Feb. 24, 1925. 1,527,399

F. B. DAVIDSON

CARTON

Filed Feb. 26, 1923

FIG. 1.

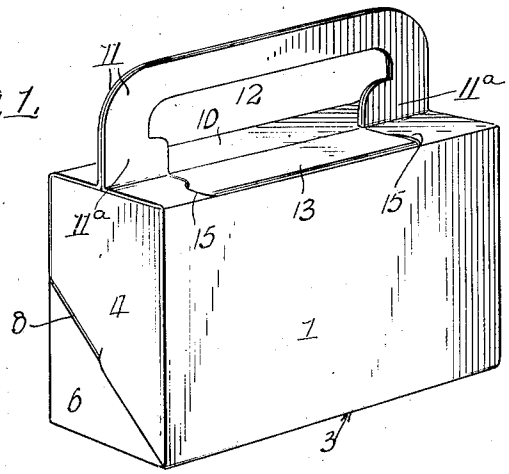


FIG. 2.

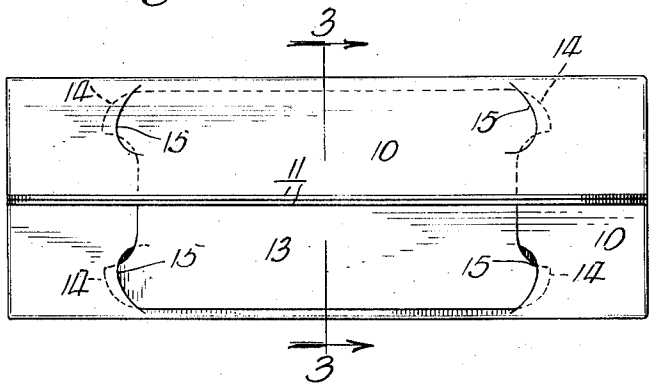


FIG. 3.

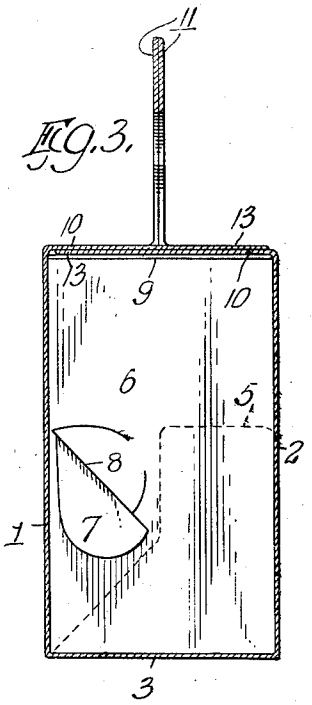
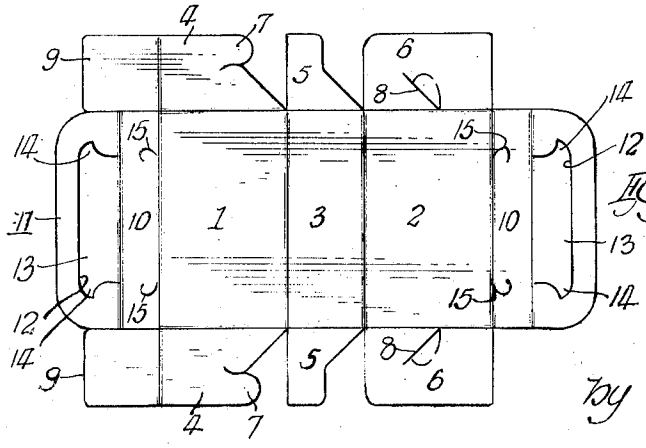


FIG. 4.



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UNITED STATES PATENT OFFICE.

FRANK B. DAVIDSON, OF MARSEILLES, ILLINOIS, ASSIGNOR TO NATIONAL BISCUIT COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

CARTON.

Application filed February 26, 1923. Serial No. 621,135.

To all whom it may concern:

Be it known that I, FRANK B. DAVIDSON, a citizen of the United States, residing at Marseilles, in the county of La Salle and State of Illinois, have invented new and useful Improvements in Cartons, of which the following is a specification.

This invention relates to foldable boxes or cartons particularly adapted for bakery and like products and provided with integral handles to facilitate carrying the same when in use.

The object of my invention is to improve the handle construction of such boxes and consists in the matters hereinafter described and more particularly pointed out in the annexed claims.

In the accompanying drawings—

Fig. 1 is a perspective view of a box of my invention;

Fig. 2 is an enlarged top plan view of the same;

Fig. 3 is an end view; and

Fig. 4 is a view of the flat blank, on a small scale, of said box.

The box or carton of my invention is formed from a flat blank (Fig. 4) cut and scored to provide two side walls 1, 2, joined by an interposed bottom wall 3, and end walls, each formed by three overlapping flaps 4, 5, and 6. These, as shown in Fig. 4, are shaped and arranged with the flaps 4 on the side wall 1 and provided with locking tongues 7 to enter locking slots 8 in the end flaps 6, which are on the other side wall 2. When locked, the end flaps 4 are outside, the ones 6 inside with the flaps 5 in between, as shown in Fig. 3. The end flaps 4 carry integral flaps 9, 9, which extend into the box over the upper edges of the end flaps 6 and underlie the top wall of the box when the latter is set up.

The top wall of the box is formed of two sections 10, 10 integrally joined to the respective side walls 1, 2 along their upper edges, and each forming one half of said top wall. These sections 10, 10, when the box is set up, lie in the plane of each other, and each carries at its outer or free edge a handle forming portion 11. These lie against each other when set up, as shown in Fig. 3, and together make a complete handle strong enough to carry the box when packed.

Said handle portions 11, 11 have registering openings 12, 12 of a size and shape to enable the fingers of a hand to pass through and grip the handles for carrying the box or carton. These openings 12, 12 are formed by cutting flaps 13, 13 in said handle portions. Said flaps 13 are joined at their bases to the opposed edges of the top wall sections 10, 10, and are provided at their outer or free ends with locking tongues 14, 14 designed to enter locking slots 15, 15 in the opposite sections 10, 10.

Each section 10 carrying a flap 13 requires that one flap 13 be inserted inside the box under the opposite section 10 between the same and the top flaps 9, 9 in setting up the box, as shown by dotted lines in Fig. 2. The other flap 13 remains outside the box and is passed through the opening 12 in the adjacent handle portion 11 to lie on top of its opposite section 10 and have its locking tongues 14 inserted in the locking slots 15 in that section, as shown in Fig. 1 and by full lines in Fig. 2. The openings 12 having the same shape and size as the flaps 13 allows them to pass therethrough in setting up the box.

It is to be observed from the drawings that the end parts 11^a of the handle portions 11 are on opposite sides of the openings 12 therein and continue to the end edges of the top sections 10, 10. This provides a maximum amount of material at the ends of the handle portions 11 for strength, and makes them capable of withstanding the weight of the contents packed in the box.

The flaps 13 having the same size and shape as the openings 12 saves waste of material in making the box, thus keeping down the expense and cost of making because there is no trim to remove. By having two flaps 13 and two sets of locking slots 15, either flap 13 may be used to lock the box.

By two handle portions 11, the complete handle is not only rendered stronger by the use of double material, but a finished product is made. Boxes of the kind here described are usually made from paperboard having one surface finished to take printing and lithographing and the other unfinished. The finished surface is outside and, by having two handle portions 11, 11, one on each top wall section 10, said handle

portions come together in registration with their finished surfaces outside for printing and ornamenting, as may be desired in selling the packed product.

Due to the locking tongues 14, 14, the flaps 13 are longer along their outer or free edges than along their bases where joined with the wall sections 10, 10. This makes the tongues 14, 14 engage the sections 10 on opposite sides of the openings 12, 12, or beyond the side edges of said flap 13, and thus provide an effective lock for the top wall of the box. Moreover, the box will remain locked should the tongues 14 become accidentally freed from their slots 15, because these tongues project beyond the edges of the openings 12 at their base portions 11^a and are prevented from passing through the openings 12 to collapse the box. Lifting the box by the handles 11 at this time slightly raises the sections 10 and causes the tongues 14 to engage the parts 11^a at their bases, thus holding the box locked. The box shown and described is particularly adapted for relatively small bakery products, as animal crackers, and with the integral handle portions 11, 11 avoids the use of fabric tapes for handles as heretofore, thus overcoming the objections to the latter. These tapes increased the cost of the box by being made separate and attached by an adhesive through an operation after the box itself had been completed. This made an insecure fastening and allowed the tape to pull away when in use and also in packing, thus disfiguring the box and lessening the sale by making the packed box appear damaged.

While I have shown and described herein in detail a box or carton embodying the features of my invention, it is of course to be understood that the details of construction and arrangement of parts may be variously changed and modified without departing from the spirit and scope of my invention.

I claim as my invention:

1. A foldable carton having bottom, side, end, and top walls, said top wall being formed of two sections carried by the side walls, overlapping handle portions carried by said sections, and flaps cut from said handle portions and carried by said sections so that either flap may be extended through its opposite handle portion and lie outside the carton on the opposite section, said flaps and sections having locking tongues and slots so that whichever flap is outside the carton it may be locked to the section overlapped thereby.

2. A foldable carton having bottom, side, end, and top walls, said top wall being formed of two sections carried by the side walls, overlapping handle portions carried by said sections, and flaps cut from said handle portions and carried by said sections so that either flap may be extended through its opposite handle portion and lie outside the carton on the opposite section, said flaps and sections having locking tongues and slots so that whichever flap is outside the carton it may be locked to the section overlapped thereby, the ends of the handle portions being continued to the ends of the carton.

3. A foldable carton having bottom, side, end, and top walls, said top wall being formed of two sections carried by the side walls, overlapping handle portions carried by said sections, and flaps cut from said handle portions and carried by said sections, so that either flap may be extended through its opposite handle portion and lie outside the carton on the opposite sections, said flaps and sections having locking tongues and slots so that whichever flap is outside the carton it may be locked to the section overlapped thereby, said tongues being at the outer ends of the flaps and extending laterally beyond the sides of the same to prevent the flaps being pulled through the bases of the handle openings.

4. A blank for a foldable carton of the character described, comprising integrally connected bottom, side, and top walls, the latter being formed of two substantially equal sections, one integrally connected to each of said side walls, handle portions integrally carried by said sections and overlapping when the carton is set up, flaps cut from said handle portions between the ends thereof and integrally connected with the associated top wall sections, said flaps having substantially the same size and shape and provided with locking tongues, said top wall sections having locking slots therefor, and said end walls being formed of overlapping flaps integrally carried by the respective side and end walls, and additional flaps on the outermost end wall flaps to extend into the carton under said top wall sections.

In testimony that I claim the foregoing as my invention, I affix my signature, this 21st day of February, A. D. 1923.

FRANK B. DAVIDSON.