Feb. 16, 1932. E. KATZ 1,845,970

MANUFACTURE OF HOLLOW BODIES FROM FIBROUS PULP

Filed Nov. 24, 1928

Fig. 2.

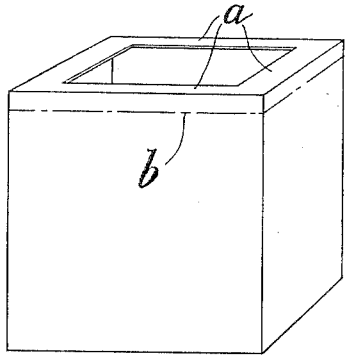


Fig. 1.

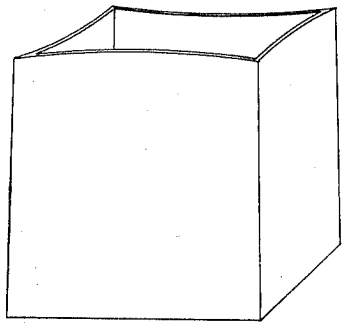


Fig. 3.

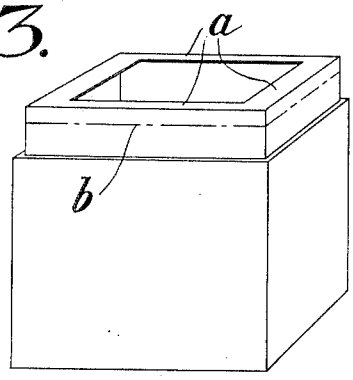
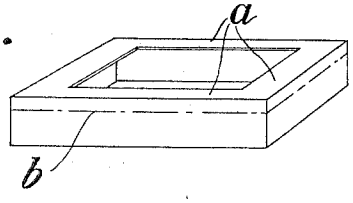


Fig. 4.



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UNITED STATES PATENT OFFICE

EUGEN KATZ, OF BERLIN, GERMANY, ASSIGNOR TO KEYES CONTAINER CORPORATION, OF BOSTON, MASSACHUSETTS, A CORPORATION OF MAINE

MANUFACTURE OF HOLLOW BODIES FROM FIBROUS PULP

Application filed November 24, 1928. Serial No. 321,561.

In the manufacture of hollow bodies from fibrous pulp it sometimes happens that differences of contraction in the final drying stage after removal from the mould result in distortion which detracts from the value and appearance of the article and renders the fitting of a lid or cover thereto extremely difficult.

In order to overcome this objection the present invention comprises forming at the, or each, open end of the hollow body a rim or flange which when undesirable in the finished article can be removed after the formation of the latter. The invention is applicable to the formation of hollow bodies from fibrous pulp according to known methods and in order that it may be clearly understood reference will now be made to the accompanying drawings wherein:—

Fig. 1 represents a hollow rectangular container made in accordance with existing methods; Figs. 2 and 3 containers made according to the present invention, and Fig. 4 a lid or cover for the container illustrated by Fig. 3, also made according to the present invention shown with the bottom uppermost.

Referring first to Fig. 1, the container here illustrated has been made in accordance with an existing method and during the latter stages, particularly the final drying stage, the sides have been drawn inwardly at and towards the open end or top by unequal contraction or shrinkage. This distortion has been somewhat exaggerated in the drawings for purposes of illustration but it will be realized that such distortion is highly undesirable as it affects the capacity and appearance of the container and renders the fitting of a lid or cover thereto extremely difficult particularly when an air-tight closure is required.

The container illustrated by Fig. 2 is similar to that illustrated by Fig. 1 except that in accord with the present invention an inturned rim or flange *a* has been formed completely around the open end thereof. This rim or flange is of course formed during the moulding operation simultaneously with the formation of the container itself and prevents the distortion illustrated by Fig. 1. Where there is no objection to such a rim on the finished article no further operation is necessary on the container, but where such a rim is undesirable the upper edge of the container can be trimmed off as for instance at the dotted line *b*.

Fig. 3 illustrates a container the upper portion *c* of which is of somewhat smaller cross-section than the remainder so that when a lid or cover is fitted thereto each side of the closed container will be in a single plane. Here, as in the construction illustrated by Fig. 2 an inturned rim or flange *a* is formed on the upper portion which latter can if necessary or desirable be trimmed off to the dotted line *b*.

Fig. 4 illustrates a lid suitable for the container illustrated by Fig. 3 similarly formed with an inturned rim or flange *a* extending inwardly from the bottom edge of the lid which for convenience is shown bottom uppermost in the drawing. In the case of a lid or cover it is of course essential that the rim or flange be removed as for instance by trimming the lid to the dotted line *b*.

Although the articles illustrated are of rectangular cross-section the invention is not limited to the manufacture of articles of this configuration but can be employed in all instances where its application would be of value.

Further, it is not essential that the rim or flange extend inwardly from the open end of the hollow body. If desirable or convenient, it may extend outwardly, in which case it would, in most instances, be necessary to remove it by trimming as hereinbefore described.

I claim:—

1. In the formation of an independent open mouth hollow body adapted to receive a fitted closure by molding wet laid pulp on a foraminous die, those steps consisting in the formation of an internal integral temporary flange about the mouth and within the normal opening thereof to prevent distortion during drying and in subsequently removing the flange.

2. In the formation of an independent open mouth hollow body by molding wet laid pulp on a foraminous die, those steps consisting in

the formation of an internal temporary integral flange about the mouth to prevent distortion during drying and in subsequently removing said flange.

3. A hollow open ended container or like thin wall article of wet laid pulp having a temporary integral flange about the mouth and disposed in the normal opening thereof to prevent distortion during drying.

4. A hollow thin-walled unitary container of molded wet laid fibre having an open mouth provided with a temporary integral auxiliary extension flange continuously molded therewith and disposed in supporting relation thereto to prevent distortion during drying, said extension being adapted to be severed to leave the predetermined article.

5. A hollow thin walled unitary container of molded wet laid fibre having an open mouth provided with an integral auxiliary flange continuously molded therewith and disposed within the normal mouth opening and in supporting relation thereto to the walls thereof to prevent distortion during drying, said extension being adapted to be severed to leave the predetermined article.

6. A hollow thin walled unitary container of molded wet laid fibre having an open mouth adapted to receive an externally fitting closure and provided with an integral temporary internal extension flange continuously molded therewith and disposed in supporting relation thereto to prevent distortion during drying and adapted to be removed to expose the closure receiving mouth.

In testimony whereof I affix my signature.

DR. EUGEN KATZ.