

May 20, 1930.

L. C. BROOKS

1,758,917

FIBROUS CONTAINER

Filed May 19, 1927

Fig. 1.

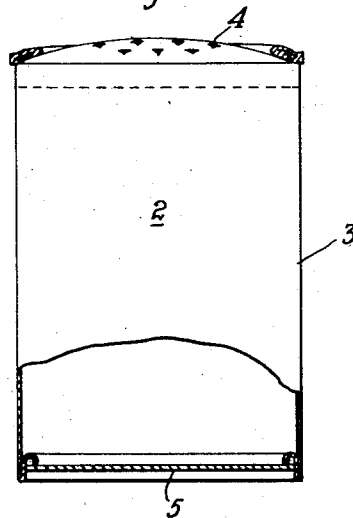


Fig. 2.

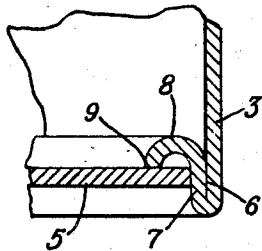


Fig. 5.

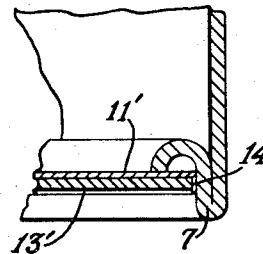


Fig. 3.

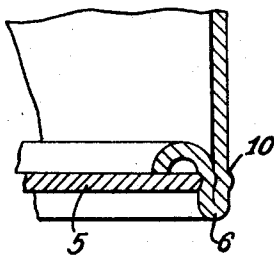
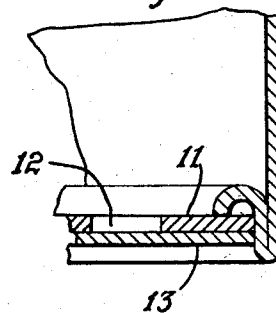


Fig. 4.



INVENTOR

Lewis C. Brooks
by *Byrnes, Stebbins & Daniels*
his attorneys

UNITED STATES PATENT OFFICE

LEWIS C. BROOKS, OF MILWAUKEE, WISCONSIN, ASSIGNOR TO NATIONAL PAPER CAN COMPANY, OF MILWAUKEE, WISCONSIN, A CORPORATION OF WISCONSIN

FIBROUS CONTAINER

Application filed May 19, 1927. Serial No. 192,532.

This invention relates to fibrous containers. Fibrous containers are well known which are provided with end closures secured to the walls of the containers in various manners, such as by crimping together portions of the closure and wall, respectively, or by gluing the closure to the wall. Many such constructions are objectionable by reason of their complexity and the consequent expense and labor involved in their manufacture.

I provide a fibrous container having a wall reversely bent at one extremity, the reversely bent portion being shaped to terminate at a distance from the wall inwardly of the container. It is thus adapted to receive a cooperating end closure, which may be held against the reversely bent wall portion. The closure may be removably held in place, so as to adapt the container for use as a condiment shaker, rendering it capable of being refilled when desired by merely lifting out the closure. In such case the removable closure preferably is at the bottom of the container, the top being closed by a suitable perforated lid.

In the accompanying drawings I have shown a present preferred embodiment of my invention in which

Figure 1 is an elevation, partly broken away, of a fibrous container; and

Figures 2, 3, 4 and 5 are vertical cross-sections to enlarged scale of portions of fibrous containers formed in accordance with my invention.

Referring more particularly to Figure 1, I provide a fibrous container designated generally by reference numeral 2 having a wall 3 to which at one extremity of the container is attached a perforated closure 4 in a manner well known in the art. At the opposite extremity a closure 5 is removably held in a manner to be hereinafter more fully described.

Referring now to Figure 2, the wall 3 of the container is reversely bent at its lower extremity, providing a wall portion 6 of double thickness. The inner thickness 7 of the double wall portion is again reversely bent at 8 so that its end face 9 is presented

in the direction of the extremity of the container.

Removably held by the in-turned portion of the wall is the end closure 5, which in this instance may comprise a flat disc of fibrous or other suitable material shaped to conform with the outline of the container. The end closure 5 may be very slightly larger than the inner diameter of the portion 7 of the container wall, so that a slight pressure need be imparted to spring the closure into position. It is held in a fixed position by the end face 9 of the container wall. Thus a closure may be cheaply and quickly manufactured which may be removed from the container when desired with little trouble and replaced by a slight pressure of the thumb. The resilient nature of the fibrous material is sufficient to insure retaining the closure in place when the container is in an upright position and filled with material.

In order that the end face 9 may be positioned to most effectively hold the closure in position, it is shaped to terminate at a distance from the wall inwardly of the container. To this end the portion 8 is bent in the form of a semicircle. This construction gives to the container the necessary strength and lessens the distance between supports on opposite sides.

In order to provide a more firm seating for the closure 5, the walls of the container at the portion 6 of double thickness may be pressed outwardly, as shown at 10 (Figure 3), to provide a groove inwardly of the container. It will be obvious that the closure when pressed into place, will fit into the groove, thereby being firmly held in place.

It may be desirable to provide a bottom closure having two closure members face to face, the inner one of which is perforated or provided with an opening of such size as to permit filling and pouring of material from the container. Such an inner closure member is shown at 11 in Figure 4, being provided with one or more suitable openings 12. It is adapted to be sprung into place similarly to the closure member 5 of Figure 2 and have a second or outer closure member 13, which may be similar to the member 5, pressed into place

over the member 11 so as to close the perforations 12. The closure member 11 may be removed if desired.

5 In Figure 5 is shown a construction similar to that of Figure 4, wherein the inner closure member 11, formed of suitable oiled or paraffined fibre, is provided with a laterally extending surrounding wall 14 adapted to bear against the wall portion 7. An outer closure member 13' is of such size as to fit against the member 11' and within the wall 14. This provides a reinforcement for the end closure.

10 While I have shown and described a present preferred embodiment of my invention, it is to be understood that the same is not limited to the form shown, but may be otherwise embodied within the scope of the following claims.

I claim:

20 1. A fibrous container having a wall bent upon itself to form a rim of two plies in contact, the rim defining a container opening, the wall material being turned inwardly toward the axis of the container and then outwardly toward the opening so as to form an annular closure engaging seat within the rim and spaced inwardly therefrom.

25 2. A fibrous container having a wall bent upon itself to form a rim of two plies in contact, the rim extending substantially parallel to the container wall and defining a container opening, the wall material being turned inwardly toward the axis of the container and then outwardly toward the opening so as to form an annular closure engaging seat within the rim and spaced inwardly therefrom.

30 3. A fibrous container having a closure receiving extremity, a perforate closure therein, and an imperforate closure removably fitted within the closure receiving extremity of the container over the perforate closure and held in place by the lateral pressure of the container wall whereby upon removal of the imperforate closure the contents of the container may be sifted out through the perforate closure.

40 4. A fibrous container having a closure receiving extremity, a perforate closure removably fitted within the closure receiving extremity, and an imperforate closure also removably fitted therein over the perforate closure, both of such closures being held in place by the lateral pressure of the container wall.

55 In testimony whereof I have hereunto set my hand.

LEWIS C. BROOKS.