July 29, 1952 C. D. WELSHENBACH 2,605,041

HANDLE FOR SUITCASE TYPE CONTAINERS

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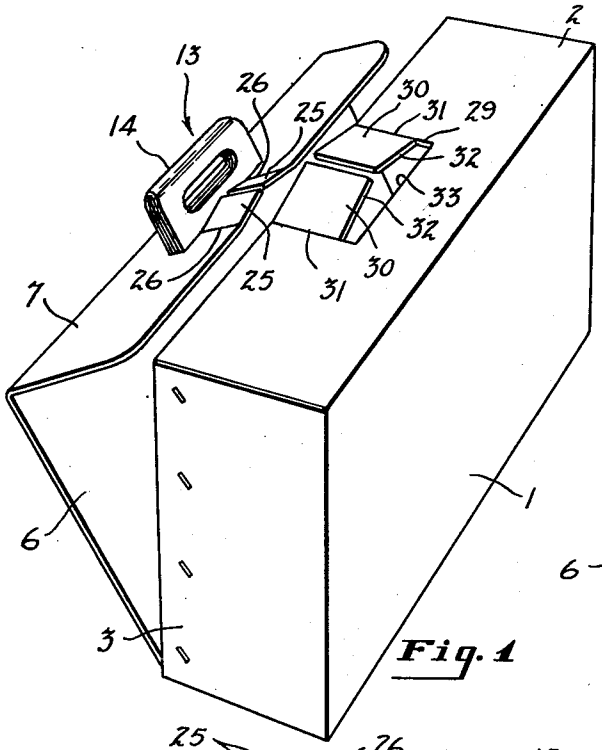


Fig. 1

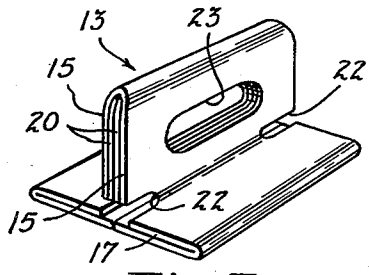


Fig. 2

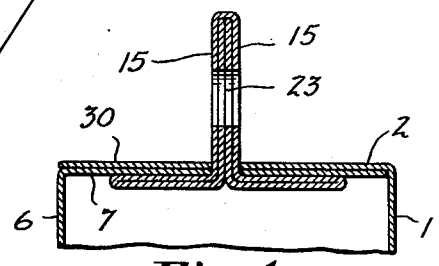


Fig. 4

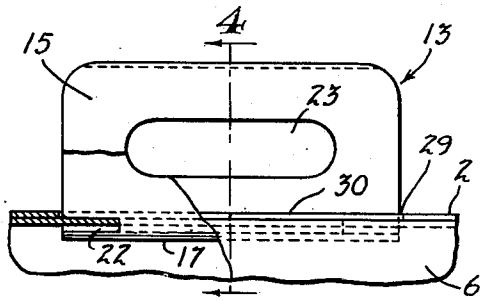


Fig. 3

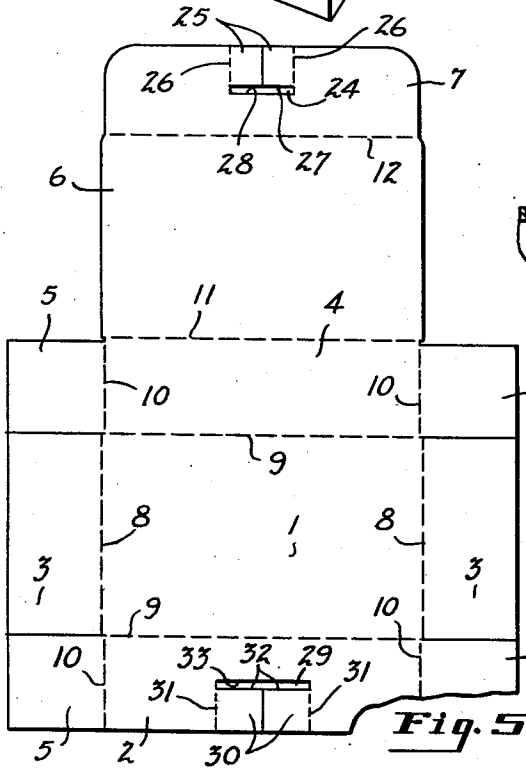


Fig. 5

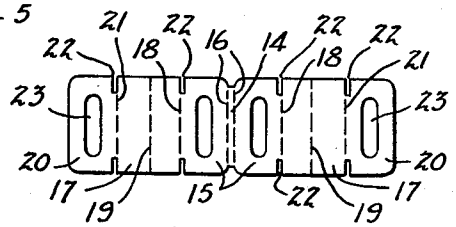


Fig. 6

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HANDLE FOR SUITCASE TYPE CONTAINERS

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4 Claims. (Cl. 229—54)

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This invention relates to paperboard containers of the suitcase type and has for an object to provide a handle securing means that also serves to hold the lid of the container in closed position.

The invention has for a further object to provide a handle formed of a folded strip of paperboard that is so interlocked to the top wall members of the container that the strip forming the handle is held in folded relation by the container and the handle is firmly anchored to said wall members in such manner that a relatively heavy load may be imposed thereon.

With the above and other objects in view, the invention may be said to comprise the device as illustrated in the accompanying drawings and herein described, together with such variations and modifications thereof as will be apparent to one skilled in the art to which the invention pertains.

Reference should be had to the accompanying drawings forming part of this specification, in which:

Figure 1 is a perspective view of an container embodying the invention;

Fig. 2 is a perspective view of the handle detached from the container;

Fig. 3 is a fragmentary side elevation partially in section showing the handle attached to the container;

Fig. 4 is a transverse section taken on the line indicated at 4—4 in Fig. 3;

Fig. 5 is a plan view of the paperboard blank from which the container is formed; and

Fig. 6 is a plan view of the paperboard blank from which the handle is formed.

The container of the present invention has a body portion provided with a back wall 1, a top wall 2, end walls 3 and a bottom wall 4 forming a box of rectangular form in which the walls are firmly secured together by suitable means such as gluing or stapling. The box body may be of any suitable construction, but is preferably formed from a single piece of paperboard in the conventional manner by providing the top and bottom walls with corner flaps 5 for attachment to the end walls 3. A lid 6 is formed integrally with the bottom wall 4 and hinged thereto along its bottom edge. At its top edge the lid 6 is provided with a flap 7 that is adapted to underlie the top wall 2 of the box body to form a top wall of double thickness.

As shown in Fig. 5, the end walls 3 are separated from the flaps 5 by a cut and connected to the bottom 1 by fold lines 8. The top and bottom walls 2 and 4 are connected to the back wall 1

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by fold lines 9 and the flaps 5 are connected to the walls 2 and 4 by fold lines 10. The lid 6 is hinged to the bottom wall 4 by means of a fold line 11 and the flap 7 is hinged to the lid 6 by a fold line 12.

As shown in Figs. 2 and 6, a handle 13 is formed from a strip of paperboard folded to substantially T-shape in cross section. Midway between the ends thereof the paperboard strip forming the blank from which the handle is formed has a narrow transverse section 14 connected to central web forming portions 15 by fold lines 16. The web forming portions 15 are connected to flange forming portions 17 by transverse fold lines 18 and each of the flange forming portions has a central transverse fold line 19. End portions 20 of the blank are connected to the flange forming portions 17 by transverse fold lines 21. At the ends of the fold lines 21 and 18, slots 22 are formed in the blank and centrally of the web forming portions 15 and end portions 20 elongated hand receiving slots 23 are formed.

The blank is folded to dispose the web forming portions 15 in parallel relation, and the flange forming portions 17 at right angles to the web portion, the flange forming portions being reversely bent about the fold lines 19 to provide two-ply flanges and the end portions 20 being tucked into the space between the portions 15 to provide a four-ply web.

As shown in Fig. 2, the hand receiving slots 23 register in the 4-ply web of the handle and the slots 22 register at the base of the 4-ply web immediately above the flanges.

The flap 7 has a slot 24 midway between the ends thereof that is of a length less than the length of the handle 13, and the outer portion of the slot is closed by flaps 25 connected to the lid 7 by fold lines 26 that are alined with the ends of the slot 24. The flaps 25 have inner edges 27 that are spaced outwardly from the inner side 28 of the slot 24 a distance corresponding to the thickness of the 4-ply web of the handle. The flaps 25 are adapted to be folded back flat against the top face of the flap 7 to open the slot 24 to receive the handle and the slots 22 in the web of the handle are of a width sufficient to permit the handle to pass over the flaps 25 when folded back against the top of the flap 7. When the handle is positioned against the inner side 28 of the slot the flaps 25 are folded back into the slot to retain the handle 13 in the slot 24.

The top wall 2 of the box is provided with a slot 29 midway between its ends that is of a length corresponding to the length of the handle 13.

The slot 29 is closed by means of hinge flaps 30 that are connected to the top 2 to hinge about fold lines 31 at the ends of the slot 29. The flaps 30 swing to a position clear of the slot 29 to permit the handle 13 to enter the slot when the lid 6 is swung to closed position. The flaps 30 have inner edges 32 spaced from the inner side 33 of the slot 29 a distance corresponding to the thickness of the 4-ply web of the handle 13 so that the handle is positioned centrally of the top of the box by the flaps 30 which are swung down into the slot after the lid has been closed. The flaps 30 not only serve to position the handle centrally of the top and retain it in that position, but they also serve to retain the lid in closed position.

When the handle is secured to the flap 7, it is positively held in its folded relation because of the interlock between the flap 7 and the web of the handle, the portion of the flap 7 extending through the slots 22 serving to prevent the end portions 20 from moving downwardly, and the portions 20 interfitting back to back afford rigidity to the flange portions 17. Since the top of the container is of double thickness and the flange portion of the handle has engagement with a considerable area of the under side of the top wall, the handle is capable of supporting a considerable weight without appreciable distortion of the top wall of the container.

It is to be understood that in accordance with the provisions of the patent statutes variations and modifications of the specific devices herein shown and described may be made without departing from the spirit of the invention.

What I claim is:

1. A suitcase type container comprising a box body having a lid forming a side wall thereof that is hinged at one edge to a side of the box body forming the bottom wall thereof and that has a flap at its opposite edge adapted to underlie the top wall of said box body, an elongated handle attached to said flap centrally thereof, said handle extending longitudinally of the flap and projecting upwardly therefrom, a handle receiving slot in said top wall of a width corresponding to the length of said handle and of a depth to position the handle centrally of said top wall, and a flap hinged to the top wall at one side of said slot and having its inner edge spaced from the inner edge of the slot, said flap being movable to a position clear of the slot to permit entry of the handle into the slot and to a position in the slot outwardly of the handle to retain said handle therein and to fasten said lid in closed position.

2. A suitcase type container comprising a box body having a lid forming a side wall thereof that is hinged at one edge to a side of the box body forming the bottom wall thereof and that has a flap at its opposite edge adapted to underlie the top wall of said box body, an elongated handle attached to said flap centrally thereof, said handle extending longitudinally of the flap and projecting upwardly therefrom, a handle receiving slot in said top wall of a width corresponding to the length of said handle and of a depth to position the handle centrally of said top wall, and a pair of flaps hinged to the top wall at opposite sides of said slot and having inner side edges spaced from the inner edge of said slot a distance corresponding to the thickness of said handle, said flaps being movable to positions clear of said slot to permit entry of said handle and to positions in said slot to retain said handle therein and to fasten said lid in closed position.

3. In a suitcase type container a paperboard wall member provided with a slot opening to an edge thereof, an elongated paperboard handle member T-shaped in cross section and of a length greater than the width of said slot, the web of said handle member having slots extending inwardly from opposite ends thereof immediately adjacent the flanges thereof to receive portions of the wall member on opposite sides of said slot and an elongated finger slot centrally of said web, and retaining flaps hinged to the wall member at opposite sides of said slot and foldable flat against the outer face of said wall member to pass through the end slots of said handle member and into said slot outwardly of the handle member to retain said handle member.

4. In a suitcase type container a paperboard wall member provided with a slot opening to an edge thereof, an elongated paperboard handle member T-shaped in cross section and of a length greater than the width of said slot, said handle being formed of a strip of paperboard bent midway between its ends to form a hollow upright web and having end portions bent at right angles to the web portion, said end portions being folded backwardly and extending upwardly into said hollow web to form two-ply flanges and a four-ply web, said handle having slots in opposite ends of its web immediately above said flanges to receive portions of the wall member at opposite sides of the slot to lock the strip ends in said web, said web having an elongated finger receiving slot centrally thereof and above said end slots, and means for retaining said handle in the slot of said wall member.

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