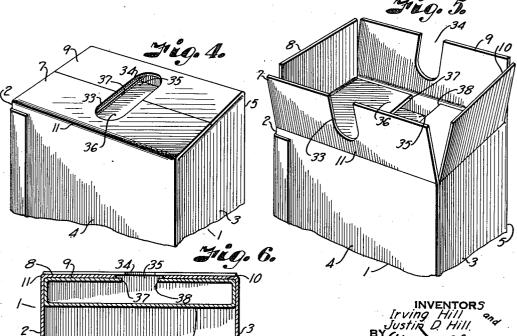
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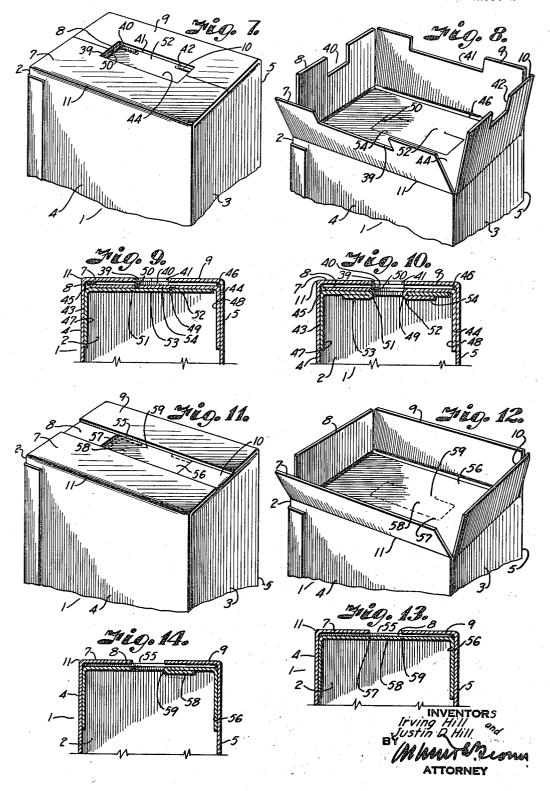
CONTAINER HAVING A HANDHOLD
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UNITED STATES PATENT OFFICE

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CONTAINER HAVING A HANDHOLD

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15 Claims. (Cl. 229-52)

Our invention relates to boxes, cartons, and the like, and particularly to those constructed of fibre board, and has for its principal object to provide a box or container of this character 5 equipped with a hand hold, whereby it may be readily carried in suspension from the fingers of the hand. Another important object is to provide a hand hold construction which may be incorporated in the closure flaps of the container 10 and within the confines thereof, so as to have no projecting parts that will interfere with tiering thereof when the containers are in storage.

In accomplishing these and other objects of the invention, we have provided improved details of 15 structure, the preferred form of which is illustrated in the accompanying drawings, wherein:

Fig. 1 is a perspective view of a carton equipped with a hand hold in accordance with our invention

20 Fig. 2 is a perspective view of the upper end of the carton showing the closure flaps in open position to illustrate the hand hold construction.

Fig. 3 is a cross-section through the carton, particularly illustrating the insert which cooperates with the finger opening in the flaps to form the hand hold and to separate it from the merchandise storage space in the carton.

Fig. 4 is a perspective view of the upper end of 30 a carton equipped with a modified form of hand hold.

Fig. 5 is a similar view with the flaps open.

Fig. 6 is a sectional view through the form of box shown in Figs. 4 and 5.

Fig. 7 is a perspective view of the upper portion of a carton showing another modified form of the invention.

Fig. 8 is a similar view showing the flaps in open position to illustrate the inserts for closing the hand hold opening.

Fig. 9 is a cross-section through the carton showing the inserts closing the hand hold opening.

Fig. 10 is a similar view with the opening closure flaps in position to complete the hand hold.

Fig. 11 is a still further modified form of the invention.

Fig. 12 is a view of the carton shown in Fig. 11 50 with the flaps open to show the insert which closes the hand hold opening as being provided with a perforated portion which may be broken through to complete the hand hold.

Fig. 13 is a section through the carton illustrated in Figs. 11 and 12 showing the perforate

portion in position to close the hand hold opening between the closure flaps.

Fig. 14 is a similar view showing the perforate portion broken through and folded back to complete the hand hold.

Referring more in detail to the drawings:

I designates a carton which may be produced from corrugated fibre board or like material cut and folded to form a rectangularly shaped body portion having side walls 2, 3, 4, and 5, and a 10 closed bottom 6. The upper end of the carton is closed by flaps 7, 8, 9, and 10 hinged to the side walls by lines of scoring 11 as in the customary practice. When the top of the box is closed the flaps 7 and 9 are ordinarily folded over the flaps 15 8 and 10 and sealed thereto for retaining the merchandise that is to be shipped in the box.

The box thus far described is of conventional design and forms a suitable container for the packaging of flour and similar food products, 20 but it has the disadvantage in that it is difficult to handle, particularly by the individual purchaser of the merchandise.

As above pointed out, it is the primary purpose of the present invention to construct the carton 25 with a suitable hand hold whereby the carton may be readily handled and carried in the same manner as if it were equipped with a bail.

In the preferred method of carrying out our invention we construct the end flaps of the box 30 so that, when folded and sealed, they form a hand hold opening through which the fingers may be inserted for grasping the box to carry it in suspended position.

In the form of the invention illustrated in Fig. 35 1 the hand hold is provided by means of notches 12, 13, and 14, formed in the end flaps 7, 8, and 10, respectively, so that when the flaps are folded they will register to form a substantially rectangularly shaped opening 15, the notches being 40 arranged in the flaps so that one longitudinal edge 16 of the opening is located above the center of gravity of the box whereby the point of support afforded by the fingers will cause it to be suspended perpendicularly from the hand of the 45 carrier.

In order to close the end of the box below the hand hold opening, the box is provided with an insert or partition 17 that is spaced below the end flaps a sufficient distance to provide a pocket 50 18 for reception of the fingers.

The insert is best illustrated in Figs. 2 and 3 and comprises a strip of fibre or similar board 19 having substantially the same width as the box between the sides 4 and 5. The portion of 55

the strip intermediate its ends is scored at 20 and 21 to form a horizontal partition portion 22 having the same width as the inner width of the box between the sides 2 and 3 thereof.

Spaced from the score lines 20 and 21 are parallel score lines 23 and 24 to form spacing flanges 25 and 26 for spacing the partition portion 22 from the flaps when the insert is positioned in the box. The ends of the strip are bent inwardly on the score lines 23 and 24 to form reinforcements 27 and 28 to lie flat against the under face of the inner flaps at opposite sides of the hand hold opening as shown.

In order to ease the edge of the hand hold on the fingers, the reinforcement 28 is preferably provided with an extension portion 29 having a score 30 at a point adjacent the edge 16 of the opening and a second score 31 spaced slightly therefrom so that the extension may be bent downwardly on the line 30 and retractively on the line 31 to increase the effective thickness of the hand hold. The rounded edge 32 afforded by the score line 31 also prevents cutting or injury to the fingers of the carrier.

In the form of the invention shown in Figs. 4, 5, and 6, the flaps 7 and 9 are provided with notches 33 and 34 which cooperate with the space 35 between the flaps 8 and 10 to form the hand hold opening. The insert 36 shown with this modification is similar to the insert 17 but does not include the extension for providing the thicker hand hold since the ends 37 and 38 of the reinforcing portions terminate adjacent the longitudinal edges of the hand hold opening.

In the form of box shown in Figs. 7, 8, 9, and 10, all of the flaps are provided with rectangularly shaped notches 39, 40, 41, and 42, respectively, which cooperate to form the hand hold opening when the flaps are sealed. The insert in this modification is shown as comprising two overlapped strips of material 43 and 44 having the same width as the space between the side walls 4 and 5 and score lines 45 and 46 to provide depending tongues 47 and 48 for engaging the inner faces of the side walls 4 and 5 as shown in Figs. 9 and 10. In this form, the inserts are placed above the merchandise and in close contact with the end flaps.

To complete the hand hold when the carton is to be carried, the overlapping portions of the inserts are provided with cuts 49 and 50, conforming to the edges of the hand hold opening in the flaps. The cuts do not extend entirely along the side edges of the opening, but terminate to form hinge tongues 51 and 52 by which the portions 53 and 54 defined within the cuts may be pushed inwardly of the box and bent back against the inner face of the lower insert, the portion 54 being moved through the opening left by the portion 53 as shown in Fig. 10.

In Figs. 11, 12, 13, and 14, the box flaps do not have notches, but the widths thereof are such as to produce a hand hold opening 55 when the flaps are folded into position for sealing. The insert 56 shown with this form of hand hold includes a single strip of material arranged to cover the hand hold opening and having depending end flaps adapted to extend between the merchandise and the side wall 4 or 5 to retain it in position. The insert is provided with perforations 57 to define a portion 58 that may be pushed into the box and folded back under the insert to help reinforce the carrying edge 59 of the insert.

While we have shown the hand holds of sufficient size to admit all of the fingers, it is obvious

that they may be constructed to receive one or more fingers of the hand without departing from the spirit of the invention.

In some types of boxes it may be desirable to provide both ends of the box with hand holds or the hand holds may be provided in the sides of the box rather than at the ends thereof as in the illustrated instances.

From the foregoing it is obvious that the hand holds afford a ready grip on the box and that the 10 boxes may be comfortably carried by the fingers. It is also obvious that the hand holds are an integral part of the box and do not form projections which will interfere with stacking the boxes when in storage.

What we claim and desire to secure by Letters Patent is:

1. A carton of the character described including a body portion, and closure flaps arranged for over-lapping position on the body portion having 20 openings arranged to form a hand hold when the flaps are moved to overlapping position.

2. In a carton of the character described, including a body portion, closure flaps on the body portion having notches arranged to form a hand 25 hold when the flaps are moved to sealing position, and a partition mounted in the body portion for separating storage space in the carton from said hand hold.

3. In a carton of the character described, including a body portion, closure flaps on the body portion having notches arranged to form a hand hold when the flaps are moved to sealing position, a partition mounted in the body portion for separating storage space in the carton from said 35 hand hold, and means spacing the partition from the flaps to form a finger-receiving space therebetween.

4. A carton having a finger opening in the top thereof whereby the carton is suspended in per-40 pendicular position from a finger projected through the opening, an insert in the carton for closing said opening from the interior of the carton, and means associated with the insert for spacing the insert from said opening to form a 45 finger-receiving space below said opening.

5. A carton having a hand hold opening therein, an insert in the carton for closing said opening from the interior of the carton and having a perforate portion in line with said opening and having 50 a connecting portion bendable along one edge of the hand hold opening and against the carton to complete a hand hold for said carton.

6. A carton including a body portion, opposed closure flaps on the body portion having opposite-55 ly facing notches therein, a second pair of opposed closure flaps on the body portion arranged to overlie the first-named flaps and having notches cooperating with the first-named notches to provide a hand hold opening.

7. A carton including a body portion, opposed closure flaps on the body portion having oppositely facing notches therein, and a second pair of opposed closure flaps on the body portion arranged to overlie the first named flaps, one of said lastnamed flaps having a notch cooperating with the first-named notches to provide a hand hold opening.

8. A carton including a body portion, opposed closure flaps on the body portion having edges spaced from each other to form an opening therebetween, and a second pair of closure flaps on the body portion arranged to overlie the first-named flaps and having notches to cooperate with

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said opening between the flaps to provide a hand hold opening for the carton.

9. A carton including a body portion provided with opposed closure flaps having adjacent edges arranged to form a hand hold opening, and an insert in the body portion for closing said opening.

10. A carton including a body portion provided with opposed closure flaps having adjacent 10 edges arranged to form a hand hold opening, and an insert in the body portion for closing said opening and having a portion in line with said opening adapted to be pushed in the interior of the carton to complete a hand hold in the carton.

15 11. A carton including a body portion, opposed closure flaps on the body portion having edge portions spaced from each other, a second pair of closure flaps on the body portion arranged to overlie the first-named flaps and having edge portions cooperating with the edge portions of the first-named flaps to provide a hand hold opening for the carton, an insert, means for spacing said insert from said hand hold opening, and means on the insert for reinforcing the flaps of the carton

12. A carton including a body portion, opposed closure flaps hinged to the body portion having oppositely facing notches therein, a second pair of opposed closure flaps on the body portion arranged to overlie the first-named flaps, one of said last-named flaps having a notch cooperating

with the first-named notches to provide a hand hold opening, an insert, means for spacing said insert from said hand hold opening, and means on the insert for reinforcing the flaps of the carton

13. In a carton of the character described, a body portion, closure flaps on the body portion having notches arranged to form a hand hold when the flaps are moved to sealing position, a partition member mounted in the body portion 10 for separating storage space in the carton from said hand hold, spacing means on the partition member for engaging the flaps to form a finger-receiving space therebetween, and flap reinforcing means extending from said spacing means to 15 reinforce the closure flaps adjacent said hand hold.

14. A carton having a hand hold opening therein, and an insert in the carton for closing said opening from the interior of the carton and having a portion aligning with the opening and bendable retractively on said insert to form a reinforcement at a side of the opening when the carton is to be carried.

15. In a container, a wall having a hand open-25 ing therein, and a liner disposed adjacent to said wall and normally sealing said opening, said liner having slits forming a flap distortable inwardly of the container away from said opening.

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