

Sept. 27, 1949.

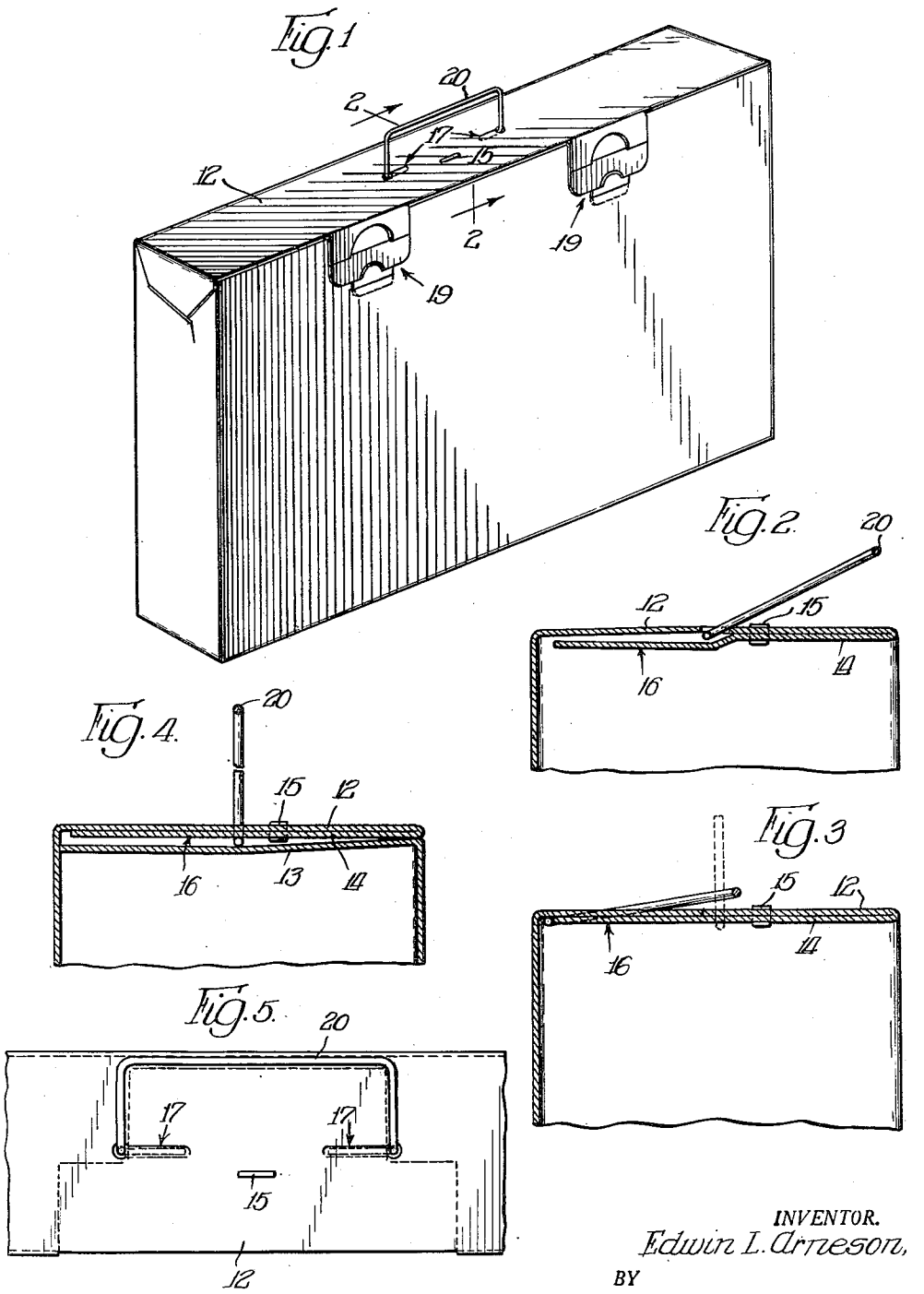
E. L. ARNESON

2,483,030

BOX

Filed Oct. 26, 1945

2 Sheets-Sheet 1



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Fig. 6.

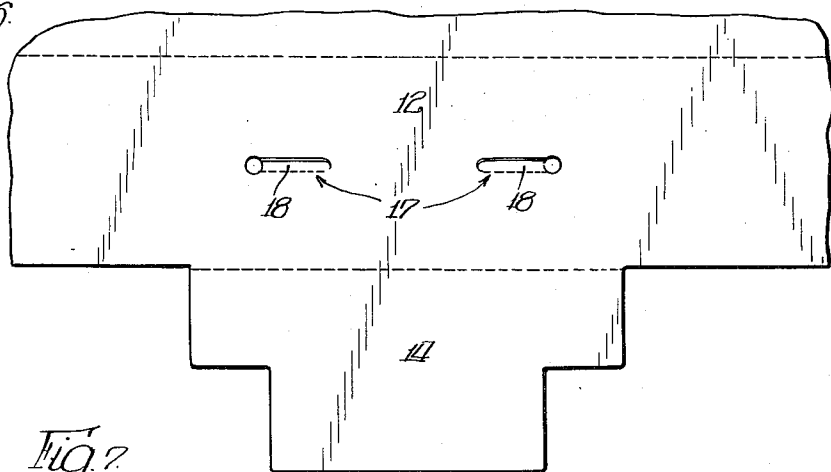


Fig. 7.

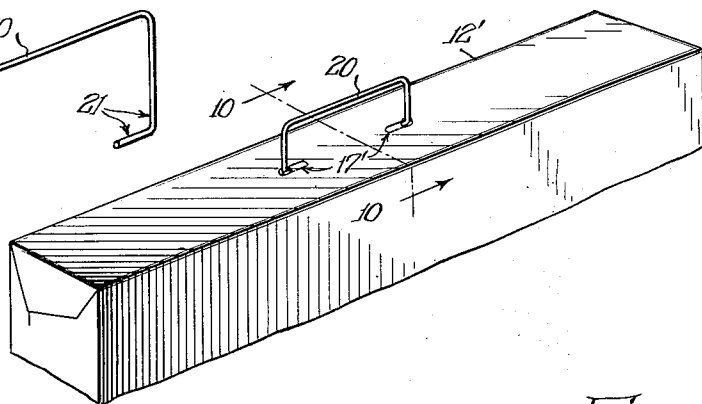
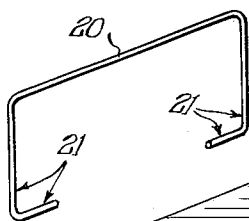


Fig. 8.

Fig. 10.

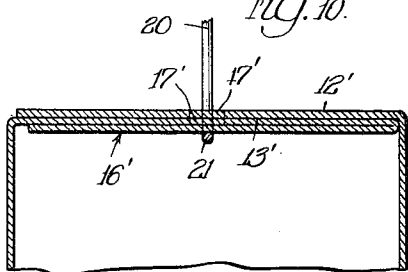


Fig. 9.

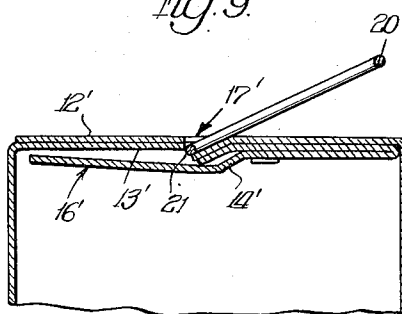
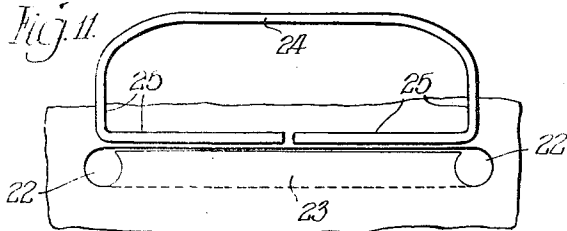


Fig. 11.



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UNITED STATES PATENT OFFICE

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BOX

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4 Claims. (Cl. 229—52)

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This invention relates to improvements in the manufacture of boxes. More particularly, it relates to improvements in clothing boxes, having particular reference to a novel kind of removable interlocking handle member which is readily and easily inserted into the top wall structure of such a box, and the provision of such a combination box with handle member is a principal object of the invention.

More specifically, it is an object of the invention to provide a clothing box, or the like, which comprises side walls and telescoping end and top walls in which one of the top walls has an underlying flap secured to itself approximately centrally thereof, the flap extending a substantial distance beyond the longitudinal axis of the top wall and beyond which the flap is unsecured thereto, the telescoping top walls providing a top wall structure, a portion of which structure is apertured along its longitudinal axis overlying the flap, and a removable handle member having a hand gripping section and an interlocking box gripping section which is insertable within the apertured portion and adapted to pass around the unsecured part of the flap interlockingly to engage the under side thereof below the apertured portion.

It is also an object of the invention to provide a handle for a box of the foregoing type which can also be used as a locking means whereby the telescoping walls of the box are secured in locked position while the box is being carried and until the handle is removed without resort to any other locking arrangement.

Other objects of the invention will in part be obvious and will in part appear hereinafter.

The invention accordingly comprises an article of manufacture possessing the features, properties, and the relation of elements which will be exemplified in the article hereinafter described and the scope of the application of which will be indicated in the claims.

For a fuller understanding of the nature and objects of the invention reference should be had to the following detailed description taken in connection with the accompanying drawings, in which:

Fig. 1 is a perspective view of a conventional type of clothing box made, for example, of a blank of material, die-cut, scored and folded to provide telescoping end and top wall structures, and provided with a novel type of interlocking carrying handle;

Fig. 2 is a transverse sectional view of a portion of an outer top and side wall only of such

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a container, taken along the lines 2—2 of Fig. 1 illustrating the manner in which the handle member initially is positioned for insertion;

Fig. 3 is a view similar to Fig. 2 illustrating the handle inserted as far as possible before bringing the same to its ultimate position as indicated by the dotted lines;

Fig. 4 is a view similar to Figs. 2 and 3 illustrating the handle finally positioned and further illustrating the box as being closed with the other top wall and side wall in position;

Fig. 5 is a plan view through a fragmentary portion of the top wall structure of the box showing the handle member lying upon the box after insertion;

Fig. 6 is a plan view of a fragmentary portion of one of the top wall structures illustrating a locking flap member projecting outwardly and connected to the wall structure before the flap is inwardly folded upon the wall structure and secured thereto;

Fig. 7 is a preferred type of removable handle member to be utilized in conjunction with such a box;

Fig. 8 is a perspective view of a fragmentary portion of a top of a conventional box having no other locking means than the handle member;

Fig. 9 is a transverse elevational view taken in the region of the handle member of the box illustrated in Fig. 8, depicting the insertion of the handle into apertures to utilize the same for locking the box walls together and for carrying purposes as well;

Fig. 10 is a view similar to Fig. 9 with the handle finally placed in position, taken along the line 10—10 of Fig. 8 and looking in the direction of the arrows; and

Fig. 11 is a plan view of a fragment of an apertured top wall structure and handle member about to be inserted therein illustrating a further modification of the invention.

The present invention is particularly applicable to the well known cardboard clothing box or valise carrying type of container. One form of such container is conventionally made from a single rectangularly shaped blank of material which has been die-cut and scored in order that the blank may properly be folded into box formation and locked for carrying purposes. When such a rectangularly shaped blank has been scored and die-cut through a central portion thereof it can be folded in such a way as to provide side, end and top walls. When folded along the intermediate crease lines after the end and top wall structures have been set up, the intermediately

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disposed crease lines will act as hinges and the material therebetween provide the bottom wall of the container. As the container is folded into closed position the end and top walls will telescope each other to provide a clothing box as shown in the drawings.

Referring more particularly to the drawings, the top wall structure comprises an outer top wall 12 and an inner top wall 13. In Figs. 2, 3 and 4 the top wall is illustrated as having an underlying flap member 14 secured thereto centrally thereof, that is, between the ends of the top wall structure. A preferred configuration of such a flap is illustrated in Fig. 6, and as being integral with the top wall 12. However, it should be understood that this flap need not be integral with the top wall structure but may be a separate piece. In any event, the flap member 14 should be of sufficient length to extend a substantial distance past the longitudinal axis of the top wall and secured thereto preferably by a staple 15. However, beyond the longitudinal axis, the flap member should be unsecured with respect to the adjacent top wall which overlies it. That is, the loose portion indicated generally at 16 constitutes the flap section of the member 14, the function of which will more fully appear hereinafter.

The top wall structure is apertured overlying the flap 14 as indicated generally at 17. In its preferred form the apertured portion consists of openings which are provided by die-cutting and scoring the region around the apertures to provide shutter members 18, 18. However, these shutters may be eliminated but for purposes of maintaining a finished appearance to the box they are permitted to remain. Where the box has locking means of a conventional type, for example, that indicated generally at 19, 19, the invention only contemplates that the outer top wall of the box be apertured as disclosed. However, as will more fully appear hereinafter, where no locking means other than a handle is provided, it is necessary that both the outer and inner top wall structures will be apertured.

For use in conjunction with a clothing box having a top wall structure with such a flap a removable handle member is provided. The handle member preferably is of the configuration indicated in Fig. 7 although it will readily be apparent that other forms of handle members can be utilized. In its preferred form such a handle member has a hand gripping section 20 for carrying the box and an interlocking box gripping section, or sections, 21, 21, constituting substantially the remaining portion of the handle member. Such a handle can be made of any suitable rigid material, such as wire, although it will be apparent that other materials for such handle carrying member can be utilized in practicing the present invention.

The handle member shown in Fig. 7 is readily insertable in a box of the type described in Figs. 1 through 4, either before or after the box has been filled and closed. In Figs. 2 and 3 the handle is illustrated as being positioned before the opposite side wall and telescoping end and top walls are brought into position to close the box. This is done by inserting the gripping portions 21, 21 of the handle into the apertured portions 17, 17, tilting the handle member to one side, moving it along the unsecured portion 16 of the flap member 14 as far as it will reach, and bringing the gripping portions 21, 21, around the flap 16 to the under side thereof and to upright position so that the gripping members hook onto the

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flap portion 16 below the apertured portions 17, 17. The handle can be inserted before or after filling and closing the box.

The handle member depicted in Fig. 7 can also be utilized as a means for locking the opposite wall sections of such a box together where no other locking means are provided in addition to utilizing the handle member as a carrying means. In order to do this, it is necessary, as shown in Figs. 9 and 10, to provide the inner top wall 13' with a flap member 14' which can be secured in the same manner as that described in connection with the preferred modification. It should be understood that the inner top wall is also provided with apertures similar to the apertures 17 provided in the top wall 12 in the preferred structure. Furthermore, the outer top wall 12' must also have apertures 17' which will coincide with the apertures in the inner top wall section.

A handle similar to that shown in Fig. 7 can also be utilized as the carrying handle as well as the locking member. For example, the gripping sections 21, 21, of the handle are inserted through both apertures, that is, aperture 17' in the outer top wall 12' and the coinciding aperture underlying the same in the inner top wall 13' (see Fig. 9). The gripping members, when passed around the unsecured portion of the flap 16' in the manner described in connection with the preferred modification, will provide the necessary means for locking the box wall together so that the box cannot be opened until the handle has been removed.

In a further modification, illustrated in Fig. 11, there is shown a fragmentary portion of a top of a box in which a single aperture, indicated at 22, is provided by die-cutting and scoring an outer top wall section, preferably leaving a shutter member 23. A carrying handle is provided having a hand gripping portion 24 and box gripping sections 25, 25. Such a handle can be inserted in the aperture 22 and be manipulated in the manner described in connection with Figs. 2 to 4 so as to provide a carrying handle when separate locking means are provided for the box.

When no separate locking means are present it is but necessary to provide the inner top wall section with a coinciding aperture as 22 so that the gripping sections 25, 25, can be made to pass through the outer top wall section, through the inner top wall section and around the unsecured portion of a flap whereby the handle member becomes a carrying means as well as a locking means for holding both sections of the box in locked position in the manner described in connection with Figs. 8, 9 and 10.

It will thus be seen that the objects hereinbefore set forth may readily and efficiently be attained, and since certain changes may be made in the above article and different embodiments of the invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the following claims are intended to cover all of the generic and specific features of the invention herein described, and all statements of the scope of the invention which, as a matter of language, might be said to fall therebetween.

Having described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. A box of the character described, which

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comprises side walls and telescoping end and top walls, one of said top walls having an underlying flap folded and secured thereto centrally thereof, which flap is of reduced length compared to its top wall, extending laterally a substantial distance past the longitudinal axis of said top wall, beyond which said flap is unsecured, said telescoping top walls providing a top wall structure, a portion of which structure is apertured along its longitudinal axis overlying said flap and adjacent the ends of the latter, a rigid removable handle member having a hand gripping section and an interlocking box gripping section provided by end portions angularly bent inwardly toward each other to subsequently underlie said flap, said box gripping section being insertable downwardly along said longitudinal axis through said apertured portion in said bent condition, said unsecured portion of said flap being freely swingable inwardly of the box interior at the zone thereof immediately underlying said apertured portions to enable said box gripping section to pass around said unsecured portion of said flap, and said box gripping section interlockingly engaging the under side of said flap below said apertured portion.

2. A folding box of flexible fibrous material comprising opposed side walls and pairs of end and top walls connected to said respective side walls and telescoping with one another in the closed condition of the box, the outermost of said top walls being provided with a pair of cuts adjacent the longitudinal center line thereof, a flap carried by one of said top walls and positioned to underlie said cuts, said flap having opposed ends disposed respectively adjacent the opposite limits of said respective cuts in the closed condition of the box, said flap substantially overlapping said longitudinal center line and having a free side edge extending between said ends thereof, said flap being bendable inwardly of the box interior in the zone thereof immediately underlying said cuts and extending to said free edge, and a relatively rigid, removable handle engageable in locked relation to said box from the exterior thereof in the closed condition of the box, said handle including bent end portions insertable through said cuts to deflect said flap downwardly and to pass laterally about the free edge thereof, said opposed ends overlying said end portions whereby said end portions are upwardly engageable with the under side of said flap beneath said opposed ends of the latter.

3. A folding box of flexible fibrous material comprising opposed side walls and pairs of end and top walls connected to said respective side walls and telescoping with one another in the closed condition of the box, the outermost of said top walls being provided with a pair of elongated cuts adjacent the longitudinal center line thereof, of which are substantially parallel to said center line and spaced from one another in the longitudinal direction, a flap carried by one of said top walls and positioned to underlie said cuts, said

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flap having opposed ends disposed within the opposite limits of said respective cuts in the closed condition of the box, said flap substantially overlapping said longitudinal center line and having a free side edge extending between said ends thereof, said flap being bendable inwardly of the box interior in the zone thereof immediately underlying said cuts and extending to said free edge, and a relatively rigid, removable handle engageable in locked relation to said box from the exterior thereof in the closed condition of the box, said handle including bent end portions insertable through said elongated cuts to deflect said flap downwardly and to pass laterally about the free edge thereof, said opposed ends overlying said end portions whereby said intumed end portions are upwardly engageable with the under side of said flap beneath said opposed ends of the latter.

4. A folding box of flexible fibrous material comprising opposed side walls and pairs of end and top walls connected to said respective side walls and telescoping with one another in the closed condition of the box, the outermost of said top walls being provided with a pair of elongated cuts adjacent the longitudinal center line thereof, of which are substantially parallel to said center line and spaced from one another in the longitudinal direction, a flap carried by one of said top walls and positioned to underlie said cuts, said flap having opposed ends disposed respectively adjacent the opposite limits of said respective cuts and being substantially confined between said limits in the closed condition of the box, said flap substantially overlapping said longitudinal center line and having a free side edge extending between said ends thereof, said flap being bendable inwardly of the box interior in the zone thereof immediately underlying said cuts and extending to said free edge, and a relatively rigid, removable handle engageable in locked relation to said box from the exterior thereof in the closed condition of the box, said handle including opposed, mutually intumed end portions insertable through said elongated cuts to deflect said flap downwardly and to pass laterally about the free edge thereof, said opposed ends overlying said end portions whereby said intumed end portions are upwardly engageable with the under side of said flap beneath said opposed ends of the latter.

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