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FIBER CORRUGATED BOARD BARREL

Filed Feb. 3, 1920

Fig. 1,

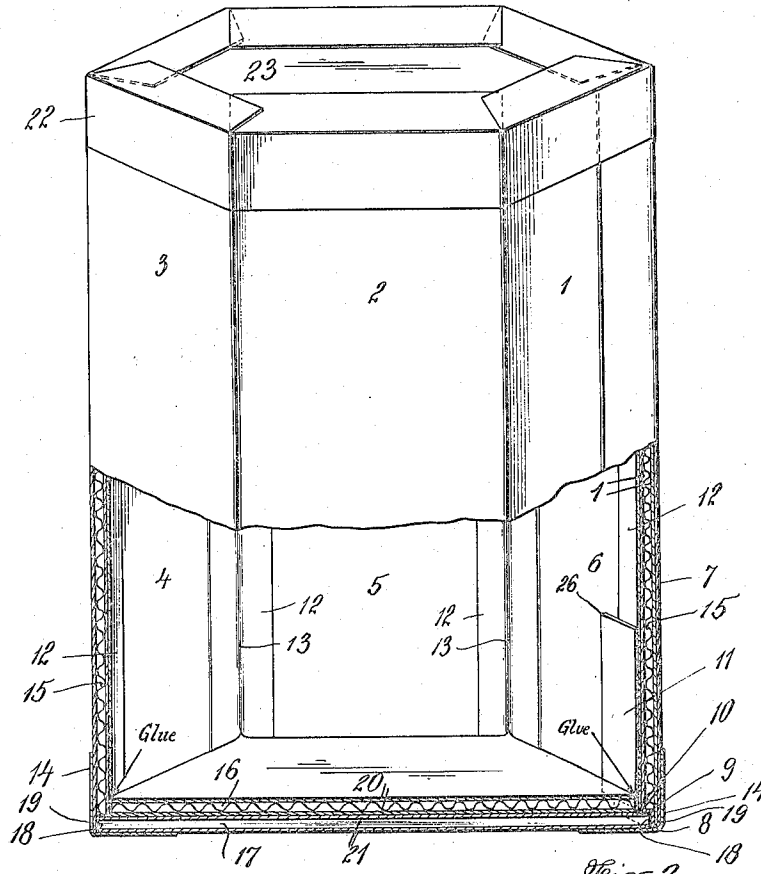


Fig. 2,

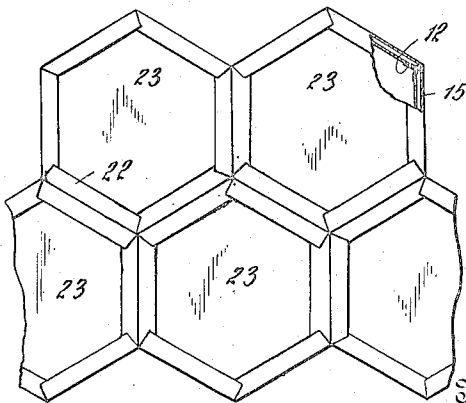
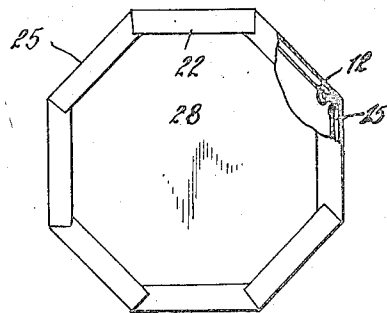


Fig. 3,



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FIBER-CORRUGATED-BOARD BARREL.

Application filed February 3, 1920. Serial No. 356,028.

To all whom it may concern:

Be it known that I, CHARLES H. CROWELL, a citizen of the United States, residing in the borough of Brooklyn, county of Kings, city and State of New York, have made a certain new and useful Invention Relating to Fiber-Corrugated-Board Barrels, of which the following is a specification taken in connection with the accompanying drawing.

This invention relates especially to barrels or similar containers formed of corrugated paper board, fiber board or similar material. One or more pieces of heavy corrugated paper board, for example, may be used to form the body of the barrel or similar container and may advantageously be creased and folded in a direction transverse to the corrugations of the paper board so as to have six or eight sides more or less, such polygonal shape contributing greatly to the stiffness and rigidity of the container especially when reenforced as at its ends by the use of heavy reenforcing covers or other end members. The cooperating covers may advantageously be made of multiple thickness corrugated paper or fiber board and by crossing the grain or corrugations of such corrugated paper board and properly shaping the edges of the pieces a stepped form of top and bottom cover may be provided fitting within the edges of the body which may be flanged to promote this action and glued thereto which is an additional preventive against pilfering when the glue engages and holds together such concealed inside portions of the cover seams or joints. The folds or joints in the body material may be reenforced and sealed by connector or retainer strips of cloth or paper tape glued in position and preferably comprising at least at the edge joints or seams a body connector strip having its ends brought around the top and bottom edges of the body and secured inside of the same which, practically speaking, prevents opening of this edge seam of the body without detection.

In the accompanying drawing showing in a somewhat diagrammatic way various illustrative embodiments of this invention,

Fig. 1 is a perspective view showing a barrel or container of this type, parts being shown in section for greater clearness.

Fig. 2 is a top view of a series of such containers; and

Fig. 3 is a top view of a different form of container.

Although not necessarily limited thereto a barrel or container of this type may advantageously be made with six or eight sides which seems to be desirable to give increased stiffness and rigidity to the body by reason of the polygonal form thereof and a six sided container of course has the added advantage of nesting accurately with other similar containers as is shown in Fig. 2 so as to greatly minimize injury and straining during transportation. This is also important since a series of such containers also packs so closely as to economize room under storage and transportation conditions. The body of the container may be formed of heavy fiber board or corrugated paper board of such weight and thickness as is suitable for the particular size of container and the weight and character of its contents and as shown in Fig. 1 the container body may be formed of one or more pieces of heavy corrugated paper board in which the facing members 1 are joined by the corrugated paper or straw board member 15 preferably having its corrugations extending transversely to the edge folds in the material. For a hexagonal container or barrel the sides 1, 2, 3, 4, 5 and 6 may for moderate sizes be formed of a single piece of such corrugated paper board which may be creased transversely of its corrugations as indicated and reenforced at these creased folding edges and also at its edge seam by suitable retainer strips such as 12 which are preferably forced at 13 into the folds or creases at these edges. The edge seam is also preferably reenforced and held together by a connector strip such as 7 of heavier material, such, for instance, as heavy gummed cloth tape which is preferably pasted around the outside of this seam and formed with intumed ends 26 adhesively or otherwise secured to the inside of the body material so as to give added strength and security to this edge seam.

It is for many reasons advantageous to form the container body with projecting edge flanges such as 19 which may be readily done by cutting away more or less of the inner portions of the body material at one or both edges so as to leave at least the outer facing strip of material and at the seams and edges the retainer and connector strips may reenforce this edge flange as shown in

Fig. 1 where the connector strip 7 has a portion 8 extending around the edge flange 19 while other portions, such as 9, 10 are secured to the corners of this flanged or stepped edge to increase its strength in connection with the inturned portion 11 of this connector strip. Such a container body may be creased and connected at its one or more edge seams and may be shipped in flat or knockdown condition if it has an even number of sides or edges, since this allows the container body to be folded together upon itself into substantially flat condition. The top and bottom may be formed of any suitable material, such, for instance, as multiple ply corrugated paper board as indicated in Fig. 1, this construction also facilitating the formation of a stepped top and bottom cover for the container as indicated. The inner cover member 20 may as shown have its corrugated connector member 16 arranged transversely to the corrugated connector 17 of the outer somewhat larger cover member having one of its facing portions 21 adhesively connected to the adjacent facing 20 of the inner cover. These covers may be formed by stamping, sawing or cutting the material and then gluing or otherwise connecting the pieces together so that a one-piece cover may thus be formed for insertion into each end of the barrel or container in which it may be secured by any suitable means. Glue or other generally similar adhesive 19 may be used for this purpose and preferably applied throughout at least some of the inside concealed portions of these joints so as to prevent the undetected opening or pilfering of the corrugated barrel and of course for still greater security or strength sealing strips such as 14, 22, may be applied and adhesively secured to the cover joints.

Fig. 3 indicates an octagonal corrugated paper barrel or container of generally similar construction, this container 28 having in this instance eight similar sides 25 formed of heavy corrugated paper board 15 in which the folded edges and seams may be reenforced internally, externally, or both, as by cloth or paper gummed strips 12. Of course in some cases a still greater number of sides may be used for such corrugated paper or similar containers, although six or eight sided barrels or containers seem to give very good results with a minimum of stiffening reenforcement adjacent the central portions.

This invention has been described in connection with a number of illustrative embodiments, forms, portions, parts, materials, arrangements and methods of manufacture and use, to the details of which disclosure the invention is not of course to be limited, since what is claimed as new and what is desired to be secured by Letters Patent is set forth in the appended claims:

1. The corrugated paper board barrel comprising a six sided container body formed of a single piece of corrugated paper board scored transversely of its corrugations, gummed tape retainer strips adhesively secured to the inside of such scored edges and side seam, a heavy gummed cloth connector strip adhesively secured to the outside of said container body to join the ends thereof which form the edge seam in said body, the ends of said connector body being brought around and secured to the inside of said connector body, said connector body having projecting edge flanges and top and bottom covers having stepped edges fitting within said edge flanges and formed of adhesively secured multiple thickness corrugated paper board and gummed tape sealing strips secured to the outside seams between said container body and covers.

2. The corrugated paper board barrel comprising a six sided container body formed of a single piece of corrugated paper board folded transversely of its corrugations, a heavy gummed connector strip adhesively secured to the outside of said container body to join the ends thereof which form the edge seam in said body, said connector body having projecting edge flanges and top and bottom covers fitting within said edge flanges and formed of adhesively secured multiple thickness corrugated paper board.

3. The corrugated paper board barrel comprising a six sided container body formed of corrugated paper board folded transversely of its corrugations, a heavy gummed connector strip adhesively secured to the outside of said container body to join the ends thereof which form the edge seam in said body, said connector body having projecting edge flanges and top and bottom covers having stepped edges fitting within said edge flanges.

4. The corrugated paper board barrel comprising a six to eight sided polygonal container body formed of a single piece of corrugated paper board folded transversely of its corrugations, retainer strips adhesively secured to the inside of such folded edges of said body, means to adhesively join the ends of said container body forming the edge seam therein, said connector body having projecting edge flanges and top and bottom covers fitting within the edges of said container body and formed of adhesively secured multiple thickness corrugated paper board.

5. The corrugated paper board container comprising a six to eight sided polygonal container body formed of corrugated paper board folded transversely of its corrugations, retainer strips adhesively secured to the inside of such folded edges of said body, means to adhesively join the ends of said

container body forming the edge seam therein and top and bottom covers fitting within the edges of said container body and formed of multiple thickness corrugated paper board.

6. The paper board container comprising a polygonal container body formed of a single piece of corrugated paper board folded transversely of its corrugations and having its ends connected, gummed tape retainer strips adhesively secured to the inside of such folded edges, said connector body having projecting edge flanges and cooperating covers having stepped edges fitting within and glued inside said edge flanges and formed of adhesively secured multiple thickness corrugated paper board.

7. The paper board container comprising

a polygonal container body formed of a single piece of corrugated paper board folded transversely of its corrugations and having its ends connected, said connector body having projecting edge flanges and cooperating covers having stepped edges fitting within and glued inside said edge flanges.

8. The paper board container comprising a six to eight sided polygonal container body formed of a single piece of paper board having connected ends and projecting edge flanges and a cooperating cover having stepped edges fitting within said edge flanges and formed of adhesively secured multiple thickness corrugated paper board.

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