W. N. SEWELL.

COLLAPSIBLE BOX.

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## UNITED STATES PATENT OFFICE.

WILLIAM N. SEWELL, OF WINCHESTER, KENTUCKY.

## COLLAPSIBLE BOX.

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To all whom it may concern:

Be it known that I, WILLIAM N. SEWELL, a citizen of the United States, residing at Winchester, in the county of Clark and State of 5 Kentucky, have invented a new and useful Collapsible Box, of which the following is a specification.

This invention relates to improvements in collapsible boxes and similar receptacles.

The object of the present invention is the provision of a box of the character mentioned which is so constructed that the body thereof is formed entirely from a single piece of suitable material, thereby permanently 15 uniting in an integral structure the sides, ends, and bottom, but in such relation to each other that they will fold and unfold without being disconnected, thus producing a collapsible box which is extremely simple in 20 construction, inexpensive in its production, and one the parts of which are not liable to separation and consequent loss.

With these general objects in view and others which will appear as the nature of the 25 improvements is better understood the invention consists substantially in the novel construction, combination, and arrangement of parts, as will be hereinafter fully described, illustrated in the accompanying drawings, 30 and pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a box constructed in accordance with the present invention as the same appears when in use, a portion of the lid being cut 35 away to show details of construction. Fig. 2 is a similar view of the box-body, partially collapsed. Fig. 3 is also a similar view of the box-body in its fully-collapsed position and illustrating the manner in which the same is 40 placed in the box-lid for storage or transportation. Fig. 4 is a sectional perspective view of the box-body when collapsed to illustrate more fully the relative positions of the several sections. Fig. 5 is a detail perspec-45 tive view of a modification.

In constructing the herein-described box lines 1 1 and also transversely along the lines 22, said scoring being at the outer face of the 50 board, while at the inner face the board is scored along the diagonal lines 3 3 3 3 to facilitate folding of the sections designed to be collapsed inwardly. Those portions of the board immediately contiguous to the apices 55 of the triangles formed by the score-lines 3 3 33, and which apices lie at the end of the box,

are entirely removed from the blank, and consequently the blank is divided into the bottom 4, the sides 1' 1', and the ends 4' 4'. By the score-lines 3 3 3 3, however, each of 60 the sides 1'1' is also provided with what may be termed "outwardly-folding or collapsible triangular sections" 2' 2' 2' 2', while the extremities of the sides 1' 1' beyond the outwardly-folding sections 2' provide end flaps 65 3' 3' 3' 3'. It will thus be seen that in folding the blank the triangular ends 4' are bent upwardly, after which the sides 1' 1' are also bent upwardly, whereupon the end flaps 3' are folded around the ends 4', as clearly 70 shown in the figures referred to, the scorelines 2 2 permitting such folding of the end flaps 3'. The end flaps 3' are suitably fastened at their meeting edges, and the boxbody is thus made complete and assumes the 75 position taken by all of the parts thereof when in the unfolded or distended position. Furthermore, it will be noted that the sides constitute compound sections, the triangular sections 2' folding outwardly, as previously 80 stated, while the triangular sections intermediate thereof fold inwardly.

In order to close the box-body, a lid 5 is employed, which lid extends over the top of the body in the usual manner, and said lid is 85 provided with a handle 8, the latter being secured to the lid through the medium of loops 10 or their equivalent, which loops receive the extremities of the handle 8. The latter is provided also with loops 9, which loops are 90 designed to extend over the loops 10, and thus the handle 8 is effectually secured to the lid 12. In order to effectually hold the lid 5 upon the body, the sides of the latter, preferably the outwardly-folding sections 2', are 95 provided with bayonet-slots 7, and arranged upon the lid 5 is a plurality of fasteningslides 6, the latter being provided with hooked ends designed to be received by the bayonet-slots 7, whereby the slides are effec- 100 tually held in engagement with the box-body and the lid 5 maintained thereon, the manner the blank is scored longitudinally along the | of engagement of the slides 6 with the boxbody being clearly illustrated in Fig. 1. If desired, the form of slide shown in Fig. 5 may 105 be substituted for that illustrated in Fig. 1, and by referring to Fig. 5 it will be observed that the slides 6 are designed to engage twin slots 7, formed in the body of the box, thus insuring a firmer connection between the 110 slides and the sides of the body. It will also be noted that the hooked ends of the slides 6

project within the inner edges of the sides of the lid 5, the purpose of this being to hold the body of the box when the same is collapsed within the lid, thus permitting the folded 5 body and lid to occupy but small compass when not required for use, but at the same time maintain them together for storage and

transportation purposes.

In the use of the form of the box shown in 10 the drawings the same may be folded or collapsed by simply pressing upon the sides 1', the pressure being exerted inwardly, whereupon the intermediate portions of said sides are caused to move toward the bottom 4 of 15 the body, the score-lines 1 providing hinges, as it were, between the bottom 4 and said sides. Simultaneous with this movement the outwardly-folding sections 2' will collapse upon the intermediate portions of the 20 sides 1', as shown in Fig. 2, the score-lines 3 serving, as it were, as hinges between the sections 2' and the intermediate portions of the sides 1'. As pressure is continued to be exerted upon the sides the end flaps 3', consti-25 tuting the ends of the box, will fold upon the sections 2' and the body will be caused to assume the position shown in Figs. 3 and 4, and if it be desired to insert the body in the lid the same may be introduced in the manner illus-30 trated in Fig. 3 and held in the lid through the medium of the ends of the slides 6.

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

by Letters Patent, is—

1. A collapsible box, comprising a col-

lapsible body, the edges of which are provided with bayonet-slots, in combination with a lid, and slides carried by said lid, the ends of said slides being hooked and projecting within the inner edges of the sides of the 40 lid, whereby said ends are adapted to engage the bayonet-slots of the body for holding the lid thereon, and also to embrace the body, when collapsed and placed in the lid, for holding the body within the lid.

2. A collapsible box, comprising a body, the sides of which are formed of compound sections, the intermediate sections of said sides being adapted to fold inwardly, while the end sections are adapted to fold out- 50 wardly and upon the intermediate sections, thereby effecting a collapsing or folding of the box, the free edges of the sides being provided with bayonet-slots, ends carried by the bottom of the body, end flaps carried by the 55 sides and embracing the ends of the bottom, and means for fastening said end flaps together, in combination with a lid, and slides carried by said lid, the ends of said slides being hooked and projecting within the inner 60 edges of the sides of the lid, whereby said ends are adapted to engage the bayonet-slots of the body for holding the lid thereon, and also to embrace the body, when collapsed and placed in the lid, for holding the body 65 within the lid.

WILLIAM N. SEWELL.

Witnesses:

P. B. Winn, J. W. POYNTER.