March 13, 1928. 1,662,277

A. MOORE

PAPER CONTAINER

Filed July 31, 1920

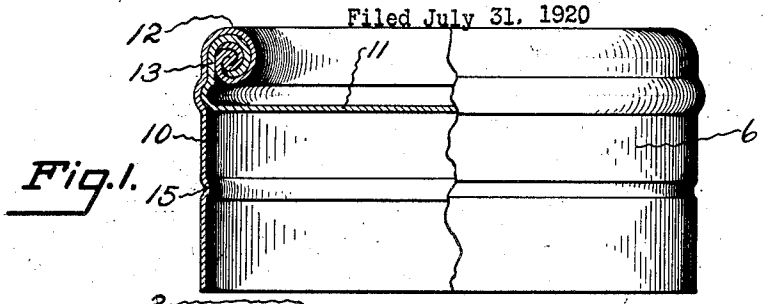


Fig. 1.

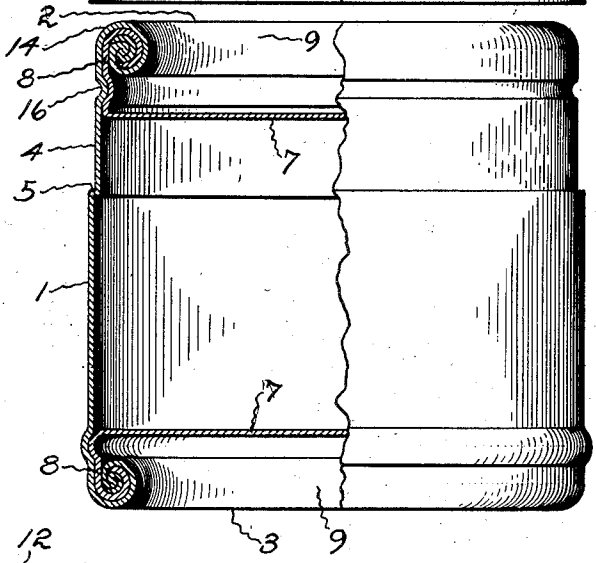


Fig. 2.

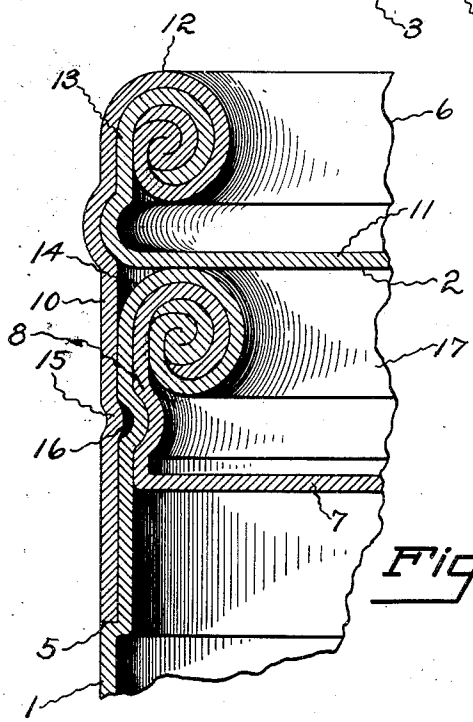


Fig. 3.

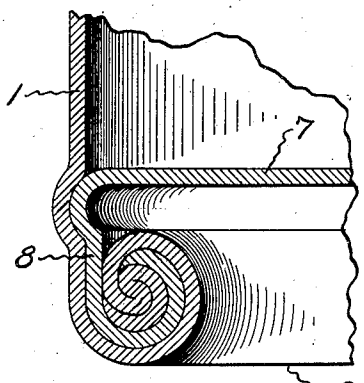


Fig. 4.

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UNITED STATES PATENT OFFICE.

ARLINGTON MOORE, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO CLARKE-MOORE CORPORATION, OF WILMINGTON, DELAWARE, A CORPORATION OF DELAWARE.

PAPER CONTAINER.

Application filed July 31, 1920. Serial No. 400,461.

The present invention relates to paper containers, that is, to containers made of any suitable fibrous stock whether paper or resembling paper, and may be in the form of a can with a cylindrical side wall, or in any suitable polygonal or curved form, wound or formed in any suitable way. The paper stock may be single or multiple ply with or without incorporating a binder, and the container may be coated with paraffin or the like and may have a paper covering or advertising label.

The container has any suitable form of top and bottom closures, preferably sealing the container, and a removable cover adapted to protect the contents from contamination and deterioration after one of the closures has been removed by the consumer. The cover may frictionally engage the top portion of the container, or the container and cover may have interlocking means such as complemental grooves, or both of these arrangements may be provided to resist the removal of the cover.

Whether or not the interlocking means are provided, the container may have a seat furnished, for example, by reducing the diameter of a portion of the side wall to form a ledge and a neck so that the removable cover seats on the ledge and frictionally engages the neck. Preferably the diameter of the neck is reduced to the extent that the cover forms a continuation of the side wall of the container to produce a smooth surface throughout suitable for an outside wrapper serving as a seal for the removal cover. Furthermore, the top closure of the container may consist of a cap and a bead, in which case the removable cover may be made to seat thereon for support in addition to that furnished by the ledge. Where interlocking means are included to secure the cover, the bead serves also to reenforce the side wall of the cover to compensate for any weakness due to the formation therein of part of the interlocking means. In either case the bead acts to support the side wall of the container against lateral pressure.

Irrespective of the form of top and bottom closures for the container, and the form of removable cover and the means for securing it, the invention comprehends as another of its parts a removable cover which is constructed and arranged to engage the end portion of the container, and to form with one of the closures an enclosed chamber which may, for example, be used to carry advertising or other printed matter. Where the removable cover is used in conjunction with the top closure of the container, the latter may be sealed, and both the cover and closure may include caps spaced to form the enclosed chamber.

In the specific embodiment of the invention hereinafter described, the container has sealed top and bottom closures each comprising a cap and a bead spaced from the cap to facilitate its formation exteriorily of the container, as well as to allow for interlocking means to secure the cap against longitudinal displacement under pressure, and the removable cover is formed with a closure including a cap which, when the cover is in place, forms with the top closure an enclosed chamber.

In the accompanying drawings illustrating the preferred embodiment of the invention in application, as an example, to a cylindrical container of single ply stock having sealed top and bottom closures,

Fig. 1 is an elevation of the cover partly in section; Fig. 2 is a similar elevation of the container; Fig. 3 is an enlarged sectional detail of the top closure and portion of the container, showing the removable cover in position; and Fig. 4 is an enlarged sectional detail of the bottom closure and portion of the container.

The container has a cylindrical side wall 1 of single ply stock and suitable surface finish, and top and bottom openings sealed by closures 2 and 3 respectively. The upper end of the side wall 1 is reduced in diameter forming a neck 4 and a ledge 5, the latter serving as a seat for the removable cover 6 which is made to frictionally engage the neck.

The top closure 2, and also the bottom closure 3, consists of a cap 7 having a wall 8 and a bead 9, the bead being formed of folded portions of the side wall 1 of the container and the wall 8 of the cap.

The cover 6 has a side wall 10 and its upper end has a closure comprising a cap 11, and a bead 12 which is formed of folded portions of the side wall 10 and the wall 13 of the cap. The removable cover is made to tightly fit the neck 4 and, to increase the frictional engagement therewith, the inside diameter of the side wall 10 is made approxi-

mately equal to the outside diameter of the neck 4. Even though the diameters be exactly equal, the cover may be adjusted without difficulty by reason of the curvature at 14 acting to guide the lower peripheral edge of the cover while the latter is being forced in engagement with the neck.

Impressed in the side wall 10 of the removable cover is an inwardly directed projection 15 which engages the complemental groove 16 formed in the neck 4 and interlocks therewith to supplement the action of friction in resisting the removal of the cover. By directing inwardly the interlocking grooves for securing the cover 7 the groove 16 serves both for receiving the projection 15 in the wall of the cover, and also to furnish the inwardly extending projection forming part of the interlocking means for the cover.

When the removable cover is seated on the ledge 5 the cap 11 contacts with the upper bead 9 which is spaced from the cap 7 to facilitate its formation exteriorly of the container, as well as to allow for the inclusion of interlocking means to secure the latter, and the cap forms with the top closure an enclosed chamber 17, for instance three-eighths of an inch in height, which may be used to carry advertising or other printed matter. Moreover, the bead 9 serves to support the removable cover, and particularly the side wall 10 thereof, thus compensating for any weakness due to the inwardly extending projection 15, and reenforcing the support furnished by the ledge 5 against pressures exerted longitudinally of the container. Furthermore, it reenforces the side wall against lateral pressures.

A paper container constructed as described is particularly well suited for articles requiring a tightly covered container for their preservation after as well as before the container is opened. Irrespective of the nature of the contents, however, the removable cover is desirable for protection against the ingress of moisture and foreign matter and to prevent the egress of the contents after the seal has been broken by the consumer. When the contents of the container have been packed and sealed, the removable cover is placed in position on the neck, and, since the wall of the cover forms a continuation of the body portion of the side wall of the container, a suitable covering or advertising label may be pasted on the outside surface to provide a seal for the cover.

Reference is made to my copending application Serial No. 400,460, filed July 31, 1920, claiming subject matter disclosed but not claimed in the present case.

Having thus described my invention, what I claim is:

1. In a paper container, a side wall, top and bottom closures therefor, a portion of said side wall being reduced in diameter to form a neck and a ledge with the ledge located below the top closure, a removable cover having a wall constructed and arranged to frictionally engage said neck, the end of said wall seating on said ledge and forming a continuation of the body portion of the side wall of the container, and interlocking means for resisting the removal of said cover comprising complemental grooves formed in said neck and in the wall of said cover.

2. In a paper container, a cylindrical side wall, top and bottom closures therefor, a portion of said side wall being reduced in diameter beyond the closure to form a neck and a ledge located below the closure, a removable cover having a cylindrical wall constructed and arranged to frictionally engage said neck, the end of said wall seating on said ledge to form a continuation of the body portion of the side wall of the container, and interlocking means for resisting the removal of said cover comprising complemental grooves in said neck and in the wall of the cover.

3. In a paper container having a side wall, a bottom closure, and a top closure formed with a bead and a cap, a portion of said side wall extending beyond the top closure being reduced in diameter to form a ledge and a neck below the closure, and a removable cover which is constructed and arranged to engage said neck and to seat on said ledge, said cover being formed with a cap seating on said bead.

4. In a paper container having a side wall, a bottom closure, and a top closure formed with a bead and a cap, a portion of said side wall extending beyond the top closure being reduced in diameter to form a ledge and a neck, and a removable cover which is constructed and arranged to engage said neck and to seat on said ledge, and interlocking means for resisting the removal of said cover comprising complemental grooves in said neck and in the wall of the cover, said cover being formed with a cap seating on said bead.

In testimony whereof I affix my signature.

ARLINGTON MOORE.