Jan. 29, 1957 C. W. VOGT 2,779,526

MULTI-UNIT CONTAINER

Filed Feb. 6, 1953

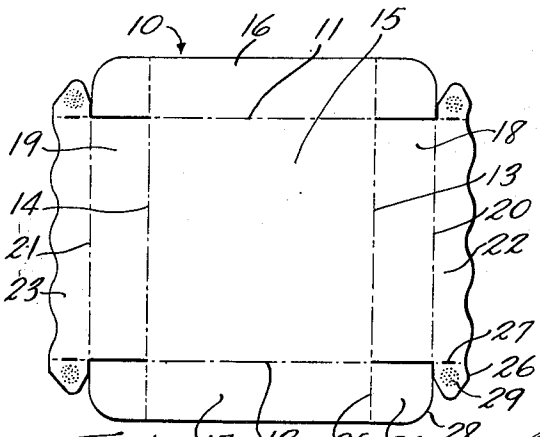


Fig. 1

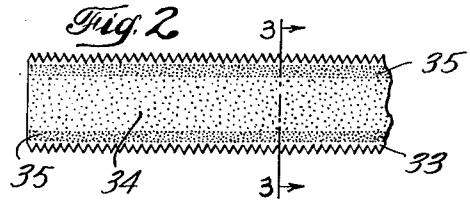


Fig. 2

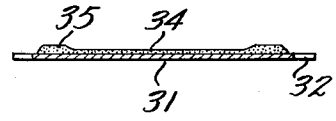


Fig. 3

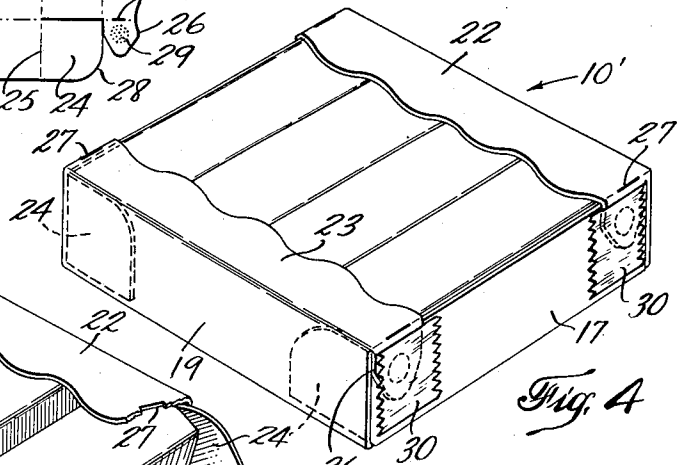


Fig. 4

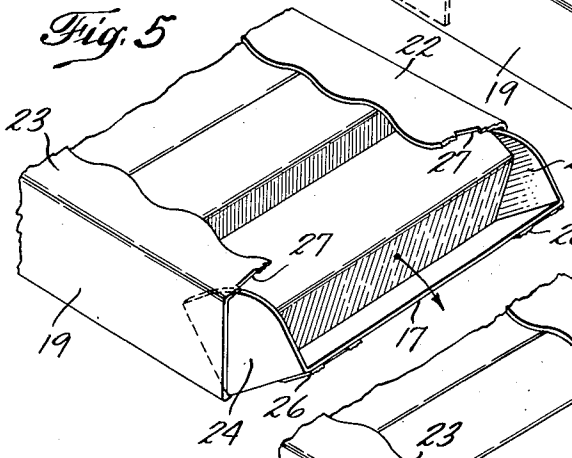


Fig. 5

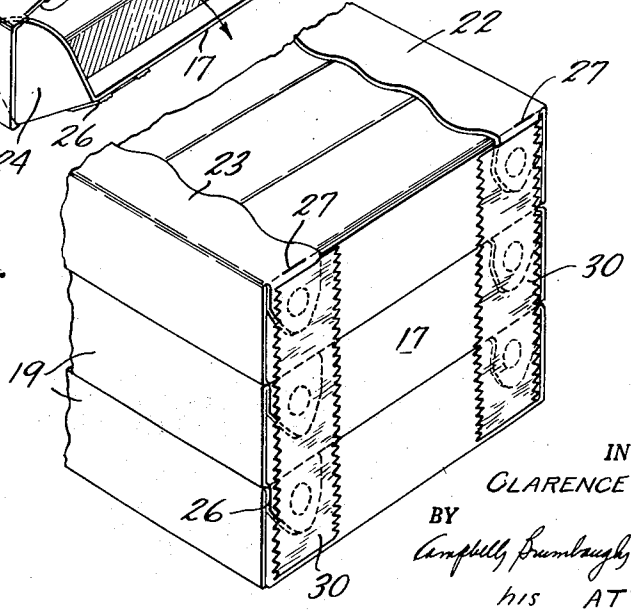


Fig. 6

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MULTI-UNIT CONTAINER

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Application February 6, 1953, Serial No. 335,536

5 Claims. (Cl. 229—34)

This invention relates to devices for maintaining a plurality of units together in the form of a unit commodity for the purpose of distribution and sale, and embodies more particularly means for securing a plurality of objects together in such fashion as to facilitate the display of the objects in their assembled position as well as to enable the objects to be readily disassembled when and as desired without disturbing the remaining articles that have been secured together as a unit.

The invention further relates to means for chaining a plurality of components together as a chained commodity, each component comprising a plurality of objects, an object of the invention being to utilize the aforesaid chaining means at least as a part of the means for maintaining a plurality of the objects assembled as the several components of the chained commodity.

A further object of the invention is to provide an improved means for maintaining a plurality of objects assembled in juxtaposed relationship to enable the individual objects to be effectively displayed as well as to facilitate the packing, transportation, and sale thereof.

Yet another object of this invention is to provide means whereby a plurality of objects may be maintained in effective display relationship, the structure providing for convenient and simple operations in the assembly of the individual objects into the desired relationship as well as means by which the objects may individually be removed conveniently when and as desired.

A further object of the invention is to provide a container for packaging a plurality of objects or units together, the container being of such structure as to enable it to be manufactured and partially assembled in such form as to permit a plurality thereof to be nested for convenient packing and shipping as a commodity to be sold to and used by manufacturers who purchase the same and pack objects therein for sale and distribution.

The foregoing and other objects are attained by the provision of a container for a plurality of objects, the container taking the form of an open boat in which a plurality of the objects or units are assembled in juxtaposed relationship and thus maintained as a packaged commodity, suitable adhesive tapes being provided to secure the boats in assembled position and preferably also serving to chain a plurality of the boats together to form a chained commodity.

In order that the invention may be more fully understood, it will now be described with reference to the accompanying drawings, wherein

Figure 1 is a plan view of a blank constructed in accordance with the present invention;

Figure 2 is a plan view of a portion of a tape formed in accordance with the present invention;

Figure 3 is an enlarged view in section, taken on the line 3—3 of Figure 2, and looking in the direction of the arrows;

Figure 4 is a perspective of the container formed from the blank of Figure 1 and indicating the manner in which the products are chained or packed therein;

Figure 5 is a partial perspective view showing the manner in which the container of Figure 4 may be manipulated to permit the contents to be removed when and if desired; and

Figure 6 is a partial perspective view of a plurality of containers shown in Figure 4, arranged in chained formation, and secured in such relationship by means of suitable adhesive tapes such, for example, as illustrated in Figure 2.

Referring to the above drawing, each of the containers of the present invention is formed from a blank indicated generally at **10**, the blank being preferably provided with creases or other structural characteristics permitting it to be folded along the lines indicated in dot-and-dash lines at **11**, **12**, **13**, and **14**, the area of the blank within these lines providing a bottom **15**.

The portions of the blank beyond the lines **11** and **12** thus form side members **16** and **17**, while the portions beyond the lines **13** and **14** form end members **18** and **19**.

Dot-and-dash lines **20** and **21** indicate creases or other means to facilitate further folding of the blank material to form the respective end flanges **22** and **23**.

Each end of each of the side members **16** and **17** is formed with a flap **24**, each of which may be folded along its hinge line **25**, while each end of each of the flanges **22** and **23** is formed with a flap **26**, foldable along a crease line **27**. The outer corners of the flaps **24** are preferably rounded at **28**, and a suitable adhesive material **29** may be applied to one side of each of the flaps **26** in order that these flaps may be adhered conveniently to the underlying surfaces of the respective side members **16** and **17** (as illustrated in Figures 4 and 6). The structure of the blank shown in Figure 1, as hereinabove described, is utilized to form an open boat or container for commodities that are to be manufactured, packaged, distributed, and sold in groups of two or more, the boat or container serving as a means effectively to display the contents in their packaged condition, as illustrated in Figure 4. Examples of commodities which may be packaged in the manner above mentioned are butter, margarine, cigarettes, candy, and the like, the accompanying drawings illustrating wrapped portions of a plastic commodity, such as butter or margarine. The packaging operation contemplates that the commodities or units to be packaged in the container or boat are placed upon or inserted within the container, and the side and end members folded into the assembled relationship illustrated in Figure 4. A typical way of accomplishing this is to slide the plurality of units onto the bottom **15** after hinging the side member **16** into its normal assembled position. The end flaps **24** of the member **16** are then folded against the ends of the adjacent commodity and the side member **17**, together with its flaps **24**, are folded into the assembled position illustrated in Figure 4. The end members **18** and **19**, together with their flanges **22** and **23**, are then folded into the assembled position, and the flaps **26** then folded down and caused to adhere to the underlying portions of the side members **16** and **17** by means of the adhesive material **29** carried thereby. The resulting container or boat is shown at **10'** in Figure 4.

The portion of the blank providing the fold line between the flaps **26** and end flanges **22** is preferably weakened as by cut scoring in order that the fold may be readily torn along such portion of the blank. Whether or not the adhesive spots **29** are used and either in addition to or in place of such adhesive material, strips of adhesive tape **30** may be applied and adhered to the outer surfaces of the flaps **26** (in their assembled positions illustrated in Figure 4) and to the adjacent outer surfaces of side members **16** and **17**, as illustrated in Figure 4.

As will be illustrated from Figure 4, when it is desired to remove one or more units or commodities from

the boat or container illustrated in Figure 4, the cut scoring 27 permits the flaps 26 (in their assembled position) to be broken away from the respective flanges 22 and 23 and the adjacent side member 16 or 17 swung outwardly, as illustrated in Figure 5. After removal of the desired number of units from the container, the side member may be folded back into its normal position. In this fashion the remaining contents of the container are maintained effectively in a desired condition, and greater convenience in use of the commodity thus results.

In order that a plurality of the containers shown in Figure 4 may be chained together, as illustrated in Figure 6, the adhesive tape 30 may be continued at each corner of the containers and caused to extend over the adjacent portions of the underlying containers in order that the desired number of containers may be secured together as a multiple commodity to be conveniently distributed. The tapes serve to protect the tabs 26 against injury and dislodgment by contact with other surfaces or edges and providing a smooth and continuous surface at these corners of the containers.

Also in accordance with this invention, there is provided an improved form of adhesive tape comprising a strip of tape material 31, the edges of which are serrated or notched at 32 in such fashion as to provide a multiplicity of closely juxtaposed weakened portions to facilitate transverse tearing of the tape. The marginal region or areas 33 in which the serrations are included are also preferably provided with an amount of adhesive that is substantially less than the adhesive provided in the intermediate tape areas. To this end the tape shown in Figures 2 and 3 is provided with adhesive material 34 in its intermediate tape area, such material having been completely removed from the marginal strip portions 33 and redistributed to the edges of the intermediate areas where the thickness of the adhesive is somewhat greater than the intermediate area, as illustrated at 35. In this fashion substantially no adhesive material occurs in the marginal strip portions of the tape. In the manufacture of tapes of this character it will be found preferable to redistribute or remove the adhesive from the marginal strips prior to the pinking, notching or serration of the edges of the tape. This tape structure provides a tape that has substantial tensile strength and yet may be readily torn by transverse twisting at any point desired along the length of the tape. Tape structure of this character and their manufacture are shown and described in my co-pending application Serial No. 285,335, filed April 30, 1952, for "Plastic Film Tape," now abandoned.

The advantage resulting from this type of tape structure will be apparent inasmuch as when used in Figure 6, the several containers 10' may be effectively chained together and yet readily separated from each other when and as desired by twisting or severing the tapes with the thumbnail.

While the invention has been described with specific reference to the accompanying drawings, it is not to be limited save as defined in the appended claims.

I claim:

1. A container for a plurality of articles comprising a bottom, side members hinged to the opposed sides of the bottom, end members hinged to the opposed sides of the bottom between the side members, flanges on the sides of the end members spaced from the bottom and having a width less than half the width of said bottom, said flanges being foldable substantially parallel with said bottom to overlie the ends of the articles received within the container, end flaps on the ends of the flanges and when in assembled position, overlying the ends of the side members, and means to seal the flaps against the outside faces of the side members, said side members also having end flanges foldable to positions within and adjacent to the ends of said end members and movable relative thereto to enable one of the side members to be pivoted to open position after the unsealing of the end flaps on said flanges for the removal of an article from the container.

2. A container as set forth in claim 1 wherein the means to maintain the end flaps in assembled position comprises adhesive material.

3. A container for a plurality of articles comprising a bottom, side members hinged to the opposed sides of the bottom, end members hinged to the opposed sides of the bottom between the side members, flanges on the sides of the end members spaced from the bottom and having a width less than half the width of said bottom, said flanges being foldable substantially parallel with said bottom to overlie the ends of the articles received within the container, end flaps on the ends of the flanges and, when in assembled position, overlying the ends of the side members, the material between the ends of the flanges and the end flaps being weakened to facilitate tearing thereof, means to adhesively seal the end flaps against the outside faces of the side members, said side members also having end flaps foldable to positions within and adjacent to the ends of said end members and movable relative thereto to enable one of the hinged side members to be pivoted to open position for the removal of an article from the container after severance of the end flaps along the weakened material.

4. A container as set forth in claim 3 including strips of adhesive tape adhered to the end flaps to maintain them sealed.

5. A container for a plurality of articles comprising a bottom, side members hinged to the opposed sides of the bottom, end members hinged to the opposed sides of the bottom between the side members, flanges on the sides of the end members, spaced from the bottom and having a width less than half the width of said bottom, said flanges being foldable substantially parallel with said bottom, in assembled position, overlying the ends of the articles received within the container while exposing the middle portions of the articles, side flaps on the ends of the side members and, when in assembled position, lying against the insides of adjacent portions of the end members, end flaps on the ends of the flanges and, when in assembled position, overlying the ends of the side members, and means to seal the end flaps on said flanges in assembled position against the outside faces of the side members, said end flaps on said side members being free to move relative to said end members to enable one of the side members to be pivoted to open position after the unsealing of the end flaps on said flanges for the removal of an article from the container.

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