Jan. 9, 1951 W. H. SCOBLE 2,537,318

COLLAPSIBLE RECESSED DISPLAY STAND

Filed July 22, 1949 2 Sheets-Sheet 1

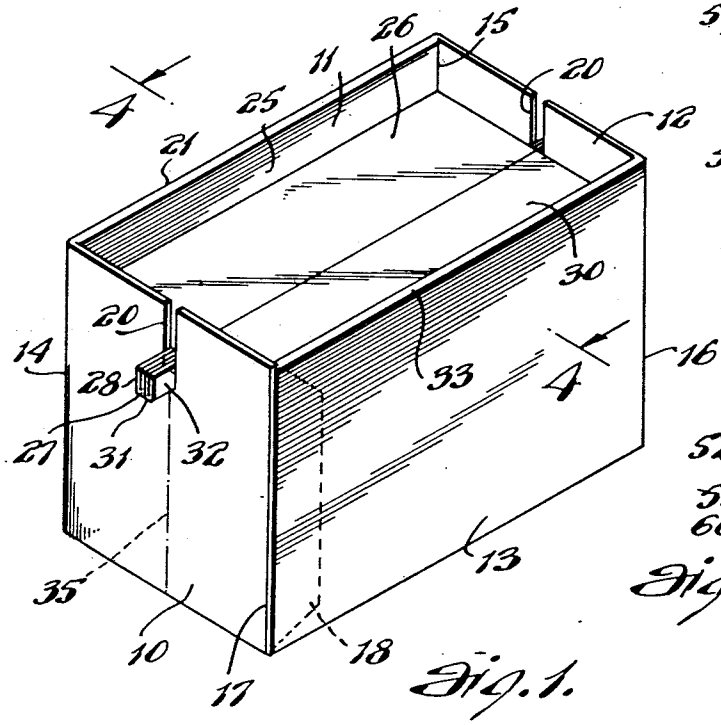


Fig. 1.

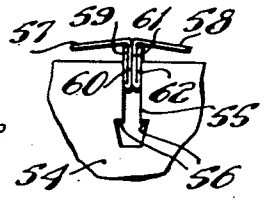


Fig. 8.

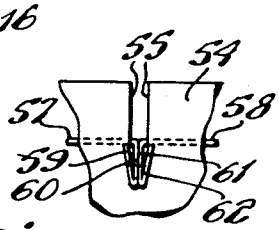
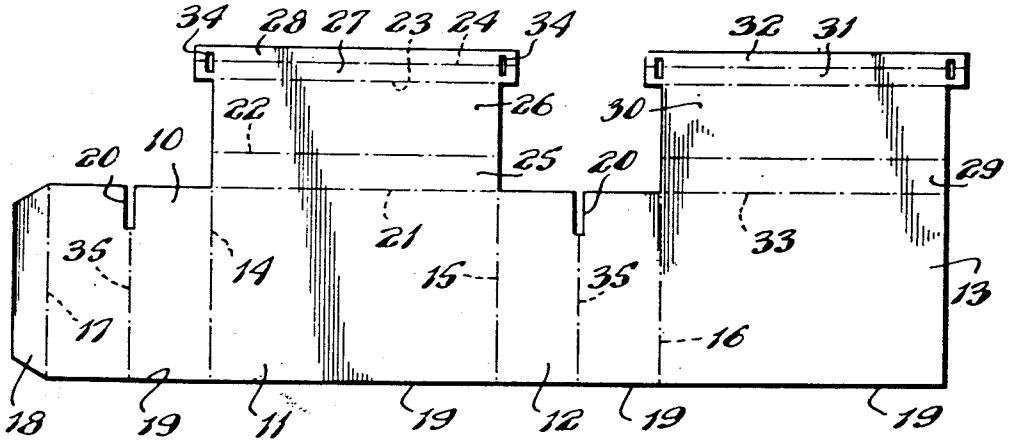


Fig. 9.

Fig. 2.



INVENTOR.
WILLIAM H. SCOBLE
BY
Frederick Bruckfield
ATTORNEY

Jan. 9, 1951 W. H. SCOBLE 2,537,318

COLLAPSIBLE RECESSED DISPLAY STAND

Filed July 22, 1949 2 Sheets-Sheet 2

Fig. 3.

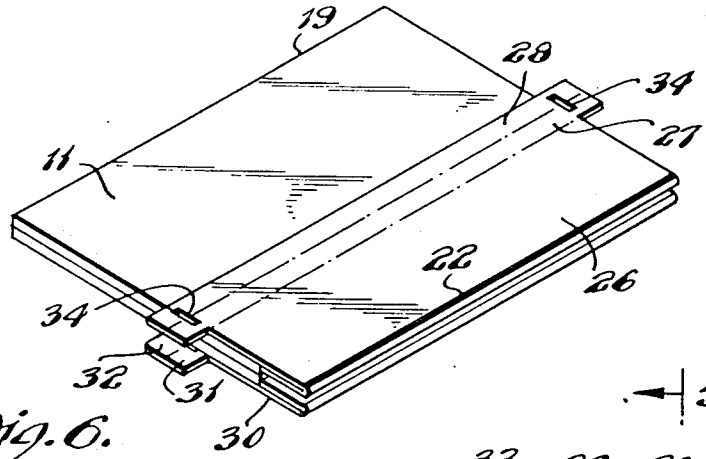
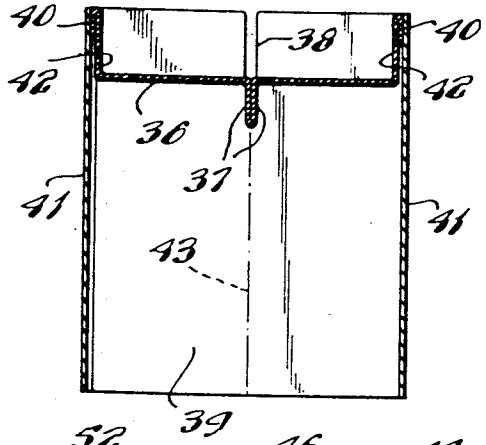


Fig. 6.



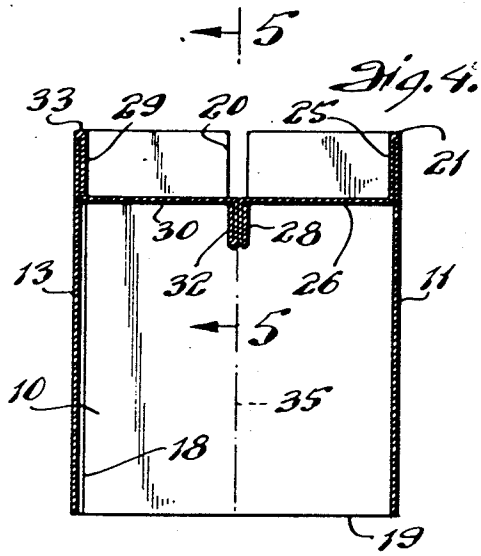


Fig. 4.

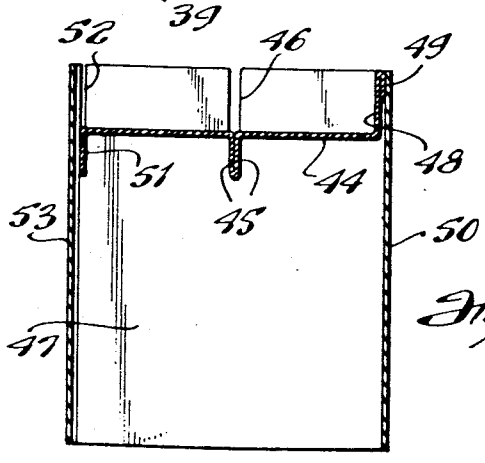


Fig. 7.

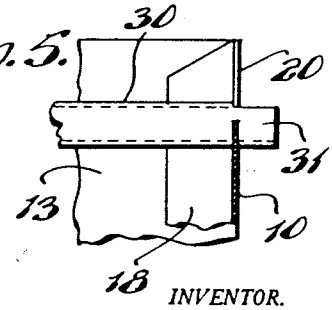


Fig. 5.

INVENTOR.
WILLIAM H. SCOBLE
BY
Frederick Breitenfeld
ATTORNEY

Patented Jan. 9, 1951 2,537,318

UNITED STATES PATENT OFFICE

2,537,318

COLLAPSIBLE RECESSED DISPLAY STAND

William Henry Scoble, Jericho, N. Y., assignor to Einson-Freeman Co., Inc., Long Island City, N. Y., a corporation of Delaware

Application July 22, 1949, Serial No. 106,241

2 Claims. (Cl. 211—135)

1

My present invention relates generally to collapsible display devices, and has particular reference to a knock-down cardboard structure for displaying articles of merchandise and the like.

It is a general object of the invention to provide a collapsible structure which may be manufactured inexpensively, of flat cardboard stock, and which is stable and staunch when set up for use.

Another object is to provide a structure which may be conveniently collapsed into a substantially flattened condition, for purposes of storage and shipment, and which is easy to adjust into set-up condition without calling for any special skill, tools, or extraneous elements.

The device is essentially a display table, when set up for use, and is intended primarily for the support and display of merchandise in retail stores. However, certain phases of the invention are not restricted to any specific type of use.

The improved device consists essentially of a supporting structure formed of upstanding walls, and a table-top which fits snugly within the upper part of the supporting structure. Among the features of the invention are the way in which the supporting structure is rigidified by the table-top, and the manner in which the table-top may be firmly supported at a level slightly below the upper edge of the supporting structure, thereby providing an upstanding peripheral rim which helps to retain the displayed merchandise in position.

Several ways of achieving these general objects and advantages, and such other objects and advantages as may hereinafter appear or be pointed out, are illustrated in the accompanying drawings, in which:

Fig. 1 is a perspective view of a preferred cardboard display table of the present improved character, shown in set-up condition;

Fig. 2 is a plan view, on a reduced scale, of the single element of cardboard of which the device of Fig. 1 may be constructed, if desired;

Fig. 3 is a perspective view showing one way of collapsing the structure of Fig. 1 into a flattened condition;

Fig. 4 is a cross-sectional view taken substantially along the line 4—4 of Fig. 1;

Fig. 5 is a fragmentary cross-sectional view taken substantially along the line 5—5 of Fig. 4;

Figs. 6 and 7 are cross-sectional views similar to Fig. 4 showing modifications of the structure, respectively; and

Figs. 8 and 9 are fragmentary end views of a modified construction showing how the device may be locked in set-up condition.

Where the device is composed of a single blank of material, the blank is cut and shaped to define the hingedly connected panels and parts shown most clearly in Fig. 2. Preferably, the supporting structure is substantially rectangular in horizontal cross-section when the table is set up.

2

Accordingly, the cardboard blank shown in Fig. 2 defines four hingedly connected substantially rectangular panels 10, 11, 12 and 13. The panels 10 and 12 are substantially the same in size, and when the device is set up, these panels define end walls. The panels 11 and 13 are also of equal size, and are adapted to define upstanding side walls. The connecting hinge lines 14, 15 and 16 define vertical edges of the supporting structure. Hingedly connected to the free edge of the panel 10, as at 17, is an attachment flap 18. During manufacture of the device, this flap is permanently secured to the free edge of the panel 13, by means of staples, adhesive, or the like.

When the structure is set up, it rests upon the aligned lower edges 19 of the upstanding walls.

Each of the end walls 10 and 12 is provided with a notch 20 in its upper edge, preferably at substantially the mid-point of the edge.

Hingedly connected to the upper edge 21 of the panel 11 is a panel or element divided by hinge lines 22, 23 and 24 into adjacent panels or sections 25, 26, 27 and 28. A similar set of panels 29, 30, 31 and 32 are associated with the upper edge 33 of the side wall 13.

Each of the panels 27 and 28 is relatively narrow and is slightly longer than the adjacent section 26. The same is true with respect to the panels 31 and 32 in relation to the section 30.

When the device is ready to be set up for use, the panels 10, 11, 12 and 13 are first adjusted into the open relationship shown in Fig. 1. The sections 25 and 29 are then turned downwardly to lie flat against the inner surfaces of the corresponding side walls 11 and 13.

The sections 26 and 30 constitute two parts of a table-top. The panels 27 and 28 are doubled upon themselves along the line 24, and are also turned along the line 23 to lie in a substantially vertical plane. In this disposition, they define a rigidifying rib extending longitudinally with respect to the table-top. The ends of this rib constitute extensions which fit snugly into the corresponding notches 20. The panels 31 and 32 are similarly adjusted and constitute a rigidifying rib. The extensions at the ends also fit into the corresponding notches 20.

To facilitate and enhance the firm engagement of these extensions with the notches 20, each extension is provided with a slot or opening 34, to define a downwardly-opening notch which interlocks with the corresponding end wall when the extension is fully fitted into the end wall notch, as shown in Fig. 1.

The disposition of the table-top below the upper edge of the supporting structure, as shown most clearly in Figs. 1 and 4, rigidifies the entire device, since the table-top is so shaped that it fits snugly within the space defined by the upstanding walls, and these walls are thereby retained in proper relationship and are braced by the table-top. At the same time, the table-top

is provided with an upstanding peripheral flange or rim which helps in the efficient support of the merchandise to be displayed. And not only does the longitudinal rib stiffen and strengthen the table-top to a highly effective degree, but its extended ends serve as convenient handles by means of which the device can be lifted or shifted from place to place, even when loaded with merchandise.

In collapsing the structure for purposes of shipment or storage, several alternatives are available. As shown in Fig. 3, the end walls 10 and 12 may be folded inwardly along pre-formed hinge lines 35, to form a resultant body whose length is no greater than that of one of the side walls 11 and 13, and whose height is no greater than one of these side walls plus the width of the panel 25. Or, if the end walls 10 and 12 are to be left uncreased, the structure could be folded along hinge lines 15 and 17 (or 14 and 16) to form a flattened mass having a length equal to the combined lengths of one of the side walls and one of the end walls.

In manufacturing the device, it is not essential that the table-top sections be integral parts of the blank of which the supporting structure is formed. Thus, while I have shown the panels 25 and 11 integrally connected along the hinge line 21, and the panels 29 and 13 integrally connected along the hinge line 33, it may under certain circumstances be desirable to form the table-top sections of separate elements, and to establish the hinged relationship by suitable staples, adhesive, or the like.

In Fig. 6 I have shown a possible modification of the structure in which the table-top is formed of a single element 36. At its midportion, this element is provided with parallel adjacent panels 37 which are brought into superposed relationship to constitute a rigidifying rib, the ends of this rib forming extensions which fit into the corresponding slots 38 in the end walls 39. The opposite sides of the element 36 are adhesively or otherwise secured as at 40 to the upper edges of the upstanding side walls 41 of the supporting structure. The table-top element 36 includes sections 42 which lie flat against the corresponding side walls 41, as shown, when the table is set up.

In the structure shown in Fig. 6, each of the end walls 39 necessarily has a medial hinge line 43 to permit a collapse similar to that shown in Fig. 3.

In the modification shown in Fig. 7, the table-top consists of an element 44 having the medial sections 45 which define a stiffening rib. The ends of this rib are extended, as before, to fit into the corresponding notches 46 in the end walls 47. One side edge of the element 44 is folded upwardly to define the panel 48, corresponding to the panel 42 of Fig. 6, and a hinged securement is established at 49 with the upper edge of the side wall 50. At its opposite side edge, the element 44 is normally disconnected from the supporting structure, and is provided with a relatively narrow panel 51 adapted to fit into a second notch 52 formed in the upper part of the end wall 47, closely adjacent to the side wall 53. The panel 51 constitutes a second stiffening rib, and it is extended at its ends so as to fit into the corresponding notches 52 when the device is set up.

In Figs. 8 and 9 I have shown a table-top like that of Figs. 1–4, composed of complementary sections 57 and 58. The section 57 has doubled-back panels 59 and 60 defining a stiffening rib, and the section 58 has similar doubled-back panels 61 and 62 defining a stiffening rib. When the structure is set up, the sections 57 and 58 align themselves in a single plane (Fig. 9) and the panels 59, 60, 61 and 62 conjointly form a medial stiffening rib for the table top. This rib has end extensions which fit into corresponding notches in the end walls. One such end wall 54 is shown in Figs. 8 and 9, and it is to be observed that the notch 55 is provided with downwardly facing shoulders 56. A similar notch is formed in the opposite end wall. As a result, when the rib extensions are pushed down into these notches, a latching effect is automatically produced, i. e., due to the inherent resilience of the cardboard, the panels 59 and 62 tend to spread into V relation to the panels 60 and 61, respectively, and therefore snap outwardly beneath the shoulders 56 as shown in Fig. 9, a similar action taking place at the opposite end of the structure. Obviously, the rib extensions in this case cannot come out of the notches in the end walls even when grasped to lift the structure, unless the panels 59 and 62 are deliberately pressed together again to clear the shoulders 56. This helps to retain the device firmly and staunchly in set-up condition.

In general, it will be understood that the details herein described are in many respects merely illustrative, and that changes in these 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. A collapsible cardboard display table comprising four hingedly connected panels adapted to define a substantially rectangular supporting structure consisting of upstanding side and end walls, each of the end walls having a notch in its upper edge, and a table-top fitting snugly within the space defined by said walls and provided with a longitudinal stiffening rib, said rib having extensions at its opposite ends which fit snugly into said end-wall notches respectively, each rib extension comprising two hingedly connected panels whose inherent resilience tends to separate them into V relation, each end-wall notch being shaped to define at least one downwardly-facing shoulder beneath which one of said panels interlocks when the rib extension is fitted into said notch.

2. A collapsible cardboard display table comprising hingedly connected panels adapted to define upstanding walls, at least one of said walls having a notch in its upper edge, said notch having a downwardly-facing shoulder, and a table-top element carried by at least one of the other walls and provided with a rib adapted to be inserted downwardly into said notch, said rib comprising a resilient part which snaps into latching engagement beneath said shoulder during said insertion.

WILLIAM HENRY SCOBLE.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,776,071	Howath	Sept. 16, 1930
1,881,224	Nuckols	Oct. 4, 1932
1,948,902	Carmichael	Feb. 27, 1934