

PATENT SPECIFICATION



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284,412

Complete Left: May 20, 1927.

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PROVISIONAL SPECIFICATION.

Improvements in or relating to Containers for Liquid or Semi-liquid Adhesives.

We, HENRY C. STEPHENS, LIMITED, a British company, CHARLES GERALD STEPHENS, Managing Director, and FRANK CARR FINCHAM, Manager, both subjects of the King of Great Britain, all of 1, Frederick's Place, Old Jewry, and 57, Aldersgate Street, in the City of London, do hereby declare the nature of this invention to be as follows:—

10 This invention relates to containers for liquid or semi-liquid adhesives such as liquid gum. Containers for this purpose have been provided with a small piece of sponge which is secured in the mouth of the container, the adhesive being applied 25 by inverting the container and pressing the piece of sponge against the surface to which the adhesive is to be applied, so that it passes through the pores of the sponge which also serves as a spreader for the adhesive, by drawing the piece of sponge over the surface with the container still in the inverted position. After the piece of sponge has been in use 30 for some time it is apt to become clogged and tacky by the adhesive, some of which is retained in the pores of the sponge. The piece of sponge is usually retained in the mouth of the container which is provided with a detachable cap having a flanged opening by sewing the sponge to a washer, the piece of sponge being inserted into the cap and pushed through the flanged opening until the washer bears 35 against the flange against which it is pressed by the mouth of the container when the cap is attached thereto.

According to the invention instead of providing the container with a sponge for applying and spreading the adhesive we provide it with a material which is either non-porous or treated to be rendered non-porous but sufficiently resilient to act as a spreader for the adhesive which reaches the surface to which the adhesive is to be applied by flowing, when the container is inverted, through one or more channels made in the said material. A suitable material for the purpose is sponge rubber as in addition to possessing the characteristics set forth above it can be readily formed or moulded with a flanged end for bearing against the flanged end of the aforesaid cap, thereby avoiding the necessity of attaching the material to a washer for example as is the case when using a sponge. The said sponge rubber is inserted into position in the aforesaid cap as previously described in the case of the sponge and one or more washers may be inserted to prevent leakage past the flanged end of the sponge. If desired the cap may be formed to receive a cover to protect the sponge rubber when the container is not in use..

Dated this 1st day of November, 1926.

HASELTINE, LAKE & Co.,
28, Southampton Buildings, London,
England, and
15, Park Row, New York, N.Y., U.S.A.,
Agents for the Applicants.

COMPLETE SPECIFICATION.

Improvements in or relating to Containers for Liquid or Semi-liquid Adhesives.

We, HENRY C. STEPHENS, LIMITED, a British company, CHARLES GERALD STEPHENS, Managing Director, and FRANK CARR FINCHAM, Manager, both subjects of the King of Great Britain, all of 1, Frederick's Place, Old Jewry, and 57, Aldersgate Street, in the City of London,
[Price 1/-]

do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to containers for liquid or semi-liquid adhesives such as

Price 75p

Price 25p

liquid gum, the containers being of the kind that have a member in their mouths which also acts as a spreader for the adhesive which is applied to the required surface by inverting the container and allowing the adhesive to flow unaided therefrom, the adhesive being uniformly distributed over the required surface by drawing the container over it with the spreader in contact therewith. Containers of this kind have hitherto been provided with a small piece of sponge which is secured in the mouth of the container, the adhesive being applied by inverting the container and pressing the piece of sponge against the surface to which the adhesive is to be applied, so that it passes through the pores of the sponge which also serves as a spreader for the adhesive. After the piece of sponge has been in use for some time it is apt to become clogged and tacky by the adhesive, some of which is retained in the pores of the sponge. The piece of sponge is usually retained in the mouth of the container, which is provided with a detachable cap having a flanged opening, by sewing the sponge to a washer the piece of sponge being inserted into the cap and pushed through the flanged opening until the washer bears against the flange against which it is pressed by the mouth of the container when the cap is attached thereto. It has also been proposed to provide containers with a rubber closure and spreader which is so formed that the channel therein through which the adhesive flows onto the surface to which it is to be applied remains closed when the container is not in use for applying the adhesive.

According to the invention we provide the container with a material which is non-porous in action, that is, non-absorbent but sufficiently resilient to act as a spreader for the adhesive which reaches the surface to which the adhesive is to be applied by flowing, when the container is inverted, through one or more permanently open channels made in the said material. A suitable material for the purpose is sponge rubber as in addition to possessing the characteristics set forth above it can be readily formed or moulded with a flanged end for bearing against the flanged end of the aforesaid cap, thereby avoiding the necessity of attaching the material to a washer for example as is the case when using a sponge.

In order that the said invention may be clearly understood and readily carried into effect the same will now be described more fully with reference to the accompanying drawings, in which:—

Figure 1 illustrates in part vertical

section a glass adhesive container having a spreader made in accordance with our invention.

Figure 2 illustrates the spreader detached from the container and,

Figure 3 illustrates in vertical section the spreader, cap and a cover for the spreader all in position on the container.

A is the container for the adhesive in the form of a glass bottle and B is the spreader having the permanently open channel *b* passing through it. The container A is made with a screw-threaded mouth or neck *a* with which engages a correspondingly internally screw-threaded cap C formed with an internal flanged part *c*. The spreader B is preferably made from sponge rubber which is a particularly suitable material as the spreader can be moulded with the flange *b*¹ so that the spreader can be secured in place in the mouth of the container by inserting it into the cap C through the end thereof having the larger opening and then screwing down the cap on the neck of the container until the top of the neck presses onto the spreader and forces it against the internal flanged portion *c* of the cap. If desired a washer D can be placed between the flange *b*¹ of the spreader and the internal flanged part of the cap C and a similar washer D¹ on the underside of the flange *b*¹ between the latter and the neck of the container to ensure a fluid tight joint. The cap C is formed with a screw-threaded extension *c*¹ for the reception of a closing cover E to protect the spreader when the container is not in use. The screw thread on the neck *a* of the container and on the interior of the cap C is a left hand thread whereas the screw thread on the extension of the cap and on the interior of the cover E is a right hand thread so that when removing the latter the cap C instead of tending to become loosened is tightened on the neck of the container. Within the cap E is placed a washer *e* to prevent leakage when the cap is in position over the spreader B. In applying the adhesive to a surface the cover E is removed and the container inverted so that the adhesive passes through the channel *b* in the spreader onto the surface to which the adhesive is to be applied the container is then moved about with the spreader in contact with the said surface until the adhesive has been sufficiently spread or distributed after which the container is turned into its normal position and set aside until required again. Although we have mentioned sponge rubber as a suitable material from which the spreader may be made we do not wish to confine ourselves to this material as other

materials so long as they are non-porous, or rendered non-porous and are sufficiently resilient to spread the adhesive, may be used. Also, we do not wish to limit ourselves to the manner above described for retaining the spreader in the mouth of the container as in some cases the cap C may be dispensed with and the spreader inserted directly in the mouth of the container. By employing a cap, however, such as the one above described the container can be readily refilled after the contents have been exhausted by unscrewing the cap which then becomes removable with the spreader within it.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. A container for liquid or semi-liquid adhesives of the kind set forth, having in its mouth a material which is non-porous in action, that is, non-absorbent but sufficiently resilient to act as a spreader for the adhesive and having one or more permanently open channels therein for the purpose specified.

2. A container for liquid or semi-liquid adhesives of the kind set forth, having in its mouth a spreader for the adhesive made of sponge rubber and having one or more permanently open channels for the purpose specified.

3. A container for liquid or semi-liquid adhesives of the kind set forth, comprising a cap having a flanged opening and adapted to fit the neck of the container

and a sponge rubber spreader having one or more channels therein and moulded with a flanged end adapted to be held between the mouth of the container and said cap substantially as hereinbefore described.

4. A sponge rubber spreader for use with containers for liquid or semi-liquid adhesives of the kind set forth having one or more permanently open channels therein and adapted to be fitted in the mouth of the container substantially as described and for the purpose specified.

5. A sponge rubber spreader for use with containers for liquid or semi-liquid adhesives of the kind set forth having one or more permanently open channels therein and a moulded flanged end for the purpose specified.

6. A container for liquid or semi-liquid adhesives of the kind set forth having a spreader substantially as hereinbefore and illustrated in the accompanying drawings for the purpose specified.

7. A spreader for use with containers for liquid or semi-liquid adhesives of the kind set forth substantially as hereinbefore described and illustrated in the accompanying drawings for the purpose specified.

Dated this 20th day of May, 1927.
 HASELTINE, LAKE & Co.,
 28, Southampton Buildings, London,
 England, and
 Berkeley Building, 19/25, West 44th
 Street, New York,
 Agents for the Applicants.

[This Drawing is a reproduction of the Original on a reduced scale.]

Fig. 1.

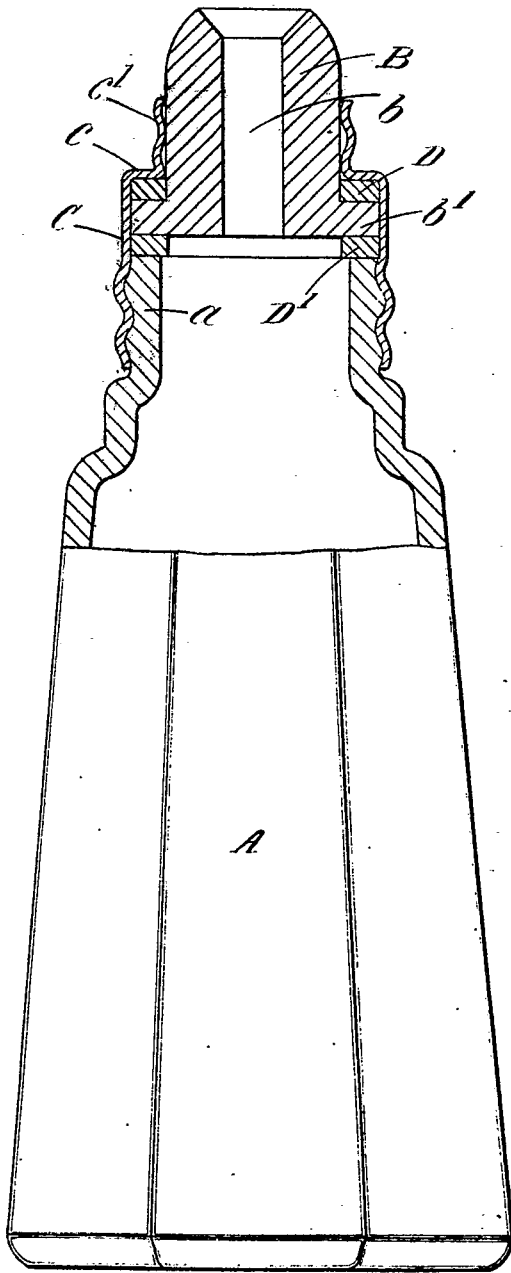


Fig. 2.

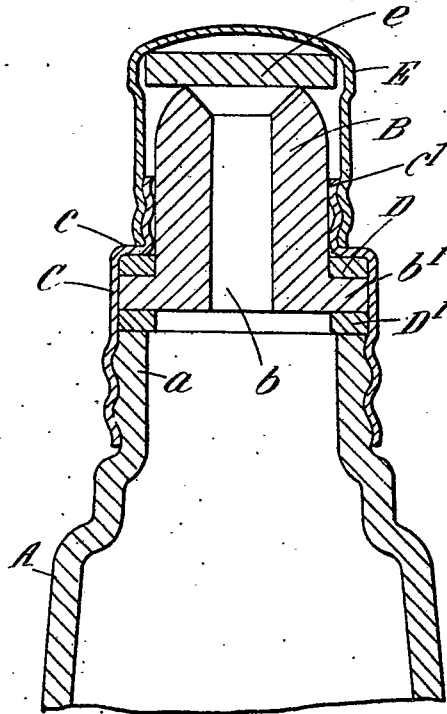
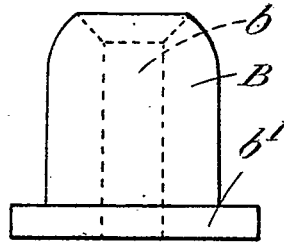


Fig. 3.