

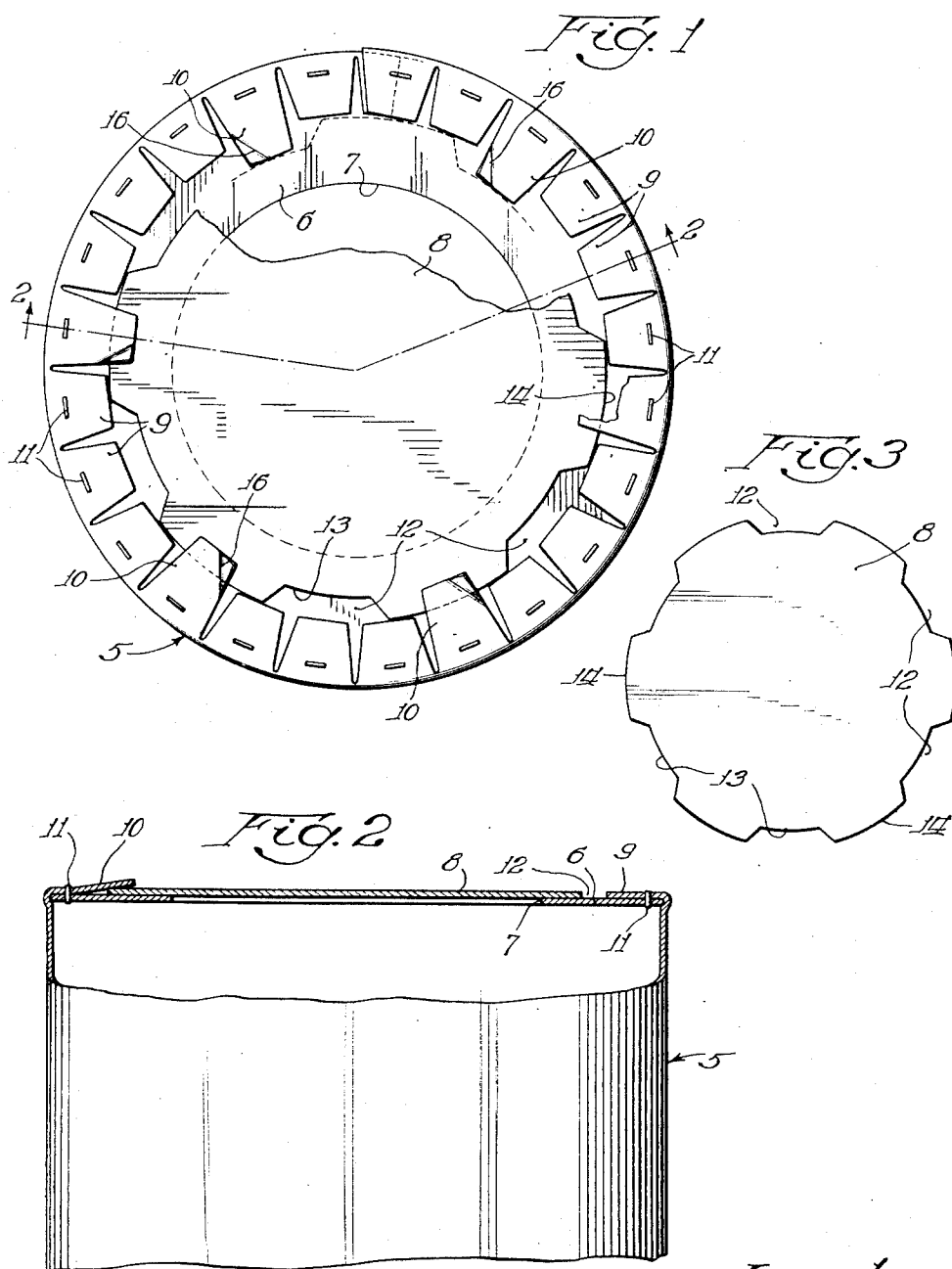
May 26, 1942.

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2,284,499

CONTAINER

Filed Oct. 21, 1940



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UNITED STATES PATENT OFFICE

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CONTAINER

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Application October 21, 1940, Serial No. 361,996

5 Claims. (Cl. 229—5.5)

The present invention relates to containers and more particularly to containers of a circular or drum form.

One object of the invention is to provide an end structure for a drum or similar type of round container in which an end closing element is provided with an opening arranged to be closed by a supplemental closure element constructed in such manner as to cooperate with the parts of the end structure so as to retain or lock the supplemental closure in its closed condition.

Another object of the present invention is to provide a collapsible, tubular container adapted to be formed of flexible sheet material in which an end element is adapted to be secured in place by tabs overlapping the end element, certain of the tabs being of lengths differing from the remaining tabs, whereby a supplemental closure may be selectively secured over an opening in the main end closure for the container.

In the drawing:

Fig. 1 is a plan view of the end of a container embodying the present invention;

Fig. 2 is a fragmentary, side-elevational view with certain parts being shown in section along line 2—2 of Fig. 1; and

Fig. 3 is a reduced plan view of the supplemental closure disc for the container.

Referring more particularly to the drawing, the body member, designated as a whole at 5, is preferably in the form of a single strip of flexible sheet material such as paperboard, the ends of the strip being brought together and stapled or otherwise secured to provide a collapsible form of body member which is adapted to be shipped in a flat condition and later set up in expanded form by the user. Reference is made herein to my co-pending application, Serial No. 320,313, filed February 23, 1940, illustrating a drum of this particular form.

The end of the body member 5 is adapted to be closed by a primary closure disc 6 formed with an opening 7 through which the container may be filled with the desired commodity. The opening 7 is adapted to be closed by a supplemental closure disc 8.

The body blank is preferably provided with a plurality of tabs 9, 9 and 10, 10. The tabs 10, 10 are made longer than the tabs 9, 9 for a purpose which will presently be explained.

The tabs 9, 9 and 10, 10 are folded over to contact the outer surface of the closure disc 6 and are secured thereto as by means of staples 11, 11.

The supplemental closure disc 8 is preferably in circular form and is provided or formed with

a plurality of recessed portions 12, 12, the inner surfaces 13 of which are preferably circular and concentric with the outer edge portions 14, 14 of the disc. The diameter of the disc 8 measured between the opposite portions 14, 14 is somewhat less than the diameter of the area defined by the inner edges of the shorter tabs 9, 9 and the diameter of the disc measured between opposite recessed portions 13, 13 is somewhat less than the distance between oppositely positioned long tabs 10, 10. This distance between the inner surfaces 13, 13 of the recessed portions of the disc, which may be termed its inner diameter, is greater than the diameter of the opening 7 so as to completely close such opening. The width of the recessed portions 13, 13 is greater than the width of the tabs 10.

It is thus apparent that when the supplemental disc 8 is placed against the main closure disc 6 with the recessed portion in registry with the longer tabs 10, 10, the disc 8 will fit flat against the disc 6. After the disc 8 has been so placed, rotation of the disc in one direction or the other to bring the portions 14, 14 in underlying relation to the long tabs 10, 10 will have the effect of retaining the closure against the outer surface of the primary disc 6. It is to be noted that the staples which secure the long tabs 10, 10 to the disc 6 are placed so as to leave the ends of the tab free from the disc and so as not to interfere with the rotary movement of the portions 14, 14 below the tabs.

For the purpose of facilitating entry of the portions 14, 14 beneath the respective tabs 10, 10, these tabs are preferably formed with score lines 16, 16 which extend diagonally across at least one outer corner of the tabs, whereby the corner may be deflected somewhat away from the plane of the tab to provide a space between the corner of the tab and the primary closure disc 6 to thereby admit the portions 14, 14 beneath the tabs without likelihood of the edges of the portions 14 striking the edges of the tab.

In using the container of the present invention it will first be set up, then filled with the desired commodity and, after filling, the closure will be secured in place, as above described, thus affording protection to the contents during storage and shipment of the container. When it is desired to open the container, this may be done by again rotating the disc 8 so as to bring the recessed portions 13, 13 into registry with tabs 10, 10, whereupon the disc may be removed.

From the foregoing it is apparent that there is provided a convenient and efficient method for

closing a filling and dispensing opening in the end of a round container. By combining with the means for securing the primary end disc with the body blank, cooperating parts on the supplemental closure disc, a very convenient means for securing the supplemental disc in place is provided at a very small increase in the size of the blank required to form the body member of the container.

While the present description sets forth a preferred embodiment of the invention, numerous changes may be made in the construction without deviating from the spirit of the invention, and it is therefore desired that the present embodiment be considered in all respects as illustrative and not restrictive, reference being had to the appended claims rather than to the foregoing description to indicate the scope of the invention.

I claim:

1. A drum construction comprising a cylindrical body member, a disc fitted into the end of the body member, said disc being formed with a central opening, flexible tabs carried by the end of the body member and adapted to be folded over and secured against the outside surface of the end disc, the major number of said tabs being of substantially uniform length to define a circular area greater in size than the opening in the end disc, at least two oppositely disposed of said tabs having a greater length than the remaining tabs so as to extend into the circular area defined by the remaining tabs of shorter length, and a supplemental closure disc adapted to close the opening in the end disc, said supplemental disc having a diameter somewhat less than the diameter of the area included inside the folded-over shorter length tabs, and somewhat greater than the distance between the free ends of the folded-over, longer tabs, the edge portion of the supplemental disc having cut-out portions formed therein corresponding in radial position to the longer tabs and of a size greater than the widths of said tabs, whereby the supplemental disc can be placed upon the end disc by registering the cut-away portions with the longer tabs and can be secured in place by rotating the supplemental disc to bring the edge portions of the disc in underlying relation to the longer tabs.

2. A drum construction comprising a cylindrical body member, a disc fitted into the end of the body member, said disc being formed with a central opening, flexible tabs carried by the end of the body member and folded over against the outside surface of the end disc and secured thereto, the major number of said tabs being of substantially uniform length to define a circular area greater in size than the opening in the end disc, at least two oppositely disposed of said tabs having a greater length than the remaining tabs so as to extend into the circular area defined by the remaining tabs of shorter length, said tabs having their free end portions unsecured to the

end disc, and a supplemental closure disc adapted to close the opening in the end disc, said supplemental disc having a diameter somewhat less than the diameter of the area included inside the shorter length tabs, and somewhat greater than the distance between the free ends of the folded-over, longer tabs, the edge portion of the supplemental closure disc having cut-out portions formed therein corresponding in radial position to the longer tabs and of a size greater than the widths of said tabs, whereby the supplemental disc can be placed upon the end disc by registering the cut-away portions with the longer tabs and can then be secured in place by rotating the supplemental disc to bring the edge portion of the disc in underlying relation to the unsecured, free end portions of the longer tabs.

3. A drum construction comprising a cylindrical body member, a disc adapted to close an end of the body member, said disc being formed with a central opening, a plurality of spaced, flexible tabs carried by the end of the body member and adapted to be folded over and secured against the outside surface of the end disc, and a supplemental closure disc adapted to close the opening in the end disc, said supplemental disc having spaced, cut-away portions formed in the edge thereof corresponding in radial position to the tabs and being of a size greater than the widths of such tabs, whereby the supplemental disc can be placed upon the end disc by registering the cut-away portions with the tabs and can then be secured in place by rotating the supplemental disc to bring the edge portion of the disc in underlying relation to said tabs.

4. A drum construction comprising a cylindrical body member, a disc adapted to close an end of the body member, said disc being formed with a central opening, a plurality of spaced, flexible tabs carried by the end of the body member, said tabs being adapted to be folded over and secured against the outside surface of the end disc and having free end portions extending inwardly from said body member in opposed relation, and a supplemental closure disc adapted to close the opening in the end disc, said supplemental disc having spaced, cut-away portions formed in the edge thereof corresponding in radial position to the tabs and being of a size and shape such that said free end portions will pass through said cut-away portions when they are in registering position, whereby the supplemental disc can be placed directly upon said end disc and then secured in place by rotating said supplemental disc to bring the edge portion thereof in underlying relation to said free end portions.

5. A drum construction according to claim 4 wherein said free end portions each have one of their corner portions deflected somewhat away from the outside surface of the end disc to facilitate movement of the unrecessed edge portions of the supplemental disc beneath said free end portions.

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