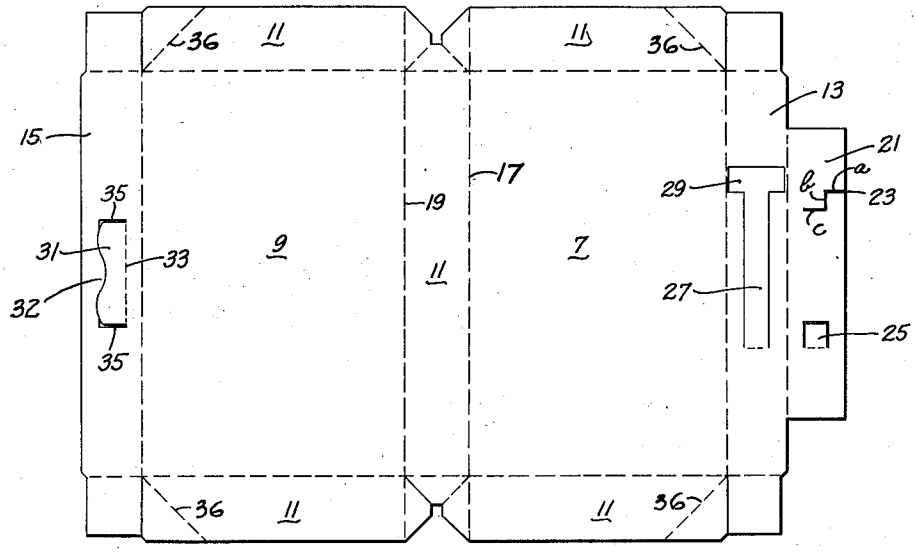
June 11, 1957 I. CASTER ET AL 2,795,368

BOX WITH INTEGRAL CARRYING HANDLE

Filed May 12, 1953

FIG. 1



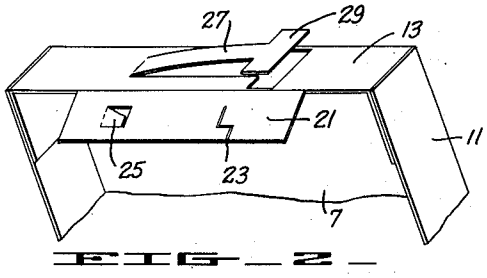


FIG. 2

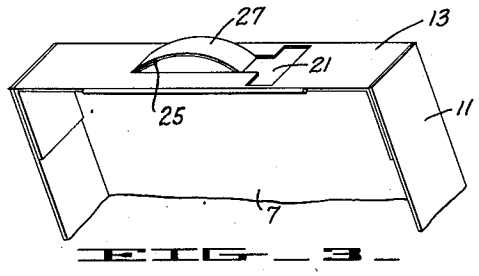


FIG. 3

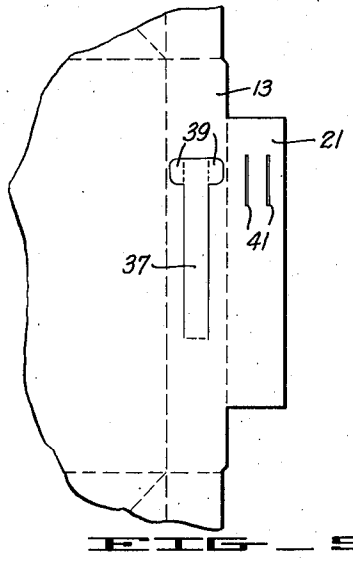


FIG. 5

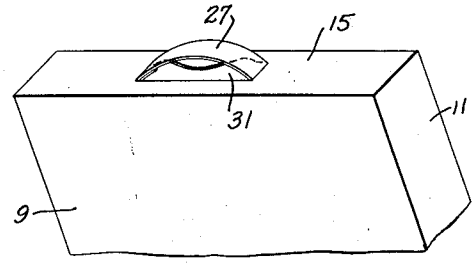


FIG. 4

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BOX WITH INTEGRAL CARRYING HANDLE

Irving Caster, San Mateo, and Irving Feldman, Hollywood, Calif.

Application May 12, 1953, Serial No. 354,516

3 Claims. (Cl. 229—52)

This invention relates to a handle for a box which is integral with the box and which also serves to keep the box closed. The invention is particularly directed to a box having an integral handle and wherein reinforcing means are provided to make a strong structure. The invention is primarily applicable to boxes of cardboard, but may be applied to boxes of other materials.

It is highly desirable to provide a box for merchandise which may be easily carried. In this manner, purchasers are encouraged to carry purchases rather than having them delivered, which results in a considerable saving to the merchant. In the past, a number of box handles have been proposed, but ordinarily these handles have added to the expense of the box and have been detachable. When detachable handles are used, there is always the possibility that the handle will become lost and the use of detachable handles requires extra storage space and record keeping.

It is an object of the present invention to provide an inexpensive handle for a box which is integral with the box.

Another object of this invention is to provide a box handle which also serves to fasten the box in a closed position.

In the drawings:

Figure 1 is a plan view of a sheet of blank stock showing the manner in which the box of the present invention is cut from a sheet of stock.

Figure 2 is a perspective view of a box having the handle of the present invention in partially assembled form.

Figure 3 is a view similar to Figure 2 in which the handle has been completely assembled.

Figure 4 is a view similar to Figure 3 in which the handle has been assembled and the box closed, showing the ultimate position of the various parts.

Figure 5 is a fragmentary view, similar in part to Figure 1, showing another embodiment of the present invention.

Referring now to the drawings by reference characters, in the blank of Figure 1, a sheet of box stock is provided which is cut out as shown. Actual cuts are made on solid lines and the box is adapted to be folded on the dash lines. According to this embodiment, the blank has a bottom portion **7**, a top or cover bottom portion **9**, end portions **11**, and side closing portions **13** and **15**. The box thus described is largely conventional in construction and the parts will not be described in detail. The box of the present invention is of the hinged lid type, the hinging action being accomplished by the fold lines designated **17** and **19** and for the exact manner of folding the box, reference is made to our copending patent application, Serial No. 332,354, filed January 21, 1953.

On the side closing portion **13**, a flap **21** is provided which serves as a reinforcing means for the handle to be described. The flap **21** has a slot **23** cut therein

and is provided with a flap **25**. The portion **13** is also provided with a T-shape cut-out which provides a handle portion **27** and a tab portion **29**. As shown, the base of the T remains attached to the portion **13**. The slot **23** is composed of three straight-line sections designated **23***a*, **23***b* and **23***c*. When the flap **21** is folded under the portion **13** as is hereinafter described in detail, the sections **23***a* and **23***b* line up with edges from which the T has been cut and **23***c* lies across the portion from which the body of the T has been cut.

The opposite end of the box **15** is provided with a flap **31** which is hinged along the line **33**, and which preferably has small cut-out slots **35** at either end thereof. By cutting the flap as shown, a small flap **32** is left on the portion **15**.

In assembling the box of the present invention, the box is first partially assembled, as is shown in Figure 2, by gluing the end tabs or by fastening them in other suitable manner, as is well-known to those skilled in the art. The flap **21** is then folded under the part **13** and preferably glued thereto, care being taken to not apply glue to parts **27** and **29**. The tab **25** is then glued to the terminal portion of the handle **27**. The box may now be folded on the lines **36** for shipment.

In the final assembly of the box, the box is first set up by folding along the fold lines **36**. The parts **27** and **29** are now partially raised. The end of the handle **29** is then passed through the slot **23**. This completes the assembly of the handle portion and it is now in the position shown in Figure 3. As is apparent from Figure 3 the handle portion **27** may be pulled up to form a handle, or pushed down to lie flat along the box.

In closing the box, the side **15** is brought over the side **13**, the flap **31** is lowered slightly and placed under the handle **27**, whereupon the flap **31** may be pushed througt the handle. As the box is completely closed, the flap **32** is depressed and placed under the handle. In this position, which is shown in Figure 4, the handle **27** and the flaps **31** and **32** cooperate to hold the box closed.

In Figure 5, another embodiment of the invention is shown wherein the handle **37** has two ears **39** thereon and wherein the member **21** has two parallel slots **41** therein. In using this embodiment of the invention, the flap **21** is glued under the portion **13**, in the manner previously desribed, and the ears **39** are then passed through the slots **41** to form the handle. It will be noted that in this embodiment, no tab **25** for reinforcing the handle is shown. However, it is apparent to those skilled in the art that the tab **25** may be used with the embodiment shown in Figure 5, or that the tab may be omitted from the embodiment shown in Figure 1. This embodiment shown in Figure 5 closes in exactly the same manner as illustrated in connection with Figure 4 of the drawing.

It is believed apparent from the foregoing that we have described a handle which forms a portion of a box, which is inexpensive to manufacture, and which serves not only as a handle, but also to hold the box in a closed position.

We claim:

1. A foldable box provided with inner and outer side panels in superposed relation, a T-shaped handle cut-out within the boundaries of the inner panel attached thereto at the base of the T, a flap integrally joined to the edge of said inner panel and folded thereunder in underlying relation to said T-shaped cutout, said flap having a transverse slit therein extending inwardly from its free edge and across said T-shaped cut-out adjacent the head portion of the T, the stem of said T passing slidably through said slit with the head por-

tion thereof on the inner side of said flap, and a slot in said outer panel adapted to have the stem of said T bowed outwardly therethrough.

2. A box as defined in claim 1 wherein said transverse slit in said flap terminates in an offset slit portion extending through the free edge of said flap.

3. A box as defined in claim 1 wherein said flap is provided with a folded tab struck therefrom and secured to the base portion of said handle cutout, said tab being joined to said flap along a fold line substantially coincident with the fold line joining said cutout to said inner panel.

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