Nov. 12, 1929. W. W. S. CARPENTER 1,735,262

MUCILAGE BOTTLE

Filed Nov. 30, 1927

Fig. 1.

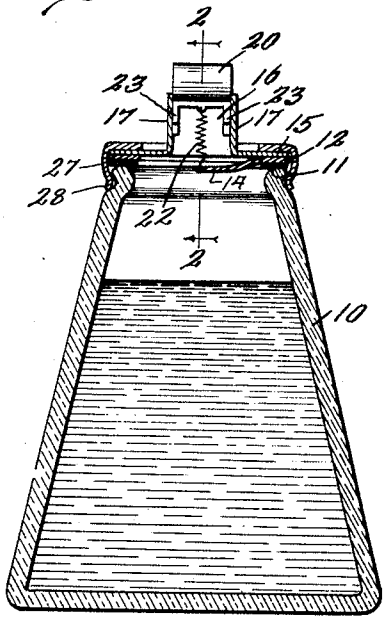


Fig. 2.

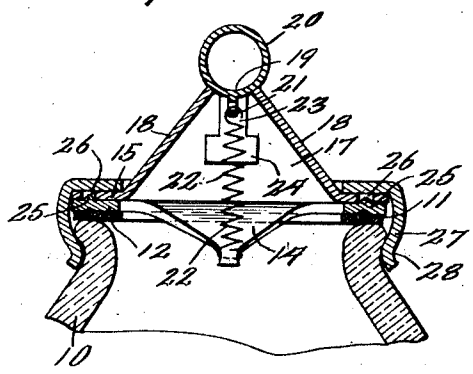


Fig. 3.

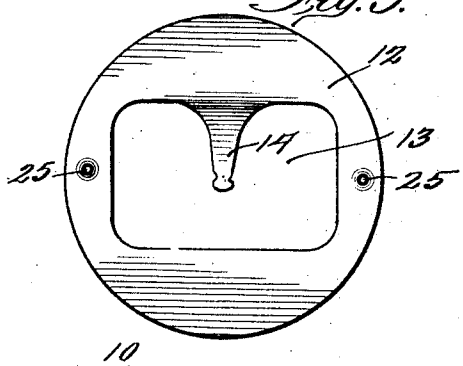
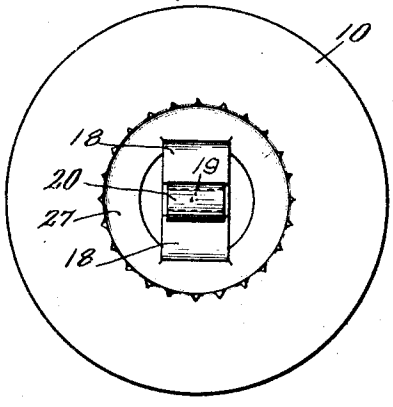


Fig. 5.



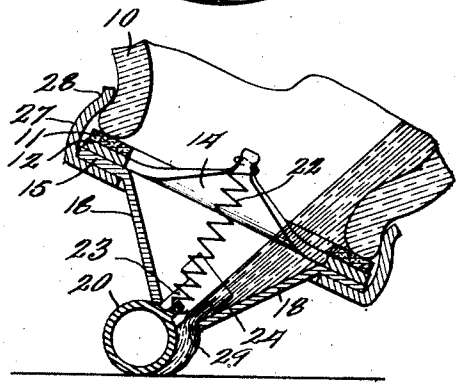


Fig. 4.

Inventor:
William W. S. Carpenter
By Nissen & Crane
Attys.

Patented Nov. 12, 1929

1,735,262

UNITED STATES PATENT OFFICE

WILLIAM W. S. CARPENTER, OF CHICAGO, ILLINOIS, ASSIGNOR TO SANFORD MANUFACTURING CO., OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS

MUCILAGE BOTTLE

Application filed November 30, 1927. Serial No. 236,624.

This invention relates to devices for containing mucilage or similar material and for dispensing the same, and has for one of its objects the provision of a device of the class named which shall be of improved construction and convenient and efficient in operation.

A further object is to provide a container from which the mucilage may be discharged in controlled amounts and by which it may be distributed over a surface to be coated thereby.

A further object is to provide a container of the class named provided with an automatic closure which will at all times close the discharge opening, except when the material is being dispensed therefrom.

A further object is to provide a device which shall be economical to manufacture and attractive in appearance.

Other objects and advantages will appear from the following description.

The invention is exemplified in the combination and arrangement of parts shown in the accompanying drawing and described in the following specification, and it is more particularly pointed out in the appended claims.

In the drawing—

Fig. 1 is a vertical sectional view of a mucilage bottle equipped with one embodiment of the present invention;

Fig. 2 is a section on an enlarged scale on line 2—2 of Fig. 1;

Fig. 3 is a plan view of one of the parts forming the closure for the bottle;

Fig. 4 is a fragmentary sectional view showing the manner of discharging mucilage from the bottle upon a surface to be coated; and

Fig. 5 is a top plan view of the bottle.

The numeral 10 designates a container or bottle of any suitable size or shape. The mouth of the bottle is shaped for receiving a crown cap similar to those used in sealing beverage bottles, although it will be understood that any other form of attachment for the cap may be used. A gasket or washer 11 rests on top of the mouth of the bottle, the washer being made of cork, paper, or other suitable material to form a tight closure. A thin metal disc 12 is placed over the washer 11, the central portion of the disc being cut away as shown in Fig. 3 to form an opening 13. The tongue 14 projects from one side of the disc 12 to the central portion thereof. A thin metal plate 15 rests on top of the disc 12 and is provided with an upwardly projecting spout 16. The spout 16 has two vertical sides 17 and two inclined sides 18. The top of the spout 16 is provided with an elongated discharge opening or slot 19 which is closed by a cylinder 20. The cylinder 20 may be formed in any suitable manner, the construction shown in the drawing being that of a hollow sheet metal cylinder having its ends closed. A solid cylinder could be used if found more convenient. The flat ends of the cylinder 20 fit closely against the inner faces of the vertical walls 17 of the spout 16 while the top edges of the inclined walls 18 are engaged by the curved surface of the cylinder so that the cylinder completely closes the opening 19. An ear 21 projects from one side of the cylinder 20 and is engaged by a spring 22 which extends downwardly through the spout 16 and is attached at its lower end to the tongue 14. The tension of the spring 22 yieldingly holds the cylinder 20 in position to close the opening 19. Fingers 23 are attached to each end of the cylinder 20 and extend into the spout 16 adjacent the vertical side walls 17. These fingers 23 may be provided with enlargements 24 on the inner ends thereof.

The disc 12 may be provided with projections 25 for engaging openings 26 in the plate 15 to properly locate the spout relative to the disc 12. The washer 11, disc 12, and plate 15 are held in place by a cap 27 which fits over the plate 15 and is provided with a recess for receiving the spout 16. The cap 27 is crimped in place around its lower edge, as indicated at 28, or it may be screwed onto the mouth of the bottle, or attached in any other suitable manner.

When the bottle is in upright position, and in fact in all positions, except when the cylinder 20 is positively displaced, the cylinder will be held in position to tightly close the opening at the top of the spout. When it is desired to discharge mucilage from the spout,

this may be done by pressing the cylinder 20 sidewise, as shown in Fig. 4. This will leave an open space, indicated at 29 in Fig. 4 of the drawing, through which the mucilage may be discharged. Usually the bottle will be inverted and the cylinder 20 pressed against the surface upon which the mucilage is to be deposited. A slight pressure transverse to the axis of the cylinder will cause it to be displaced in the manner shown in Fig. 4 to permit the mucilage to escape. The amount of displacement is limited by the fingers 23 which engage the inclined walls 18 of the spout. As soon as the pressure is released, the spring 22 will restore the cylinder 20 to its closed position and shut off the flow of mucilage.

The surface of the cylinder 20 may be used as a spreader to spread over the article to be coated. It is seen that a mucilage dispenser is thus provided by means of which the mucilage may be distributed in the desired quantity upon the surface to be coated and may be spread upon the surface without the use of a brush or other auxiliary spreader. At the same time the device provides an automatic closure which prevents the mucilage from becoming dry and keeps the bottle closed at all times when not in use.

I claim:—

1. A container having a discharge opening, a cylinder fitted against the outer side of said opening, a spring for holding said cylinder in position to close said opening, and a finger secured to said cylinder and extending through said opening into said container for limiting the lateral displacement of said cylinder relative to said opening.

2. A dispensing container having a discharge spout provided with two spaced parallel sides and two oppositely relatively inclined sides, the outer edges of said sides being spaced to form a discharge opening, and a cylindrical closure for said opening arranged to engage the outer edges of said inclined sides, the ends of said cylindrical closure being disposed adjacent the outer edges of said spaced parallel sides.

3. A dispensing container having an outwardly tapered discharge spout provided with a rectangular discharge opening at the outer end thereof, and a cylindrical closure for said opening disposed outside of said spout and having its curved surface arranged to engage two sides of said rectangular opening and having its end portions extending adjacent the inner faces of the other two sides of said rectangular opening.

4. A dispensing container having an outwardly tapered discharge spout provided with a discharge opening at the outer portion thereof, a cylindrical closure arranged outside of said spout in position to close said discharge opening, a spring attached to said closure and extending into said spout for holding said closure in position against said opening, and a finger attached to said closure and extending into said spout and having the inner end thereof enlarged for engaging the inner surface of the wall of said spout to limit lateral displacement of said closure.

5. In combination, a container having an open mouth, a washer having an opening therethrough arranged to register with the mouth of said container, said washer having a tongue extending toward the central portion of said opening, a discharge spout for said container registering with the opening in said washer, means for holding said discharge spout and washer in position on the mouth of said container, a closure for said spout, and a spring connected with said tongue for holding said closure in its closed position.

6. In combination, a container having an open mouth, a washer having an opening therethrough in registration with said mouth and having a tongue extending toward the central portion of said opening, a gasket interposed between said container and washer, a disc engaging the outer face of said washer and having a tapered spout carried thereby, a cap arranged to be crimped onto said container for holding said discharge spout, washer and gasket in position on said container, a cylindrical closure for said spout disposed outside thereof and arranged to be displaced laterally to permit discharge of material through said spout, fingers secured to said closure and extending into said spout to limit the lateral displacement thereof, and a spring connecting said closure and tongue for returning said closure to its closed position.

7. A container for mucilage or other material having a dispensing opening, a laterally displaceable cylindrical closure for said opening, and means for automatically returning said cylindrical closure to closed position when released.

8. A dispensing receptacle having a rectangular dispensing opening, a cylindrical closure fitting said rectangular opening and arranged to be displaced laterally to permit escape of material from said container, and resilient means for automatically returning said cylindrical closure to its closed position covering said rectangular opening.

9. A dispensing container having a discharge opening, a closure arranged outside of said opening for lateral displacement relative thereto to permit escape of material through said opening, a restoring spring for said closure, and an anchorage for the inner end of said spring, said anchorage comprising a device secured to the mouth of said container.

10. A dispensing container having a discharge opening, a closure arranged outside of said opening and having the external sur-

face adapted to spread material discharged from said opening, a restoring spring for said closure, and an anchorage for the inner end of said spring, said anchorage comprising a disc fitting over the mouth of said container and having a tongue extending toward the center of an opening in said disc.

11. A dispensing container having a discharge opening, a cylindrical closure for said opening adapted to be laterally displaced for permitting escape of material from said opening and along the surface of said cylindrical closure to the surface to which the liquid is to be applied, and a restoring spring for said cylindrical closure to automatically close said opening when said closure is released.

12. A dispensing container having a discharge spout provided with two spaced-apart parallel sides and two oppositely relatively inclined sides, the outer edges of said sides being spaced to form a rectangular discharge opening, a cylindrical closure for said opening, spaced-apart fingers adjacent the spaced-apart parallel sides of said spout in position to engage the said inclined sides to limit the lateral displacement of said cylindrical closure, and a restoring spring for said closure.

13. A mucilage spreader comprising a bottle for containing the mucilage, a spout having a discharge opening therein, a closure on the outside of said spout in position to fit said opening and movable outwardly to permit escape of mucilage from said bottle, a restoring spring for pulling the closure against the spout to close said opening, an anchorage for the inner end of said spring independent of the interior of said bottle, and means for securing said spout and said anchorage to the mouth of said bottle.

14. The combination with a container having an open mouth, of a discharge spout having a flange adapted to fit the mouth of said container, a closure for a discharge opening in said spout, said closure being adapted to be moved outwardly to partially uncover said opening when pressed against the surface to which material in said container is to be applied, a restoring spring for drawing inwardly said closure to cover said opening when the application of said closure to such surface is released, an anchorage for the inner end of said spring, said anchorage having a flange adapted to fit the mouth of said container, and a cap having an opening therein and provided with means for clamping said spout and said anchorage to the mouth of said container.

15. The combination with a container having an open mouth, of a discharge spout for said container having a flange adapted to register with the mouth of said container, a closure for the opening in said spout, a restoring spring for said closure, an anchorage for the inner end of said spring, said anchorage having a flange adapted to fit the mouth of said container and an opening therethrough for the flow of the material from said container through said spout, and means for holding in position over the mouth of said container both said spout and said anchorage.

16. In a mucilage spreader, the combination with a bottle for containing the mucilage, of a spout having a flange adapted to register with the mouth of said bottle, a mucilage spreader closure mounted on the outside of said spout in position to close the opening therein and movable outwardly from said opening to partially uncover the same to permit flow of mucilage from the bottle through said spout and over said closure to the surface to which the mucilage is to be applied, a restoring spring connected to said closure and exerting an inward pull thereon, an anchorage for the inner end of said spring comprising a plate having a periphery registering with the mouth of said bottle and having an anchorage tongue extending to the center of an opening in said plate through which opening the mucilage is adapted to flow from the bottle through said spout, and means for securing the spout and said plate to the mouth of said bottle.

In testimony whereof I have signed my name to this specification on the 25th day of November, A. D. 1927.

WILLIAM W. S. CARPENTER.