July 11, 1950 H. A. FEIGELMAN 2,514,381

FOLDING BOX

Filed July 11, 1946 2 Sheets-Sheet 1

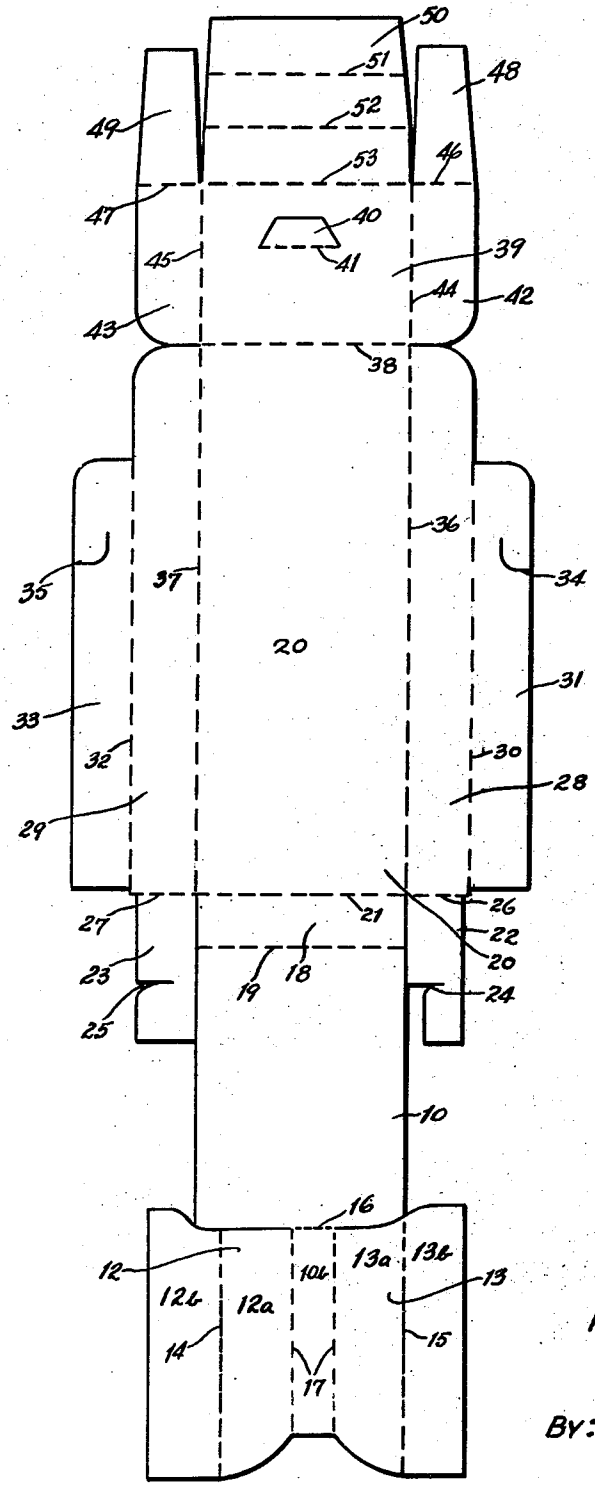


Fig. 1.

HERMAN A. FEIGELMAN
INVENTOR.

BY: Maynard E. Hanson
Attorney

July 11, 1950 H. A. FEIGELMAN 2,514,381

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Filed July 11, 1946 2 Sheets-Sheet 2

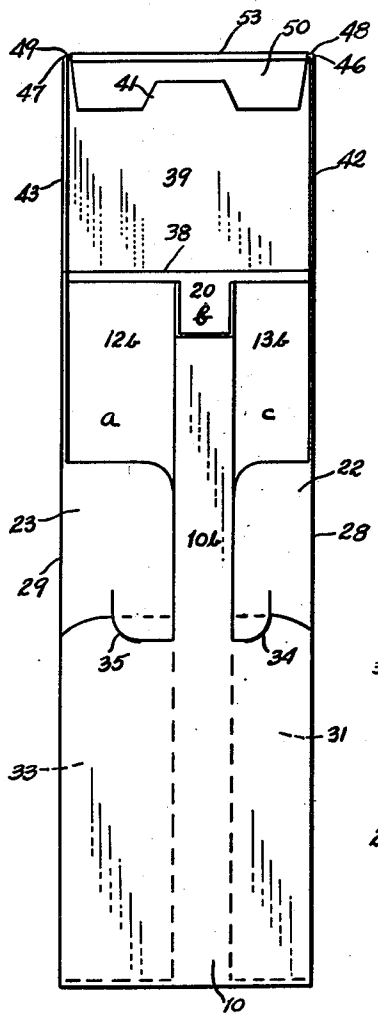


Fig. 2.

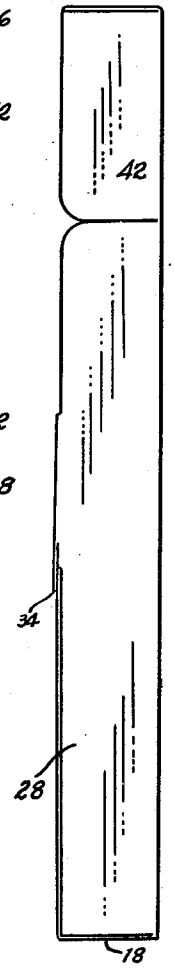


Fig. 3.

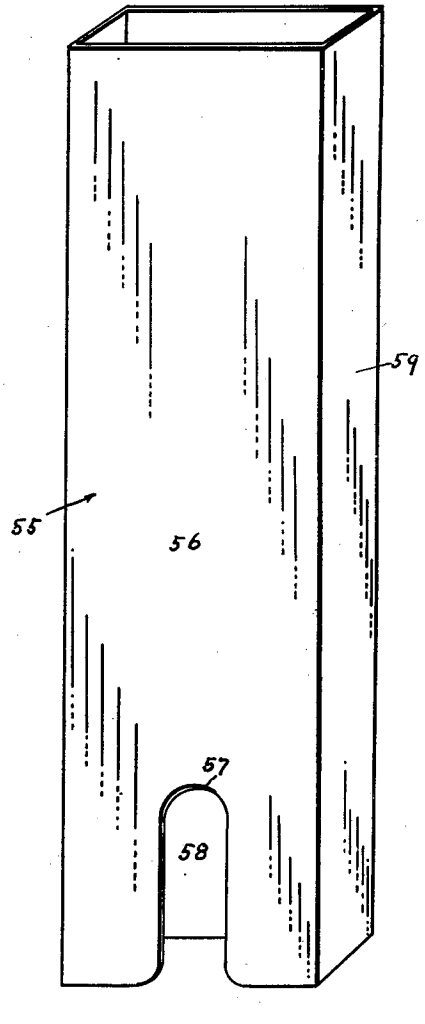


Fig. 4.

HERMAN A. FEIGELMAN
INVENTOR.

BY: Mathews & Hanson
Attorney

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FOLDING BOX

Herman A. Feigelman, Paterson, N. J.

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9 Claims. (Cl. 229—27)

1

This invention relates to improvements in collapsible or folding boxes, cases or cartons for holding articles.

An object of the present invention is to provide an economical, efficient, practical and simple carton or box used for holding pencils, pens, crayons and the like and which is constructed from a single sheet of material and which may be collapsed for storage purposes.

A further object of this invention is to provide a collapsible box which can easily be set up to act as a holding device, for which purpose a blank back or platform is provided for holding or acting as the main support for the pencils or the like.

It is another object of the present invention to provide a folding carton wherein a section thereof is inwardly foldable to provide three slots or grooves in which the pencils or the like are held captive when placed therein.

A still further object of this invention is to provide a cover or jacket to hold the carton containing the articles when not in use, said cover comprising a single sheet of material which is glued on one side, said jacket being used to house the collapsible box containing the articles, when not in use.

Further objects and advantages of the invention will appear from the following disclosure thereof together with the attached drawings which illustrate a certain form of embodiment thereof. This form is shown for the purpose of illustrating the invention since said form has been found in practice to give satisfactory and reliable results, although, it is to be understood that the various instrumentalities of which the invention consists can be variously arranged and organized and that the invention is not limited to the precise arrangement and organization of the instrumentalities as herein shown and described.

In reference to the drawings:

Fig. 1 is a plan view of the blank (on a reduced scale) from which the carton is formed.

Fig. 2 is a plan view of a collapsible carton made in accordance with the invention, the box being shown in operative position, with said box slightly raised from the jacket.

Fig. 3 is a side view of Fig. 2.

Fig. 4 is a perspective view of the jacket which houses the collapsible carton.

Referring now more particularly to the drawings:

In Fig. 1 the blank comprises an extended section 10 which is hingedly connected to section

2

10*b* at 16, which in turn is connected to flaps 12 and 13 at the score lines 17, said flaps 12 and 13 being foldable at 14 and 15, respectively.

Section 10 is connected at score line 19 to portion 18 which in turn is connected at score line 21 to panel section 20. Flaps 22 and 23 having cut-outs at 24 and 25, respectively, are connected at fold lines 26 and 27, respectively, to lateral portions 28 and 29 respectively, said lateral portion 28 being connected at fold line 30 to flap 31 and said other portion 29 of said lateral portions, being connected at fold line 32 to flap 33. Flap 31 has a slit 34 while said other flap 33 has a slit formed at 35. Lateral portions 28 and 29 are connected to panel section 20 at fold or score lines 36 and 37, respectively. Section 20 is connected at fold line 38 to upper portion 39, the latter having a small tongue or flap 40 cut out of the material and hinged at the fold line 41. Side flaps 42 and 43 are connected to portion 39 at 44 and 45, respectively. Flaps 42 and 43 are respectively connected at fold lines 46 and 47 to tongues 48 and 49. Top portion 50 having score lines at 51 and 52 is hingedly connected to upper portion 39 at score line 53.

In Fig. 2 which is a plan view of the folded collapsible box made from the blank shown in Fig. 1, the flaps 22 and 23 are folded along the fold lines, 26, 27 and made to interlock at the recesses or notches 24, 25. Sections 28 and 29 of Figs. 2 and 3 form the side walls. Flaps 31 and 33 are folded along the crease lines 30, 32 respectively. The blank is then folded along the score lines 19 and 21 so that the section 10 is disposed over flaps 31 and 33, entering the slits 34 and 35, and sections 12 and 13 are folded along the respective crease lines 14, 15 and 17 forming portions 12*a* and 12*b*; 13*a*, 13*b*, and 10*b*. Sections 12*b* and 13*b* are arranged against the upper face of bottom 20 and are partially disposed under the flaps 31, 33, so that the section 10*b* extends in the opening between the folded flaps 31, 33 and is substantially flush therewith. Flaps 42 and 43 are folded along fold lines 44 and 45, respectively. Tongues 48 and 49 are folded, respectively, along score lines 46 and 47, and made to overlap, thus supporting flap 50, which is then folded along score line 53. Flap 50 is again folded at crease line 52 and finally folded at score line 51 which squarely meets score line 53, thereby causing flap 50 to snugly engage with tongue 40. The collapsible carton is now in a utilizable form.

Fig. 4 shows the cover 55 for the carton. This cover is made from a single blank folded to pre-

sent the front wall **56** provided with a finger slot **57**, the rear wall **58**, and side walls **59**, only one of which is viewable in Fig. 4.

When the carton is folded as seen in Fig. 2, three compartments *a*, *b* and *c*, are formed for receiving elongated articles, such as pencils, pens, crayons, or the like. These compartments may contain different articles or the same type article in different colors or assortments. The upper portions of the articles rest against the wall **39**.

When the complete box is assembled, the bottom **58** of cover **55** is adjacent the bottom walls **20** and **39**, of the folded blank body. In positioning the body of the box for use, the end wall **18** is pushed with the thumb or other finger of the user, the thumb entering the slot **57** of the cover, thus raising the opposite end portion of the body throwing into view the upper portions of the articles contained in compartments *a*, *b* and *c*. The upper section of the body is folded back on fold line **38**. The said articles may now be withdrawn as desired.

As clearly apparent from Figs. 3 and 4, the slot **57** is just long enough that the upper body section **39—53** may be fully exposed and permitted to pivot about the hinge line **38** before the finger engaging the end wall **18** strikes the closed end of the slot.

It is thus seen that the present invention comprises simple, and practical article-holding means, which will be simple, efficient, and reliable in use and operation. The device comprises relatively few parts which may be inexpensively manufactured and assembled and which is well adapted to accomplish, among others, all of the objects and advantages herein set forth.

Without further analysis the foregoing will so fully reveal the gist of the invention that others can by applying current knowledge readily adapt it for various applications without omitting certain features that from the standpoint of the prior art fairly constitute essential characteristics of the generic or specific aspects of this invention, and, therefore, such adaptations should and are intended to be comprehended within the meaning and range of equivalency of the following claims.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent, is:

1. A folding box comprising a body made of a single blank and having a main bottom wall, a first extension hinged at one end of said main bottom wall, and a second extension hinged to the other end of said main bottom wall; said first extension comprising an auxiliary bottom wall having a tab, side walls and an end wall section; said end wall section comprising overlapping sections of said side walls folded at right angles to said side walls, an extension of said auxiliary bottom wall foldable over said overlapping sections and engageable with said tab; lateral extensions connected to said main bottom wall, each of said lateral extensions forming a side wall for said body and a section folded parallel to said main bottom wall and spaced therefrom, each of said latter folded sections having a slit, each of said lateral extensions having an alined extension, said alined extensions being folded in overlapping engagement and at right angles to said lateral extensions; said second extension comprising a first end part which is hinged to said main bottom wall, an intermediate part and a second end part hinged to said intermediate part adjacent their common axial line and separated therefrom thereby beyond, said second end part having a plurality of spaced parallel fold lines extending longitudinally of said body; said parts of said second extension being folded whereby said first end part and said alined extensions form a second end wall section for said body, said intermediate portion forming a top wall for said body spaced from said main bottom wall and engaging said slits and said second end part forming with said main bottom wall an intermediate compartment and with said main bottom wall lateral extensions compartments disposed laterally of said intermediate compartment.

2. A folding box according to claim 1 and including a tubular cover for said body, said cover having a finger slot at its end remote from said first extension, the length of said slot being dimensioned so as to facilitate relative movement of said body and said cover over a distance substantially not greater than necessary to expose said first extension and allow for swinging movement thereof.

3. A folding box comprising a body made of a single blank, said body comprising a main bottom wall, an auxiliary bottom wall swingably connected to said main bottom wall at one end thereof, side walls and an end wall connected to said auxiliary bottom wall, side walls connected to said main bottom wall, said latter side walls having extensions folded above and parallel to said main bottom wall, an end wall connected to the other end of said main bottom wall, said end wall having an extension overlying and parallel to said main bottom wall and in interlocking engagement with said folded extensions, and a member extending from said overlying extension; said member having a plurality of spaced parallel fold lines extending longitudinally of said body, and being folded along said fold lines forming with said main bottom wall an intermediate compartment and with said side walls connected to said main bottom wall and with said engaged overlying and folded extensions compartments disposed laterally of said intermediate compartment.

4. A folding box according to claim 3 and including a tubular cover for said body, said cover having a finger slot at its end remote from said auxiliary bottom wall, the length of said slot being not less and substantially not greater than the length of said auxiliary bottom wall whereby relative movement of said body and said cover over a distance just sufficient to expose said auxiliary bottom wall and allow for swinging movement thereof will be facilitated.

5. A folding box made of a single blank comprising a body having a main section having a bottom and an auxiliary section swingably connected to said main section at one end thereof, said auxiliary section having an end and side walls, said main section having an end and side walls, said main section end wall having an extension disposed above and parallel to said bottom, said side walls of said main section having extensions disposed above and parallel to said bottom and in interlocking engagement with said end wall extension, said end wall extension having an extension folded longitudinally in such a manner as to provide with said bottom an intermediate compartment and with said main section side walls and their extensions further compartments parallel to said intermediate compartment.

6. A folded box according to claim 5 and including a tubular cover for said body.

7. A folding box according to claim 5 wherein said main section side walls extensions are shorter

than the main section side walls and said folded extension projects beyond said main section side walls extensions, whereby a substantial portion of each of said further compartments will be exposed.

8. A folding box comprising a body section having a bottom, an end wall and side walls, said side walls having each an extension disposed above and parallel to said bottom and being provided with slits, said end wall having an extension disposed above and parallel to said bottom and projecting within said slits in interlocking engagement with said side wall extensions, said end wall extension having an extension folded longitudinally in such a manner as to provide with said bottom an intermediate compartment and with said side walls further compartments parallel to and adjacent said intermediate compartment.

9. A folding box according to claim 8 wherein said side walls extensions are shorter than the

side walls and said folded extension projects beyond said side wall extensions, whereby a substantial portion of each of said further compartments will be exposed.

HERMAN A. FEIGELMAN.

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