Sept. 13, 1949. R. C. POTTS 2,481,871

HANDHOLD AND CARD POCKET

Filed April 26, 1944

Fig. 2.

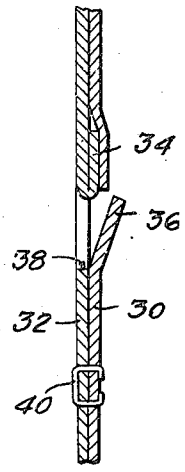


Fig. 1.

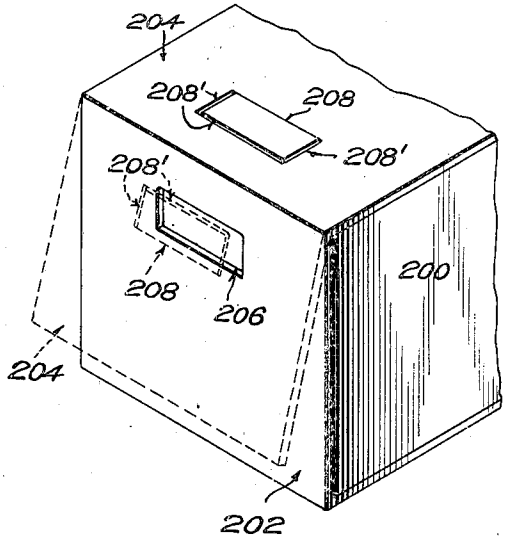
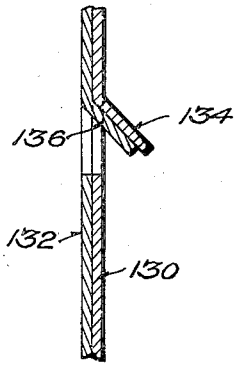


Fig. 3.



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Patented Sept. 13, 1949 2,481,871

UNITED STATES PATENT OFFICE

2,481,871

HANDHOLD AND CARD POCKET

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Application April 26, 1944, Serial No. 532,816

3 Claims. (Cl. 229—52)

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It is an object of this invention to provide a form of handhold for two-ply wall boxes which may be easily manufactured, and the principles of which may be adapted to varying requirements of the packaging problem.

It is a further object of this invention to provide a handhold pocket structure which will coact with a box lid to increase the advantages of each.

These and other objects will be made clear from the following detailed description taken in connection with the annexed drawings in which:

Fig. 1 is a partial perspective view of the application of my invention to a two-wall box having a hinged lid; and

Fig. 2 is a section through a double-thickness (two-ply) box wall showing a preferred form of handhold.

Fig. 3 is a view similar to Fig. 2, showing a handhold tongue in each ply attached to and projecting downward from the upper edge of the handhold.

Boxes of corrugated board and of solid fiber are constantly being used for more and more products, and for heavier loads. Such boxes have many advantages, not only of cost but of reduced tare weight, reduced storage and carrier space and improved appearance. As weight and size increase, however, certain disadvantages appear which it is the object of this invention to correct.

The surface of corrugated and solid fiber boards has a relatively low coefficient of friction. There is, therefore, a limit to the weight which a man can lift depending solely on a friction grip on the smooth box surfaces. This smoothness of surface, and the total lack of interruptions therein is a necessary characteristic of this class of box, and, in deed, is one of the merits of the class. It does not, however, make for ease of handling. I have devised two forms of handholds each embodying the principle of using only the material which must be used in the box in any event, and of providing only a minimum interruption of the smooth surface

In Fig. 1 I show a box **200** having a two-ply vertical wall **202** and a hinge type lid **204**. As shown in dotted outline, the lid **204** may be swung away from the top of the box and brought to lie against the vertical wall **202**. In the vertical wall **202**, there is formed a handhold **206**. In the lid **204** is formed a foldable tongue **208**. This tongue is defined by slits **208'** on three sides, but remains in the plane of the lid until ready for use.

In Fig. 2 I show an inner ply **30** and an outer

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ply **32**. The outer ply **32** has a tongue **34** struck therefrom and folded back to lie between the plies **30** and **32**. The inner ply **30** has a tongue **36** struck therefrom or defined by score lines but which is not initially folded out of the plane of the ply **30**. When it is desired to lift a box containing the construction of Fig. 2, the handler may displace the tongue **36** of the ply **30** to approximately the position shown in Fig. 2. This permits the insertion of the entire first joint or, if desired, the first and second joints of the handler's fingers, thus providing a firm grip adapted to a heavy load.

In Fig. 3 I show an inner ply **130** and an outer ply **132**. As initially formed there is a tongue **134** formed in the inner ply **130** and a tongue **136** formed in the outer ply **132**. These tongues are defined by perforations or die cuts along the three free edges but are not bent out of the plane of their respective plies until it is desired to use the handgrip. The handler will then push the tongues inwardly with his fingers and will thereby secure a grip having an effective width which is probably even greater than four thicknesses of box board. This form has the distinct advantage, first, that neither surface of the box wall has any projection at the time of loading; second, that there is no opening in the wall until the box is actually handled; and third, that there is no tendency to spread the free edges of the plies.

The lid will usually be of a single thickness, but, if of double thickness, the tongue **208** may be given the form of Fig. 3, but, in active position, its free edges should be on the upper side. The tongue **208** in the lid **204** is so located that, when the lid is swung to its dotted line position, the tongue **208** coincides with the handhold **206**. This feature is of great importance where the nature of the contents is such that the box must be handled one or more times after it has been opened. This is particularly the case with standard egg crates, where the necessities of inspection, handling and repacking involve numerous handlings of the box in open condition.

While I have illustrated certain specific applications of the principles of my invention, I do not intend to be limited to the structures shown, but only as set forth in the subjoined claims, which are to be broadly construed.

I claim:

1. A box having a two ply vertical wall, a lid hingedly connected to said vertical wall, said lid being swingable so as to overlie the outside of said wall, a handhold opening in said wall, and a foldable tongue formed in said lid and so located

as to register with the handhold in said vertical wall when said lid is swung to lie against said vertical wall, and being sized and shaped to enter said handhold, whereby to give access to said handhold through said lid.

2. A box having a two-ply vertical wall, a lid integral with one ply of said vertical wall and being hingedly connected therewith; said lid being swingable so as to overlie the outside of said wall, a handhold opening in said wall and a foldable tongue formed in said lid and so located as to register with the handhold in said vertical wall when said lid is swung to lie against said vertical wall and being sized and shaped to enter said handhold whereby to give access to said handhold through said lid.

3. A box having a two-ply vertical wall, a lid hingedly connected to said vertical wall, said lid being swingable so as to overlie the outside of said wall, a handhold opening in said wall and a foldable tongue formed in said lid and so located as to register with the handhold in said vertical wall when said lid is swung to lie against said vertical wall and being sized and shaped to enter said handhold and supplementarily to support said handhold.

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