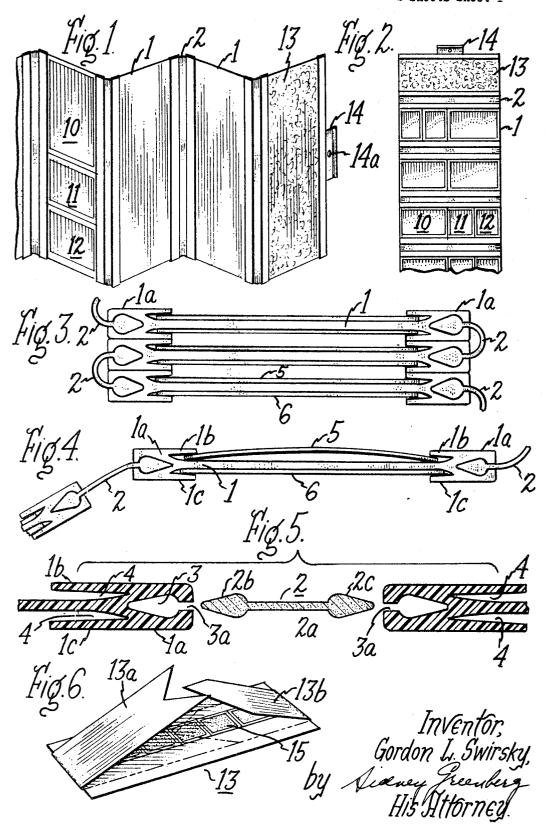
PHOTOGRAPH DEVICE

Filed March 30, 1967

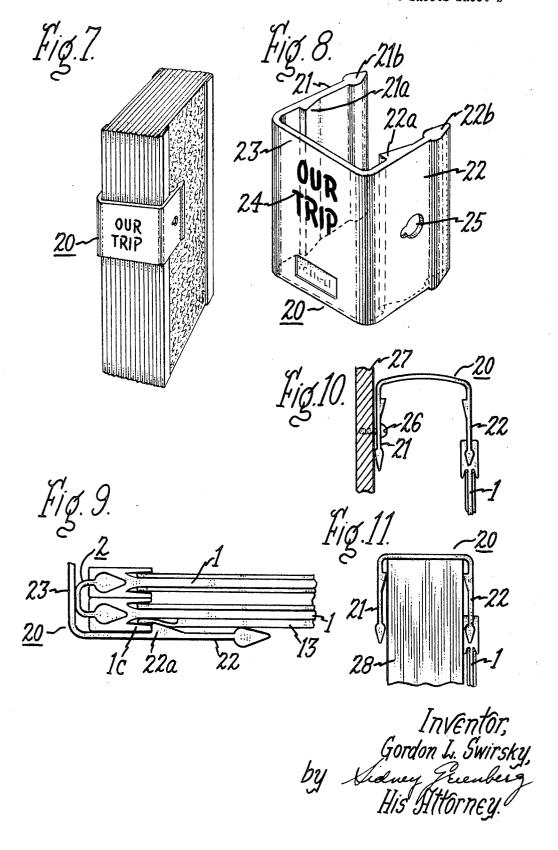
2 Sheets-Sheet 1



PHOTOGRAPH DEVICE

Filed March 30, 1967

2 Sheets-Sheet 2



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3,460,282
PHOTOGRAPH DEVICE
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Filed Mar. 30, 1967, Ser. No. 627,111
Int. Cl. G09f 11/06, 1/12

U.S. Cl. 40-102

8 Claims

ABSTRACT OF THE DISCLOSURE

A photograph album is formed of a number of plastic panels having integrally formed flanges along their side edges for retaining photographs and for slidably engaging flexible hinge strips which hold adjacent panels in foldable assembly.

It is an object of the invention to provide a photograph album which may comprise an assembly of any desired number of leaves and which is foldable into closed 20 compact form and unfoldable into fully opened form to display all or any desired number of photographs mounted therein.

It is another object of the invention to provide a photograph album of the above type in which photographs and 25 the like may be readily attached and firmly held for display, and readily detached for removal therefrom.

It is still another object of the invention to provide a photograph album of the above type which may be readily suspended in fully opened form.

Another object of the invention is to provide an album of the above type wherein the photographs mounted therein are protected from undesirable contact with one another when the album is in closed or folded condition.

Still another object of the invention is to provide an ³⁵ album of the above type which incorporates a film storage device.

Another object of the invention is the provision of a multi-purpose retaining clip for an album of the described type.

A further object of the invention is to provide a photograph album of the above type which is readily and economically manufactured, is readily assembled and disassembled, and which is versatile in use for various photograph display and storage purposes.

Other objects and advantages will become apparent from the following description and the appended claims.

With the above objects in view, the present invention in one of its aspects relates to a photograph album comprising a plurality of display panels, each panel having 50 integral flanges extending along opposite side edges thereof, the flanges having photograph-engaging frame portions and hinge-engaging portions, and hinge means detachably connecting each panel to the adjacent panel along their side edges, each hinge means comprising a strip member 55 formed of a flexible web having enlarged portions extending along opposite sides thereof for slidably fitting in and engaging the hinge-engaging flange portions of the respective adjacent panels, the thus connected panels being foldable relative to one another about each flexible hinge strip member.

The invention in its various aspects will be better understood from the following description taken in conjunction with the accompanying drawings, in which:

FIGURE 1 is a view in elevation of a portion of a pho- 65 tograph album constructed in accordance with the invention:

FIGURE 2 is a view on a smaller scale of the photograph album in unfolded form as it appears when vertically suspended;

FIGURE 3 is an enlarged end elevational view of a portion of the album in folded condition;

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FIGURE 4 is an end view of a panel of the album showing the insertion of photographs on opposite sides thereof;

FIGURE 5 is an exploded view in section of side edge portions of adjacent panels and the hinge strip associated therewith;

FIGURE 6 is a perspective view of a film storage folder which may be incorporated in the photograph album of the invention:

FIGURE 7 is a perspective view of the album held by a clip device constructed in accordance with the invention; FIGURE 8 is an enlarged perspective view of the clip device shown in FIGURE 7;

FIGURE 9 is a fragmentary detail view of the clip device in association with the closed album;

FIGURE 10 is a fragmentary side view of the album suspended by the clip device from a support; and

FIGURE 11 is a similar view of the album suspended by the clip device hung over a door or the like.

Referring now to the drawings, and particularly to FIGURE 1, there is shown an album for mounting and displaying photographs comprising a plurality of elongated panels 1, preferably made of relatively stiff plastic material, such as a polystyrene base plastic material, hingedly connected at opposite side edges to its adjacent panels by flexible hinge strips 2 so as to permit the connected panels to be folded flatwise together in compact superposed condition as illustrated in FIGURE 3, and to be opened to fully unfolded condition, as shown in FIGURE 2.

As seen in the cross-sectional view of FIGURE 5, hinge strip 2 is formed of a thin central web portion 2a having integral projections 2b, 2c extending along opposite side edges. Typically, hinge strip 2 is made of a quite flexible plastic material such as polyethylene, and its web portion is sufficiently thin to impart the desired flexibility to the strip, such that the strip bends easily along its web portion and without having a tendency to unfold the panels when folded on one another. A thickness of the web portion which has been found satisfactory is about .007 inch.

Each panel 1 is integrally formed along its opposite side edges with a flange 1a which defines a hinge-engaging slot 3 complementary to the shape of projections 2b, 2c of strip 2. Slot 3 is open at opposite ends and is formed with a narrow passage 3a opening to the side edge of the panel. Portions 2b, 2c of hinge strip 2 fit in their respective slots 3 with frictional engagement, the fit being such that hinge strip 2 is longitudinally slidable endwise in slots 3 for assembling the panels together, while still being tight enough for strip 2 to frictionally hold the assembled panels together in normal use and handling. The portions of flange 1a which define slot 3 are of sufficient thickness and stiffness and the bearing surfaces are so formed, as shown, as to retain the projections of hinge strip 2 in assembly within slot 3 without the parts being separated when pulled in a transverse direction in normal use and handling.

Flange 1a is further integrally formed with frame portions 1b, 1c projecting inwardly from opposite margins of each panel 1 on both front and rear faces thereof. The grooves 4 thus defined between the panel surfaces and the respective frame portions 1b, 1c receive the opposite edges of photographs 5 and 6 for retaining the same in display position, as shown in FIGURE 4. As seen in FIGURE 5, grooves 4 taper toward their inner ends and are so dimensioned and so spaced from the opposite grooves that when a photograph of standard width (about 3½ inches) is inserted between the opposite grooves on one face of panel 1, the opposite edges of the photograph are frictionally gripped in the crevices formed by the tapered portions of the respective grooves, and the photo-

graph is held thereby in firm engagement. Photograph 5 in FIGURE 4 is shown in slightly bowed condition as it is initially inserted in the frame grooves, and photograph 6 on the reverse face of the panel is shown fully inserted in display position with its opposite edges pinched between the frame portion and the face of the panel in the tapered portion of the grooves. In the latter position, photograph 6 lies substantially flat against the surface of panel 1 with its front surface set back from the plane of opposite frame portions 1c. As a result, the mounted photographs are substantially protected from harmful contact with each other in the folded condition of the album, as evident from the spacing of the photographs by the mutually contacting frame portions as shown in FIG-URE 3.

While the album panels may be made of any desired length, they are preferably about 10% inches long. Such a panel length will accommodate various combinations of different sized photographs of standard width, that is, those having standard lengths of 31/2 inches, 21/2 inches, 20 and 5 inches. Thus, as shown in FIGURE 1, one 5 inch photograph 10 and two 21/2 inch photographs 11 and 12 may be conveniently mounted on one panel. Alternatively, two 5 inch photographs or three 31/2 inch photographs or four 21/2 inch photographs could be mounted in com- 25 bination on a single panel.

For the purpose of enabling a hanging display of the album, one of the end panels is provided at its free longitudinal edge with a hanger 14 constituted by a partial hinge strip of the form of strip 2 engaging the hinge 30 groove 3 of the free edge of the end panel and having an aperture 14a therein. The album may then be hung vertically as shown in FIGURE 2 with hanger 14 at the top and with a suitable hook or the like (not shown) projecting from a supporting wall and passing through its aper- 35 ture 14a. The album in this hanging position is thus completely unfolded with all the photographs on one side in full display. With the album thus hung from a suitable support which is spaced away from the wall, both sides would, of course, be visible to the observer.

The surface of the endmost panels of the assembly which constitute the outside surfaces of the closed album may be covered by a relatively stiff decorative sheet, such as cardboard or the like, which is mounted in the frame portions of those panels in the manner of the photographs 45 described. In accordance with a feature of the invention, such sheet 13 is formed as shown in FIGURE 6 with integral strips 13a, 13b at its opposite ends which fold toward each other on the rear face (i.e., the concealed side) of sheet 13. There is thus provided a storage folder for 50 holding film negatives 15 in a safe, concealed, yet readily accessible enclosure in the album. Advantageously, the adjacent free edges of strips 13a, 13b are formed to closely interfit in a type of tongue-and-groove formation as shown to prevent the possibility of loose negatives slipping out 55 of the folder at this junction. The fully folded position of strips 13a, 13b with interfitting ends is shown in interrupted lines in FIGURE 6. As shown, strips 13a, 13b are somewhat narrower than main sheet 13 to avoid the necessity of inserting the edges of those strips into the 60 frame portions of panel 1, in which the edges of main sheet 13 are already inserted.

As shown in FIGURE 7, there is further provided as a feature of the invention a clip 20 for securely holding the album in fully closed, folded condition, such as when 65 Patent of the United States is: the album is stood on its end on a shelf or table. Clip 20 is of U-shaped form (see FIGURE 8) having slightly converging arms 21, 22 projecting from web portion 23. The clip is preferably made of relatively stiff plastic 22 is normally somewhat less than the overall thickness of the closed album. The arrangement is such that when clip 20 is inserted over the folded longitudinal edges of the album, the arms of the clip are forced slightly apart and thereby, when in operative position, firmly embrace 75

the external surfaces of the album, on which surfaces decorative folder inserts 13 are normally mounted. In this way, the album is held in positive, compactly closed condition, no matter in what position it may be placed. The outer surface of web portion 23 may conveniently serve to receive indicia 24 for identifying the contents of the album, as indicated in the drawing.

In order to ensure positive locking of clip 20 on the closed album, the arms of the clip are provided on their inner surfaces with ridges 21a, 22a extending from top to bottom of the clip and spaced from web 23 a predetermined distance as explained below. Each ridge tapers toward the open end of clip 20 in order to facilitate insertion of the clip on the folded album, and each ridge 15 has a locking surface facing the closed end of the clip. As seen best in FIGURE 9, in the assembled position of clip 20 on the closed album, the locking surface of ridge 22a abuts against the free edge of frame portion 1c of the outside panel 1, while the ridge on the opposite arm of the clip similarly abuts the corresponding frame portion on the other side of the closed album and while the web 23 abuts against the folded edge of the album. Clip 20 is thus securely retained in operative clamping position on the closed album. To remove the clip, the free end of either arm 21, 22 may be bent outwardly to free the ridges from the frame portions so that the clip can be pulled off, or the clip may simply be slid along the album until it slips off the end.

Clip 20 may also serve as a hanger member for suspending the album in open display as depicted in FIGURE 2. For this purpose the ends of arms 21, 22 of the clip are provided (see FIGURE 8) with enlarged portions 21b, 22b having a form like that of projections 2b, 2c of hinge strip 2 (see FIGURE 5), whereby either enlarged portion 21b or 22b may be inserted and retained in the hinge-receiving slot 3 of the endmost panel 1. One or both arms 21, 22 may have an aperture 25 so that, as shown in FIGURE 10, the album may be hung from a projection 26 such as a screw or the like extending from a wall 27 or other vertical supporting surface. For viewing the photographs on the opposite side of the unfolded album, clip 20 is simply removed from screw 26, and the album with attached clip is reversed and hung on screw 26 with the latter passing through the aperture in clip arm 22 which is now adjacent the wall.

An album of the described nature typically comprises an assembly of about 12 panels, and the spacing of the arms of clip 20 which is appropriate for embracing a closed album of this size is such that the clip readily fits over the top of a door of conventional thickness. Hence, as shown in FIGURE 11, the album may be suspended in unfolded condition simply by hooking the attached clip 20 over the top of a door 28 with arms 21, 22 on opposite sides of the door, whereby the album is securely held at a suitable height for viewing while it hangs in open display on the door.

While the present invention has been described with reference to particular embodiments thereof, it will be understood that numerous modifications may be made by those skilled in the art without actually departing from the scope of the invention. Therefore, the appended claims are intended to cover all such equivalent variations as come within the true spirit and scope of the invention.

What I claim as new and desire to secure by Letters

1. A photograph album comprising, in combination, a plurality of display panels, each panel having front and rear faces and integral flanges extending along opposite side edges thereof, said flanges having photograph-engagmaterial, and the spacing between the ends of arms 21, 70 ing frame portions and hinge-engaging portions, and hinge means connecting each panel to an adjacent panel along their adjacent side edges, each hinge means comprising a strip member formed of a flexible web having enlarged portions of solid cross-section extending along opposite sides thereof and engaging the corresponding hinge-engag-

ing portions of the respective adjacent display panels, the thus connected panels being foldable relative to one another about each flexible hinge strip member to form a compact portable panel assembly unfoldable for selectively exposing any or all of the component panels, each said integral flange being formed along its outer edge with a slot defined by opposite hinge-gripping jaw portions and having frame portions formed by inwardly directed extensions of said jaw portions spaced from and overlapping the lateral margins of said front and rear 10 panel faces and defining therewith grooves on opposite sides of said panel for receiving the edges of photographs inserted between the frame portions of the panel, whereby said enlarged portions of said strip member are frictionally gripped along their length by said jaw portions 15 of said integral flange.

2. An album as defined in claim 1, said grooves tapering at their innermost ends to provide crevices for receiving and holding in pinching engagement the edges of photographs inserted therein.

3. An album as defined in claim 1, the panels being foldable flatwise on one another in compact closed condition, the frame portions of adjacent panels contacting one another in such folded condition for holding photographs mounted in said panels spaced from each other.

- 4. An album as defined in claim 1, a film-storage device mounted on at least one of said panels, said device comprising a stiff sheet member with front and rear faces overlying said panel and mounted with its side edges engaging the opposite frame portions of the panel, said 30 sheet member having strip portions at opposite ends foldable toward one another against the rear face of said sheet member for retaining film negatives and the like between said strip portions and the rear face of said sheet member.
- 5. An album as defined in claim 1, and means for supporting the assembly of said display panels in vertically adjacent, fully unfolded condition, said means comprising a hanger member in the form of said hinge strip member engaging the hinge-engaging portion at the free side edge 40 of an endmost display panel, said hanger member having means for attachment to a support.
- 6. An album as defined in claim 1, and means for holding said album in fully closed, folded condition, said means comprising a substantially U-shaped clip member 45 fitting over the folded edges of the panel assembly and having opposite arms embracing the outside panels of the assembly while urging them together, and having a web portion connecting said arms, the inner surfaces of the arms of said clip member having ridge means spaced a 50 predetermined distance from said web portion, said ridge means engaging the frame portions of said outside panels

for retaining said clip member in operative position on the folded album assembly.

- 7. An album as defined in claim 1, the inner ends of said grooves in each integral flange being in the vicinity of and on opposite sides of the innermost extremity of the slot in said flange.
- 8. A photograph album comprising, in combination, a plurality of display panels, each panel having integral flanges extending along opposite side edges thereof, said flanges having photograph-engaging frame portions and hinge-engaging portions, and hinge means connecting each panel to an adjacent panel along their adjacent side edges, each hinge means comprising a strip member formed of a flexible web having enlarged portions extending along opposite sides thereof and engaging the corresponding hinge-engaging portions of the respective adjacent display panels, the thus connected panels being foldable relative to one another about each flexible hinge strip member to form a compact portable panel assembly unfoldable for selectively exposing any or all of the component panels, and means for holding said album in fully closed, folded condition, said means comprising a substantially U-shaped clip member fitting over the folded edges of the panel assembly and having opposite arms embracing the outside panels of the assembly while urging them together, at least one of said arms of said clip member being formed at its free end with an enlarged portion adapted to engage the hinge-engaging portions of said display panels, whereby said clip member may be connected at said free end to the endmost panel of said panel assembly, said clip member having means for attachment to a support for hanging said connected panels in vertically adjacent, fully unfolded condition.

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U.S. Cl. X.R.

40—152; 129—20; 160—231