May 3, 1932. J. F. ROBINSON 1,856,729

FIBER SHIPPING CASE

Filed Oct. 6, 1930

Fig. 1.

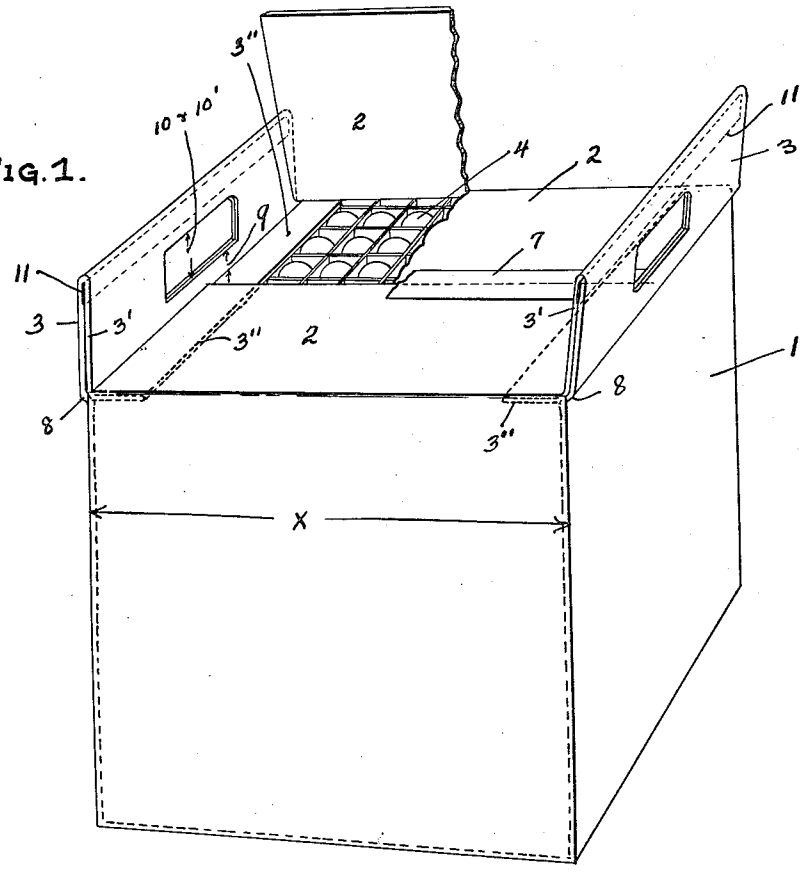
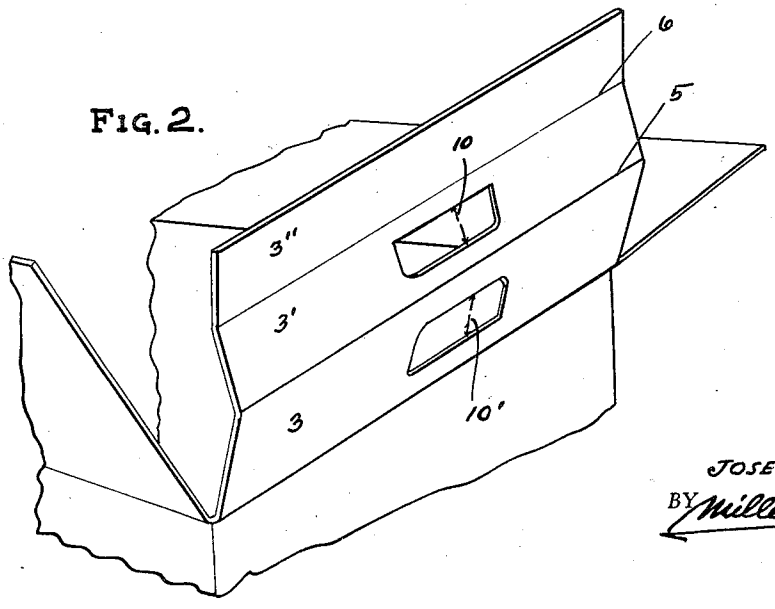


Fig. 2.



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UNITED STATES PATENT OFFICE

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FIBER SHIPPING CASE

Application filed October 6, 1930. Serial No. 486,564.

This invention relates to paper boxes, or rather the larger and heavier variety known as fiber shipping cases, and it has as its objects an improved box of this sort which is easy to manufacture and will provide specially reinforced hand gripping flaps on the packed box, also such a construction which will not prevent the boxes from being stacked but which will in fact aid in aligning the boxes one upon another.

My improved construction is shown in the drawings accompanying this application and in which drawings Fig. 1 is a perspective view of any improved box filled with merchandise and with a portion of one closing flap broken and lifted to show the relation of the parts.

Fig. 2 is an enlarged perspective view of a portion of the box showing one of the hand grip flaps unfolded to show the manner of its scoring.

In further detail my box comprises a sheet of fiber board 1 either plain or corrugated as may be desired, cut, folded and joined in the well known manner to produce a rectangular body 1 with four free flaps 2, 2, 3, 3 extending from the upper edges of its walls.

Ordinarily such flaps are simply glued down in overlapping arrangement to close and seal the box over whatever commodity 4 the box is filled with.

In my improved construction, however, I make two of the flaps 2, 2 of a length substantially equal to the width X of the box and of a height so that when both are folded down their long edges will just meet to close the box.

All four flaps are scored at their juncture with the vertical walls of the box to fold, and the flaps 3, 3 lying at right angles to flaps 2, 2 are scored in two more places, one being at 5 to fold inwardly and the other at 6 to fold outwardly so that when the flaps may be doubled from the line 5 to form an outer layer 3 and an inner layer 3′ and a marginal layer 3″, while extending through both layers 3 and 3′ are elongated apertures 10, 10′ adapted to coincide when the flaps are folded to make a single hand grip in each upstanding flap as shown in Fig. 1 and with the marginal layer 3″ of the flaps extending horizontally under the main closing flaps 2, 2, and to which margins the closing flaps are usually pasted when the box is sealed, and in addition a strip of gummed tape 7 is run along over the abutting edges of the main closing flaps to complete the closure.

If the box is filled evenly with goods as indicated in Fig. 1 or if it is filled with carton goods which present a relatively flat upper surface, the marginal portions 3″ of the gripping flaps will be properly supported from below, but if the nature of the goods affords no such support a heavy sheet of cardboard is usually laid on the goods under marginal pieces 3″ to give a flat support, though of course this is optional.

When the box as described is filled and sealed the hand flaps with the hand grips are held in vertical position as shown so that they are always ready for lifting the box about, and since the flaps 2 are substantially the length of the box side X their ends force the doubled gripping flaps slightly outward as indicated at 8 so that another box of similar dimensions is readily "nested" above it between the gripping flanges and thus the stacking of the boxes in shipment is greatly promoted.

The hand grip holes 10, 10′ are dyed out of the stock simultaneously with the scoring of the hinge or folding lines, and to make this possible with standard equipment they are set a short distance away from the adjacent score lines, with a result also that a slight wall is produced at 9 which aids in sealing the end joint of the main flaps and prevents the ingress of dirt and dust at this point.

It is of course evident that if desired the main flaps 2, 2 may be made of a height to overlap to any desired extent when closed, also that a reinforcing strip of any suitable material may be inserted between the layers of the folded handle as at 11.

By the construction described it will be seen to be adapted for use with shipping cases of relatively large dimensions filled with heavy goods such as canned goods and

the like which in ordinary fiber cases are very hard to handle, whereas with the doubled over gripping flaps substantial handles are provided, and with the margins 3″ extending under the main closing flaps 2 all glued in place a structure is secured which will easily support the load and be in good shape at the end of long shipments.

I therefore claim:—

1. A fiber box having a rectangular body with flaps extending from the upper edges of its side walls, two of said flaps arranged to fold toward one another over the top of the box, and the other two projecting above the box substantially in the planes of the side walls respectively from which they extend and being doubled downward upon themselves and provided with hand grip openings, the two projecting flaps spaced to permit nesting of a similar size box therebetween when the boxes are piled.

2. A fiber box having a rectangular body with flaps extending from the upper edges of its side walls, two of said flaps arranged to fold toward one another over the top of the box, the other two projecting above the box in spaced relation for nesting a similar box therebetween and being doubled downward upon themselves and provided with hand grip openings, and marginal portions extending in the plane of the top of the box coextensive with the side walls from which the projecting flaps extend.

3. A fiber box having a rectangular body with flaps extending from the upper edges of its side walls, two of said flaps arranged to fold toward one another over the top of the box, the other two projecting above the box in spaced relation for nesting a similar box therebetween and being doubled downward upon themselves and provided with hand grip openings, and marginal portions extending under the two closing flaps and coextensive therewith.

4. A fiber box having a rectangular body with flaps extending from the upper edges of its side walls, two of said flaps arranged to fold toward one another over the top of the box, the other two projecting above the box and being doubled downward upon themselves and provided with hand grip openings, and marginal portions extending under the two closing flaps coextensive with the length of the side walls from which they extend, said hand grip openings spaced away from the folding lines of the flaps providing an abutting wall for the ends of the closing flaps.

5. A fiber box having a rectangular body with flaps extending from the upper edges of its side walls, two of said flaps arranged to fold toward one another over the top of the box, the other two projecting above the box and being doubled downward upon themselves and provided with hand grip openings, and a reinforcing strip extending between the layers of the doubled flaps above the hand grip openings.

6. A pasteboard box having a rectangular body provided with handle flaps extending upwardly at opposite edges, said handle flaps of pasteboard stock doubled over and apertured for hand grips, and with free ends extending downward into the box, and a pair of flaps connected to the other two edges of the box arranged to fold inwardly for sealing the box.

7. A pasteboard box having a rectangular body provided with handle flaps extending upwardly at opposite edges, said handle flaps of pasteboard stock doubled over and apertured for hand grips, and with free ends extending downward into the box, and a pair of flaps connected to the other two edges of the box arranged to fold inwardly for sealing the box formed of a length to lie tightly between said handle flaps to hold same in upward extension.

JOSEPH F. ROBINSON.