SECTIONAL CARDBOARD DISPLAY DEVICE

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Application March 11, 1953, Serial No. 341,671

4 Claims. (Cl. 40—125)

My present invention relates generally to display devices, and has particular reference to cardboard structures of the type which are commonly employed on store counters, store windows, and in similar places.

It is an object of the invention to provide certain improvements in a type of display element which may be selectively used by itself as a separate item or may be assembled with others of the same kind to form a composite display. The invention provides a means which is simple and inexpensive, yet highly effective, to unite a plurality of basic display sections in a number of different ways to achieve various attention-arresting effects.

The basic unit of the contemplated sectional display device is a frame-like structure, commonly of polygonal shape and preferably rectangular, in which there is a back panel and a number of side panels arranged at right angles thereto. It is intended that two or more of such units be secured together in side-by-side relationship in varying patterns and arrangements, and that the sections be separately interconnected at the back. By the term "side-by-side" I include assemblages in which one or more of the units are arranged one above the other, either in direct vertical relation, or in stepped or staggered fashion. The aim of the invention is to provide some improved expedients, reliable in operation, easy to use, and low in cost, for the interconnection of the sections and the simultaneous rigidifying and stiffening of the resultant composite structure.

In accordance with my invention, the back panel of the basic unit is provided in a special way with certain marginal apertures for the reception of gripping jaws, and with upper and lower easel slots intended for connection with an easel of particular design. Both the gripping jaws and the easel contribute to the desired rigidification and strengthening of the sectional assemblies; although in some instances the employment of the special easel is not necessary. Each back panel is also provided with its own integrally formed easel of ordinary and well-known kind, for use whenever its propping and stiffening effect may prove desirable. And to complete the independence of the basic section as a separately useful display the back panel may also have a "picture cord" or its equivalent for hanging it on a wall or other support.

The gripping jaws by means of which each pair of juxtaposed sections is held together are part of a separable clip of special design which includes a flat plate-like part of appreciable area adapted to overlie the joint between the sections and to lie flatwise against the adjacent areas of the corresponding back panels.

I achieve the foregoing objects, and such other objects and advantages as may hereinafter appear or be pointed out, in the manner illustratively exemplified in the accompanying drawings, in which:

Figure 1 is a perspective view, from the rear, of one of the basic display sections to which the invention relates;

Figure 2 is a plan view of the blank of cardboard of which the back panel is formed;

Figure 2a is a fragmentary view, on an enlarged scale, of one of the easel slots;

Figure 3 is a perspective view, from the front, of one illustrative arrangement of three of the basic sections to form a composite display unit;

Figure 4 is a rear elevational view of the device shown in Figure 3;

Figure 5 is a plan view of the special easel employed in Figure 4, shown by itself;

Figure 6 is an enlarged fragmentary cross-sectional view substantially on the line 6—6 of Figure 4;

Figure 7 is a view similar to Figure 4 showing an illustrative assemblage of five basic sections arranged in accordance with a different pattern;

Figure 8 is an elevational view, on an enlarged scale, of one of the special clips which help to hold adjacent sections together;

Figure 9 is an end view of the clip shown in Figure 8;

Figure 10 is an enlarged fragmentary cross-sectional view taken substantially along the line 10—10 of Figure 7;

Figure 11 is a view similar to Figures 4 and 7, showing another illustrative arrangement of five basic sections;

Figure 12 is a view similar to Figure 5, showing a modified type of easel that may be used;

Figure 13 is an exploded view of the two parts of which the easel of Figure 12 is formed, shown in separate relation; and

Figure 14 is an enlarged rear view of the joint shown in Figure 12.

The basic section is a rectangular or square frame-like unit of the kind shown in Figure 1. It is complete by itself and can be used separately, if desired. The ornamentation, configuration or advertising purpose of the front of the unit has no direct bearing on the present invention. For illustrative purposes I have shown a unit in which the front is formed of a cardboard blank 20 (see Figures 3 and 6) formed to define a central display area 21, a forwardly flaring frame-like margin 22, and rearwardly directed side panels 23. The unit is provided with a back panel shown by itself in Figure 2 and designated, generally, by the reference numeral 24. The back panel has a central area that lies parallel to the front face, preferably flatwise against the central display area of the front blank 20; and marginal attachment areas 25 which are folded forwardly into nesting relation to the side panels 23, as best shown in Figures 6 and 10. The areas 25 may be permanently secured to the side panels 23 in any desired manner, as by adhesive, by staples, or other fastening expedients.

To facilitate the use of the basic unit as a separate display, the back panel may be provided with a "picture cord" 26 (see Figure 1) so that the device may be hung on a wall or the like; and the panel is also provided with appropriate cuts 27 to define an integral easel 28 adapted to be swung into the propping position shown in Figure 1 if the device is to be stood upon a supporting floor.

In order that the unit of Figure 1 may be conjointly used with one or more other units of substantially identical construction, to form composite displays of varying contours, the back panel 24 is provided with at least one special aperture adjacent to each of its edges. Preferably the back panel has a series of spaced apertures adjacent to each edge. In the device herein illustrated by way of example, I have chosen to show a series of four equally-spaced substantially rectangular apertures 29 adjacent to each edge of the back panel. The apertures along opposite parallel edges are preferably in alignment, as shown.

The back panel 24 is also provided with at least one upper easel slot and at least one lower easel slot, these...
slots being vertically out of alignment. In the device chosen for illustration I have shown the back panel provided with a pair of upper easel slots 30, in horizontal alignment, and a pair of lower easel slots 31, also in horizontal alignment. All of these slots are, however, vertically out of alignment.

It is advantageous that the apertures 29 arranged along the lower and upper edges be spaced from each other by an amount equal to the horizontal misalignment of the easel slots 30, 31.

The special easel constituting one of the features of the present invention is shown by itself in Figure 5. This easel is composed of adequately stiff cardboard, and may be of any of several lengths. It is provided with adjacent vertical panels 33 and 34, separated by a fold line 35.

The panel 34, when arranged at substantially right angles to the panel 33, is adapted to perform the desired propping and rigidity function, while the panel 33 is the one which establishes appropriate connection with the basic units which are secured together. The panel 33 is provided with several pairs of attachment tabs. In the illustrative easel shown in Figure 5, there is an uppermost pair of tabs 36, 37; an intermediate pair of tabs 38, 39; and a lowermost pair of tabs 40, 41. The tabs of each pair are vertically spaced by an amount equal to the vertical distance between the upper and lower easel slots 30, 31.

Each of the attachment tabs of the easel is engageable with any selected easel slot. This engagement is preferably a simple frictional one, and to facilitate this each easel slot 30, 31 is preferably formed as indicated in Figure 2a. In this figure I have illustrated one of the easel slots on an enlarged scale. The back panel is provided with a vertical cut 43, and with a horizontal cut 44 extending from the midpoint of the cut 43. Fold lines 45 extending obliquely from the end of the cut 44 to the vertical cut 43 define triangular flaps 46 which normally lie in the plane of the back panel 24 but which may be lifted away as indicated by the depicted disposition of the upper flap 46 in Figure 2a. To facilitate this lifting of the flaps, the back panel has a semi-circular region cut away completely, this region being bounded by the midportion of the vertical cut 43 and by a semi-circular or C-shaped cut 42.

When any selected one of the easel tabs is to be engaged with the easel slot, the flaps 46 are slightly lifted, and the tab may then be readily inserted, sideways, into the space behind the flaps 46.

This interengagement between easel tabs and easel slots is useful in holding together three basic sections in the stacked relationship shown in Figures 3 and 4. Merely by way of example I have shown the sections shown in a staggered relation, whereby the lowest and the uppermost section are directly in vertical alignment, while the intermediate section is laterally displaced. The lateral displacement is such as to bring the left hand lower easel slot 48 of the intermediate section into vertical alignment with the right hand easel slots 49 and 50 of the upper and lower sections respectively. The easel of Figure 5 is secured to these superposed sections, the tab 37 being brought into engagement with the easel slot 49, the tab 39 with the easel slot 48, and the tab 41 with the easel slot 50. Thus the three sections are retained in superposed relation with the back panels in a common plane and with a side panel of each section lying directly against a side panel of the adjacent section.

Obviously, more than three sections could be arranged in superposed relation, and in that event the easel employed would be one of corresponding height. Similarly, if only two sections are arranged one above the other, and if an easel of the kind described is used to support them and hold them rigidly together, the easel would then be of corresponding shorter length than the one shown. In each case, the pairs of easel tabs are arranged at appropriate vertical intervals whereby the upper tab of each pair is in horizontal alignment with the corresponding set of upper easel slots, while the lower tab of each set is in horizontal alignment with the lower set of easel slots.

In Figures 8 and 9 I have shown a clip of special construction adapted to be employed in holding sections of the present type together. The clip may be composed of metal or equivalent rigid material. It comprises a flat plate 52 of appreciable area which I have chosen to show of substantially rectangular shape, but any other appropriate shape may be employed. Projecting from this plate is a pair of springy substantially parallel gripping jaws 56. These jaws are preferably struck from the material of the plate 52, by forming opposite U-shaped cuts 53, 54 and bending the released areas forwardly along the fold line 55.

The clip is employed by arranging two adjacent sections of the display device with one of the apertures of one unit in alignment with a selected one of the apertures in the adjacent unit, and by causing the jaws 56 to enter these aligned apertures, respectively, and grip between them the superposed side panels of the adjacent sections. When this is done, the plate part 52 of the clip lies flatwise against the back panels, and the clip thus overcomes the joint between the sections and fulfills a rigidifying purpose.

In Figure 7 I have shown an illustrative array of five sections shown in an arrangement whereby three of them are in directly superposed relation while two of them project laterally. The lateral section 60 has been arranged in a position in which the uppermost of its series of apertures 61 is in alignment with the lowest one of the series of apertures 62 in the top section 63. Joining the parts together is a clip of the character described, the jaws of the clip entering this pair of aligned apertures, as best shown in Figure 10, and holding together the superposed side panels 64 and 65. The side panel 65 is on the section 63, and the side panel 64 is on the section 60.

At the right hand side of Figure 7 I have shown another section 66 similarly arranged, and held in association with the section 63 by means of the clip 67. Obviously, the section 66 may be dispensed with if desired, or it may be connected with one or another of the three superposed sections shown in a vertical disposition other than that illustrated.

In holding the five sections of Figure 7 together, I have also employed an easel 68 of the character hereinbefore described. In this case the upper one of each pair of easel tabs is in engagement with one of the upper easel slots of the corresponding section.

In Figure 11 I have illustrated another arrangement of five sections in which three of them are in horizontal alignment, slightly spaced from each other, while two are at an elevated level and bridge the gaps between the lower sections. In this case, the easels 25 of the lower sections may be used to support the assembly, and no special easel is required, although an easel of this kind may be used if it is considered desirable. In this case, also, I have illustratively shown how four clips 69 of the character hereinbefore described, are utilized to advantage in holding each pair of adjacent sections in the desired relationship. Wherever one of the clips 69 is shown, its jaws are engaging with a pair of marginal apertures which have been brought into alignment.

It should be observed that each of the integral easels 28 is hingedly movable on a vertical hinge line 19 and that this hinge line and the easel 28 itself lie in one of the vertical regions of the backing 24 between adjacent easel slots.

In Figures 12–14 I have shown a modified easel construction formed of separable parts 79 and 71. The lower part 70 is a complete easel by itself, similar to that of Figure 5 except that it is of less height and has only two pairs of easel tabs instead of three, thus making it useful to hold together two superposed basic sections. The
easel tabs of the upper pair are designated 72, 73; the tabs of the lower pair are at 74, 75.

The upper part 71 is an extension adapted to be applied to the part 70 when a greater height of easel is called for. The part 71 has a pair of easel tabs 76, 77. When the part 70 and 71 are interconnected (Figures 12 and 14) the resultant easel is functionally identical with the one shown in Figure 5. It has three pairs of tabs. Those of each pair are vertically spaced by an amount equal to the vertical distance between the upper and lower easel slots of each basic section; and the three groups of tabs are arranged at appropriate vertical intervals whereby the upper tab of each pair (76, 72, 74) is in horizontal alignment with the corresponding set of upper easel slots (where three basic sections are superposed) while the lower easel tabs (77, 73, 75) are in horizontal alignment with the corresponding lower sets of easel slots.

Aligned fold lines 78 and 79 divide the composite easel into adjacent panels, one of which carries the tabs and lies flatwise against the interconnected basic sections when the easel is used, the other of which stands at right angles thereto. As in Figure 5, the easel may also have other fold lines, as indicated, to provide additional stiffening, if desired.

The interengagement of the easel parts 70 and 71 is achieved by a set of notches 80 in the upper edge of the lower part 70 (Figure 13), a set of corresponding notches 81 in the lower edge of the upper part 71, and an extension on one part provided with locking tabs adapted to fit into corresponding slots in the other part. I have shown such an extension on the part 71; it is a small rectangular area 82 hinged to the part 71 at 83 and provided with the lateral locking tabs or ears 84 hinged at 85. These ears, when turned at right angles to the area 82, may be pushed through the slots 86 on the lower part 70.

To apply the extension 71 to the easel 70, the notches 80, 81 are interlocked as shown in Figures 12 and 14, the alternate areas 87 between the notches 80 lying on one side of the part 71, the other areas 88 lying on the other side. The ears 84 are then inserted into the slots 86. A rigid easel of extended height (like that of Figure 5) is thus produced. The extension will not be used when an easel of less height (i.e., the part 70 by itself) is to be employed.

Obviously there are innumerable patterns along which two or more of the basic display sections may be arranged and joined together. The invention thus affords an opportunity for forming a wide variety of different composite display devices. The device is in each case of sectional and separable character, and the individual elements can be reused by themselves or in other arrangements.

In many respects the details herein described and illustrated are merely illustrative, and it is to be understood that variations in such details may be made by those skilled in the art without necessarily departing from the spirit and scope of the invention as expressed in the appended claims.

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

1. In a sectional cardboard display device, a pair of rectangular sections each of which has a back panel and side panels at right angles thereto, said sections being adapted for arrangement one above the other with the back panels in a common plane and the bottom side panel of the upper section resting on the top side panel of the lower one, and an easel extending vertically up from the lower section to lie behind both sections, the back panel of the upper section having at least one upper easel slot and at least one lower easel slot, said slots being vertically out of alignment, said easel having a pair of tabs one of which is horizontally aligned with the upper easel slot, the other with the lower easel slot, whereby an engagement can be made between the upper tab and the upper easel slot in one disposition of the upper section relative to the easel, and between the lower tab and the lower easel slot in a laterally shifted disposition of the upper section.

2. In a sectional cardboard display device, a pair of rectangular sections each of which has a back panel and side panels at right angles thereto, said sections being adapted for arrangement one above the other with the back panels in a common plane and the bottom side panel of the upper section resting on the top side panel of the lower one, each back panel having at least one upper easel slot and at least one lower easel slot, said slots being vertically out of alignment, and an easel extending vertically behind both sections, said easel having an upper pair of tabs respectively aligned horizontally with the upper and lower easel slots of the upper section, and a lower pair of tabs respectively aligned horizontally with the upper and lower easel slots of the lower section, whereby an engagement between selected easel tabs and slots can be made in each of several horizontally displaced relative dispositions of said superposed sections.

3. In a sectional cardboard display device, the combination of elements set forth in claim 2, in which each back panel has a plurality of upper and lower easel slots, each set being in horizontal alignment and all slots being vertically out of alignment.

4. In a sectional cardboard display device, a plurality of sections each of which has a back panel, said sections being adapted for arrangement one above the other with the back panels in a common plane, each back panel having a set of upper easel slots and a set of lower easel slots, said slots being vertically out of alignment but the slots of each set being in horizontal alignment, and an easel extending vertically behind said sections, said easel having a pair of tabs in the region of each section, each pair comprising an upper tab at the level of the corresponding set of upper easel slots and a lower tab at the level of the corresponding set of lower easel slots, whereby an engagement between selected easel tabs and slots can be made in each of various horizontally displaced relative dispositions of said superposed sections.

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