Oct. 15, 1929. H. A. INMAN 1,731,780

CONTAINER

Filed June 17, 1926

Fig. 4

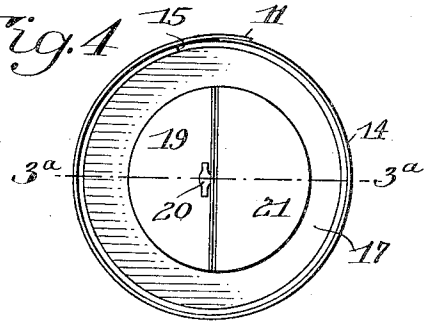


Fig. 5

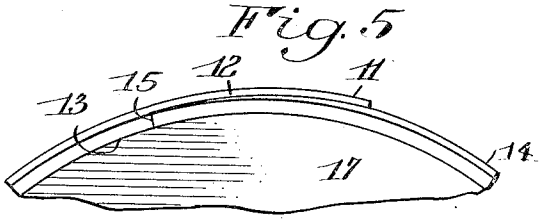


Fig. 1

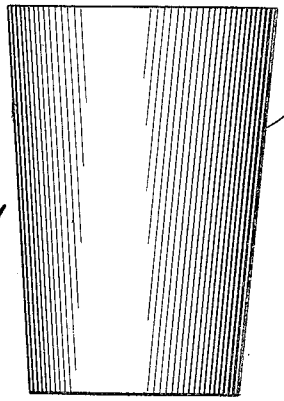


Fig. 2

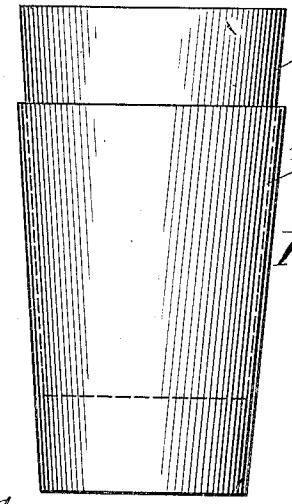
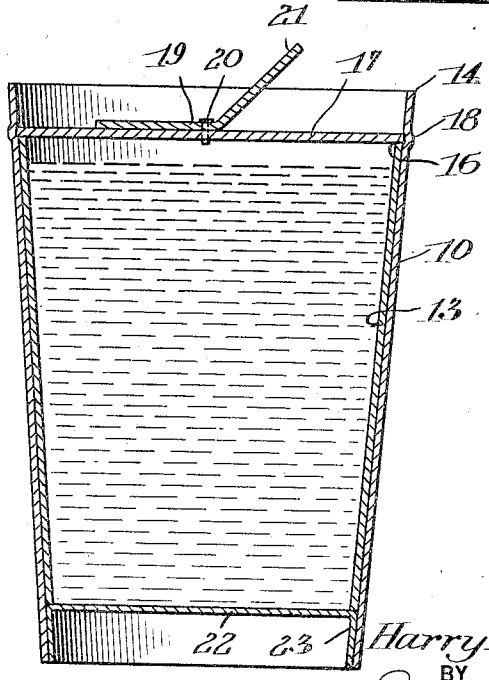


Fig. 3



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UNITED STATES PATENT OFFICE

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CONTAINER

Application filed June 17, 1926. Serial No. 116,541.

This invention relates to containers of the variety, for example, constructed of paper, cardboard or the like, one object of the invention being to provide an improved container of this nature having a simple and practical form of construction adapted for holding liquids.

Another object is to provide such a container in a simple and inexpensive form of construction comprising but few parts and requiring a minimum number of manufacturing operations.

A further object is the provision of a container of the above character in a form convenient in use and of a shape adapting it for nesting in quantities and thus requiring a minimum of space for shipment and storage.

To these and other ends the invention resides in certain improvement and combinations of parts, all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings:

Figure 1 is a side elevation of a container embodying the present invention;

Figure 2 is a similar view of two containers illustrating the manner in which they may be nested one within the other;

Figure 3 is an enlarged sectional view of the container on the line 3^a—3^a of Figure 4;

Figure 4 is a top plan view of the container, and

Figure 5 is an enlargement of parts shown in Figure 4, to illustrate the side wall construction.

Similar reference numerals throughout the several views indicate the same parts.

The invention is herein disclosed, by way of illustration, as embodied in a container constructed of paper or cardboard and particularly adapted for holding liquids, having the general shape of a truncated cone provided with a detachable cover at its larger end so that the container is well adapted for compact nesting in quantities, as illustrated, for example, in Figure 2. It is constructed of sheet material of a thickness suited to particular requirements and preferably of a water-proof character such, for example, as the paraffin stock commonly used for such purposes.

The container comprises one or more wrappings forming the side walls, each constructed of a single blank of material having its ends brought together longitudinally of the body, as shown. Such a wrapping or sheet is shown at 10 as constructed from a single blank, preferably of relatively flexible material, having its ends brought together in overlapping relation as at 11, Figures 4 and 5. It has been found desirable to construct this joint so as to form a smooth inner wall surface for which purpose the inner end of the sheet is skived as at 12 to afford the desired smooth surface. Both ends of the material may, of course, be skived or the joint otherwise constructed to obtain the described result. This wrapping or sheet is provided with a bottom closure and with a detachable top or cover as hereafter described.

In addition to the sheet 10, it is preferred to reinforce and stiffen the main body portion of the container as, for example, by the use of a second wrapping or sheet indicated at 13. This is formed in the present instance to fit in close contact with the inner surface of the wrapping 10 to which it is preferably glued or otherwise cemented to provide a laminated and relatively stiff side wall. Wrapping 13 is preferably terminated short of the top and bottom ends of the wrapping 10, as shown, so that the ends of the inner wrapping or sheet form supporting abutments for the top and bottom closures. It is to be noticed that by means of this construction the outer wrapping 10 is left with a relatively flexible or elastic top extension 14 for receiving the detachable cover. The ends of sheet 13 are brought together in any suitable manner as, for example, in the butt joint 15 which affords a smooth interior surface. The detachable cover or closure is preferably constructed of a size slightly greater than that of the interior of the top extension 14 adjacent the upper end 16 of the sheet 13 which forms an abutment or seat for the closure. The latter is in the present instance in the form of a relatively stiff disk 17 of such a diameter that, while it may be readily in-

serted within the top extension 14, it acts to slightly expand or spring the latter outwardly when pressed down on to its seat 16. In the latter position the cover acts to spring the outer wrapping 10 outwardly as indicated in a somewhat exaggerated manner at 18, so that the side wall grips or hugs the cover to form a thoroughly fluid tight closure. The side walls are held against permanent distortion by the reinforced or laminated construction of the main body portion just below the cover seat 16, it being understood that the inner sheet 13 may be constructed of suitable heavy stock if desired and is thoroughly united with the outer sheet 10.

The cover 17 is preferably provided with any suitable means for taking hold of the same such, for example, as a smaller disk 19, bent along a diameter and having one-half suitably secured to the cover 17, as by means of a clip 20, leaving the other half 21 of the disk extending conveniently upward for grasping between the fingers for inserting and removing the cover.

The bottom of the container is preferably closed by means of a blank formed up into the substantially cup-shape shown at 22 which is fitted into the lower end of the side wall sheet 10 and seated against the lower end of sheet 13, the flange 23 of the bottom closure being glued or otherwise suitably secured to the outer wrapping 10 as shown to form a thoroughly fluid tight bottom closure.

Paper and board material, as well understood in the art, generally has a grain running in the direction in which the sheet is made and it is preferred to use the material with the grain running lengthwise or from end to end of the container as this affords the best arrangement for resiliently resisting the tendency to stretch at the portions where the cover is positioned into place.

The invention thus provides a container of exceedingly simple but efficient form comprising but few parts affording a simple and inexpensive method of manufacture. By the selection of stock of appropriate material and thickness, as well as of suitable waterproof character, the container may be adapted for various uses. The principle of construction is such that practically any desired thickness may be given to the main body portion, while the top of the container and the cover are so constructed and combined as to afford a detachable closure which is simple and convenient in use and thoroughly fluid tight in operation. The general shape of the container, moreover, is such as to adapt it for nesting compactly one within another for economy of space in shipment and storage.

I claim as my invention:

1. A paper container comprising tapered side walls formed by an inner sheet of material having its ends brought together in abutting relation and an outer sheet cemented about the inner sheet and having its ends brought together in overlapping relation with the inner of said ends skived to provide a smooth inner wall, said inner sheet being terminated short of the ends of the outer sheet, a bottom closure seated within the smaller end of said outer sheet against the adjacent end of said inner sheet and a cover of slightly greater size than the portion of said outer sheet adjacent the other end of said inner sheet and adapted to be pressed thereinto against the end of said inner sheet to form a fluid tight closure.

2. A container comprising a sheet of fibrous material formed substantially into the shape of a truncated cone with the grain of said fibrous material running substantially longitudinally of said cone, a stop member within said sheet and spaced from the larger end thereof, said sheet being resilient adjacent said stop member, and a closure member including a substantially circular disk of slightly larger diameter than the inside diameter of the portion of the container adjacent said stop member, said closure member being adapted to fit within said container and to be held frictionally by the resiliency of said sheet in contact with said stop member to provide a liquid tight closure for said container.

HARRY A. INMAN.