No. 669,159. Patented Mar. 5, 1901.

J. B. DAVIDS.

PASTE JAR COVER.

(Application filed May 16, 1900.)

(No Model.)

Fig. 1.

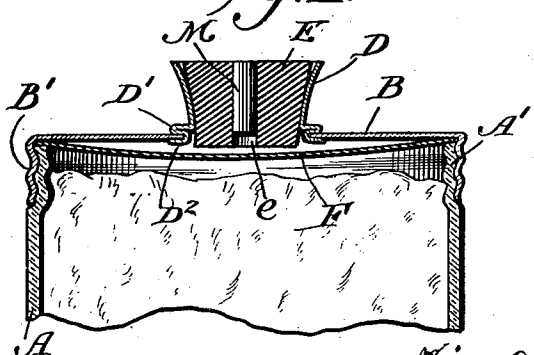


Fig. 2.

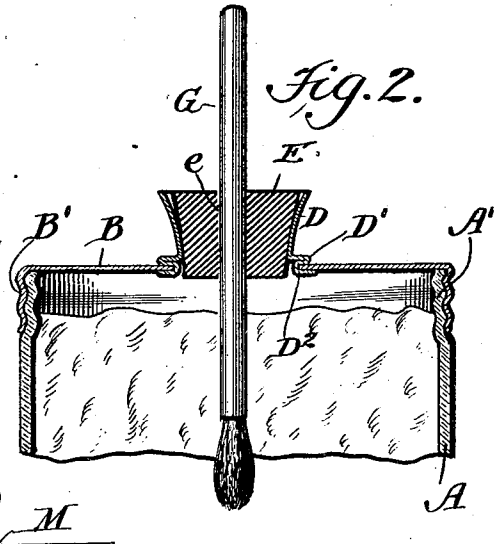


Fig. 10.

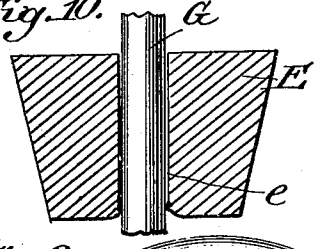


Fig. 9

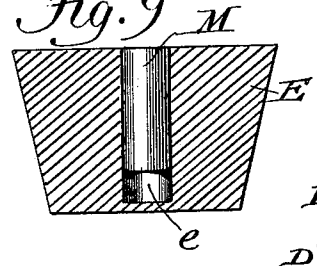


Fig. 4.

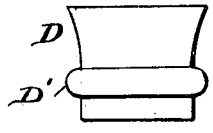


Fig. 3.

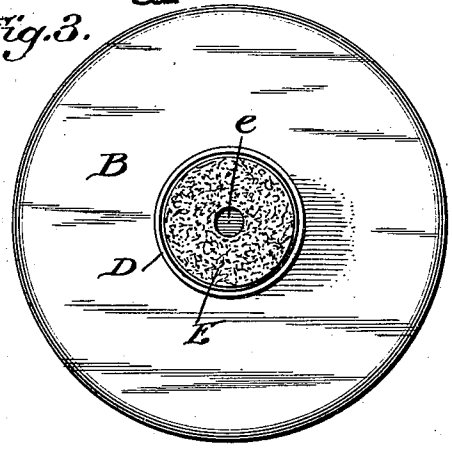


Fig. 5.

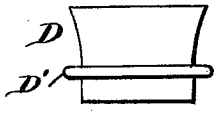


Fig. 6.

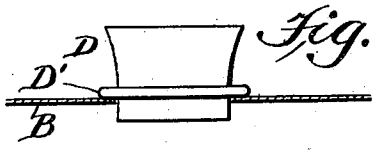


Fig. 8.

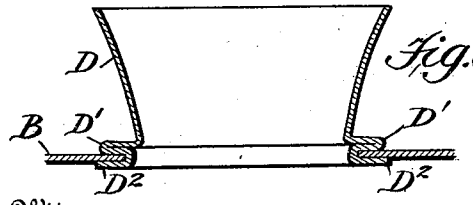
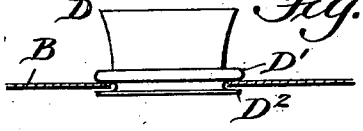


Fig. 7.



Witnesses:
A. R. Appelman Jr.
J. B. Clautice

Inventor
John B. Davids
By his Attorney
Thomas Drew Stetson

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN B. DAVIDS, OF NEW YORK, N. Y.

PASTE-JAR COVER.

SPECIFICATION forming part of Letters Patent No. 669,159, dated March 5, 1901.

Application filed May 16, 1900. Serial No. 16,900. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. DAVIDS, a citizen of the United States, residing in the borough of Manhattan, in the city and State of New York, have invented a certain new and useful Improvement in Paste-Jar Covers, of which the following is a specification.

I employ an ordinary construction of cylindric jar and have a cap of thin metal applied and removed by screw-threads or partial threads—a bayonet-joint. I equip the cover with a separately-formed flaring neck of thin metal extending upward from a sufficient circular orifice in the otherwise plane top of the cover. I use an annular plug of elastic material—soft vulcanized rubber—to serve a double duty. Being provided with a proper closure for the central hole, it makes a tight stopper when the jar is stored or transported. When the paste is required for use, the annular rubber forms a support for the separately-supplied brush. The hole may be formed originally entirely through the plug and be closed when the plug is to form a tight stopper by a small auxiliary stopper of wood, cork, or other suitable material, or said hole may be formed nearly through the said plug, the closure being effected by the diaphragm of rubber so formed with or without the aid of an auxiliary stopper. The brush-handle being inserted forcibly through the plug will rupture the diaphragm, leaving a hole therein whose edges will bind upon the brush-handle more closely than the body of the plug. The rubber plug affords a peculiarly firm grip on the smooth handle and makes a tighter closure than usual by the tight insertion of the plug after each use. The neck should be of so large diameter and so little height that the brush may be greatly inclined. Surplus paste may be removed by thus inclining it and drawing forcibly across under the bottom of the neck. The interior of the neck may thus be kept dry and clean. To more fully insure this condition, I make the lower portion of the neck carrying the lower flange of a little larger diameter interiorly than the portion immediately above. The brush may be scraped against the under side of the cover, holding it in the required inclined position to make such angle effective, and any paste accidentally presented on the interior of the neck in the slightly-enlarged portion below the upper flange will not be touched by the tapering stopper and the stopper will not be soiled.

I propose to sell the jars ready filled with a good quality of perfumed paste.

The accompanying drawings form a part of this specification and represent what I consider the best means of carrying out the invention.

Figure 1 is a central longitudinal section of the upper portion as the jar is sold. Fig. 2 is a central longitudinal section with the brush in place. Fig. 3 is a plan view. Figs. 4, 5, 6, and 7 are elevations of portions showing steps in the progress of the manufacture. Fig. 8 is a central vertical section through the neck and its junction on a larger scale. Fig. 9 is a corresponding section through the annular plug, showing an additional feature, also forming part of the invention. Fig. 10 is a sectional view of the last-mentioned plug after the insertion of the brush, a portion of the brush-handle being shown in position therein.

Similar letters of reference indicate like parts in all the figures where they appear.

A is the body, and A′ complete or partial screw-threads around the exterior of the top.

B is the main body of the cover, and B′ screw-threads formed in the hanging lip.

D is the tubular neck slightly flared, as shown, having its lower end strongly and tightly engaged with the main body of the cover by the aid of two flanges D′ D^2, the upper flange being formed by beading and compressing endwise. The lower flange is formed outward after the main body D is brought into position. I compress the flanges D′ D^2 together by suitable dies, so that they strongly embrace the adjacent edge of the cover-body B. The joint is sufficiently tight without soldering; but solder may be also used, if desired. The interior diameter of the neck below the upper flange is greater than immediately above. The annular plug E, of rubber, does not touch this lower portion of the neck. The interior of the neck need not become wet with the paste; but if it should become so it will be such only in the lower portion where the rubber does not touch it and the rubber will not become soiled. Surplus paste can be removed by inclining the brush, (such inclination being facilitated by the greater conicity

of the flaring neck D as compared with the plug E,) the cover-disk B forming a scraper. This scraping action is improved by the flange D^2.

E is an annular plug of soft vulcanized rubber having an exterior taper corresponding approximately to that of the neck D and a cylindrical hole *e*. Most advantageously the plug E is less flaring than the neck D, as shown clearly in Figs. 1 and 2, the greater conicity of the neck facilitating the inclination of the brush in the paste-jar.

M is a wooden plug fitting tightly in the hole *e*, to be forced out by a thrust of the brush G when required for use. The annular plug is, when so desired, first made, as shown in Fig. 9, with a film of rubber forming an integral part of the same to stop the hole *e*. The thin portion is destroyed by thrusting in the brush-handle when the bottle is to be conditioned for use. The wooden or other plug M, although shown and preferred, is not absolutely necessary to close the orifice for storage or shipment.

Modifications may be made without departing from the principle or sacrificing the advantages of the invention.

F shows a disk of waterproof paper or other suitable material laid on the jar before applying my cover and serves in addition thereto as a means of further insuring the tightness in storage and transportation. It should be removed and thrown away when the cover is being put in condition for use. It is not essential and can be omitted, if preferred.

I have made the body of the brush-handle of sheet metal. It can be wood, plain or varnished.

The annular rubber plug may be successfully used as an eraser.

Although I designate this a "paste-jar cover," it will be evident that my cover may be used on jars for holding various other materials than paste.

The screw-threads may be omitted, the lip B′ being smooth and fitting over a smooth top on the jar.

The thin film of rubber stopping the hole *e* until required may be at the top or at the mid-height instead of at the bottom of the elastic plug.

The annular plug E may be made, as shown in Fig. 9, with a film of rubber forming an integral part of the same to cover either the upper or lower or any internal part of the hole *e*, so that a wooden or other plug M, although shown, would be unnecessary to close the orifice for storage or shipment.

I claim as my invention—

1. A paste-jar cover having a neck enlarged interiorly at the bottom with a scraper for surplus material beyond such enlargement, that is to say, between the wall of said enlargement and the periphery of said cover, and a removable plug which fits inside of said neck with a temporarily-closed hole therein adapted for receiving the handle of a brush on removal of the closure, substantially as described.

2. A paste-jar cover composed of a flat disk, a neck enlarged interiorly where it joins said disk and a removable plug in said neck with a temporarily-closed hole therein adapted for receiving the handle of a brush on removal of the closure, the opening through said disk being equal to the interior of the said enlargement, substantially as described.

3. A paste-jar cover composed of a flat disk, a neck secured to said disk by flanges on said neck above and below said disk and enlarged interiorly where it joins said disk, and a removable plug in said neck with a temporarily-closed hole therein adapted for receiving the handle of a brush on removal of the closure, substantially as described.

4. A paste-jar cover having a neck enlarged interiorly at the bottom with a scraper for surplus material beyond such enlargement, that is to say, between the wall of said enlargement and the periphery of said cover, and an annular removable plug which fits inside of said neck, and a brush having its handle projecting through the hole in said plug, substantially as described.

5. A paste-jar cover composed of a flat disk, a neck enlarged interiorly where it joins said disk, and an annular removable plug in said neck, and a brush having its handle projecting through the hole in said plug, the opening through said disk being equal to the interior of said enlargement, substantially as described.

6. A paste-jar cover composed of a flat disk, a neck secured to said disk by flanges on said neck above and below said disk and enlarged interiorly where it joins said disk, and an annular removable plug in said neck, and a brush having its handle projecting through the hole in said plug, substantially as described.

7. A paste-jar cover having a neck enlarged interiorly at the bottom with a scraper for surplus material beyond such enlargement, that is to say, between the wall of said enlargement and the periphery of said cover, and a removable rubber plug which fits inside of said neck with a hole therein extending nearly through the same and temporarily closed by the aid of the film or diaphragm of rubber forming part of said plug, said hole being adapted for receiving the handle of a brush on removal of the closure by rupture of said film or diaphragm, substantially as described.

8. A paste-jar cover having a neck enlarged interiorly at the bottom with a scraper for surplus material beyond such enlargement, that is to say, between the wall of said enlargement and the periphery of said cover, and a removable annular rubber plug, which fits inside of said neck with a brush held by its handle in said plug, the hole in said plug for a short portion of its length fitting said handle more tightly than at other points, substantially as described.

9. A paste-jar cover having a flaring neck which projects above the body of said cover, this latter being provided, where it joins the neck, with an opening fully equal to the interior of said neck at its bottom; and a removable frusto-conical plug fitting the inside of said neck, and provided with a hole therein which is temporarily closed by a closure carried by said plug, said hole being adapted for receiving the handle of a brush on removal of the closure, substantially as described.

10. A paste-jar cover having a flaring neck, and a frusto-conical plug of less conicity than said neck, with a brush whose handle is held in said plug, substantially as described.

In testimony that I claim the invention above set forth I affix my signature in presence of two witnesses.

JOHN B. DAVIDS.

Witnesses:
JOHN D. CARBERRY,
J. B. CLAUTICE.