1937.

(Seal)

Henry Van Arsdale
Acting Commissioner of Patents.