

No. 698,106.

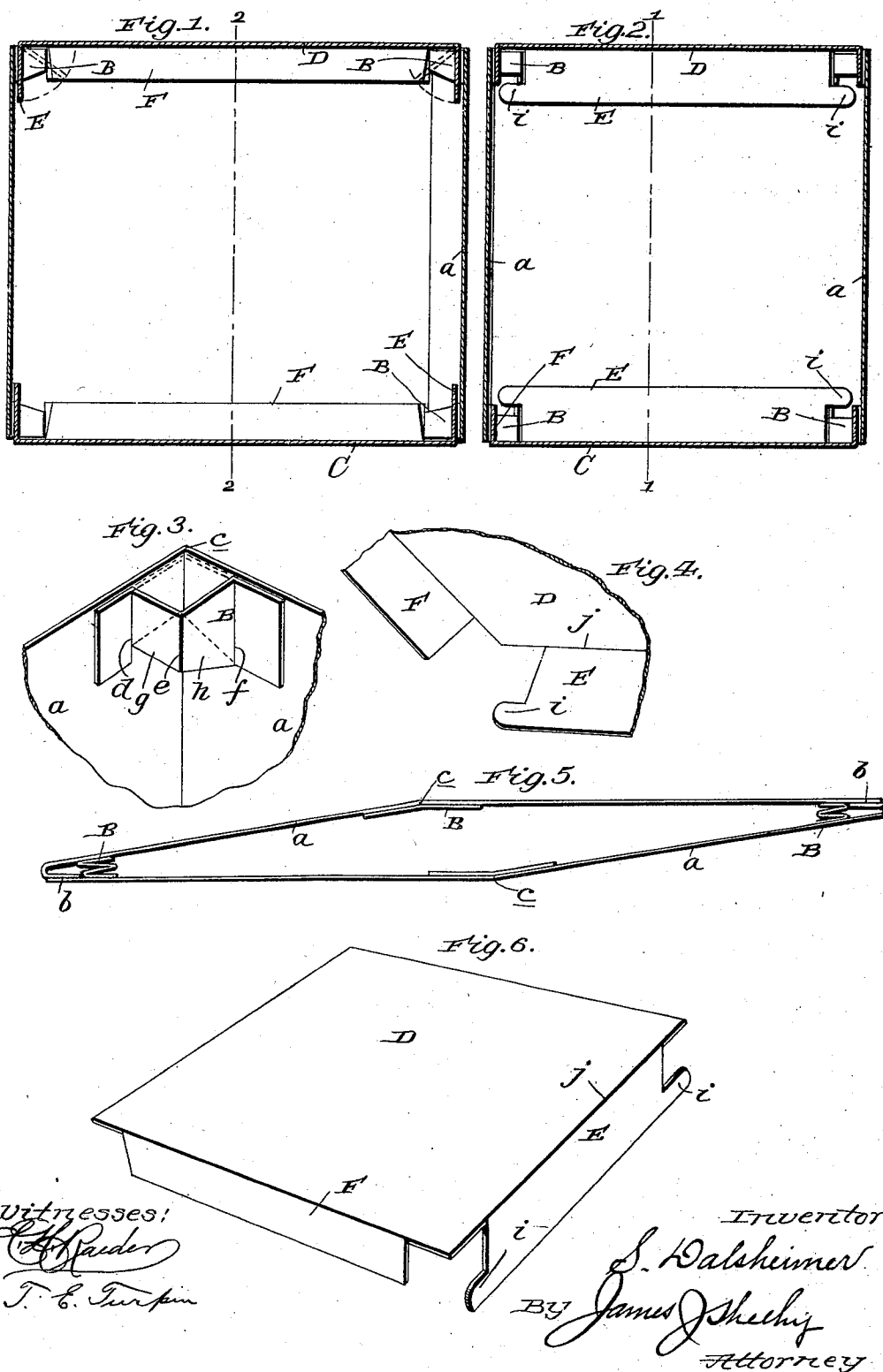
Patented Apr. 22, 1902.

S. DALSHIMER.

BOX.

(Application filed July 23, 1901.)

(No Model.)



UNITED STATES PATENT OFFICE.

SIMON DALSHIMER, OF BALTIMORE, MARYLAND.

BOX.

SPECIFICATION forming part of Letters Patent No. 698,106, dated April 22, 1902.

Application filed July 23, 1901. Serial No. 69,435. (No model.)

To all whom it may concern:

Be it known that I, SIMON DALSHIMER, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented new and useful Improvements in Boxes, of which the following is a specification.

My invention relates to improvements in boxes, and more particularly that kind of pasteboard boxes which are designed for display purposes in stores and similar places and are susceptible of being readily collapsed, so as to take up but a minimum amount of space when not in use.

It consists in the provision of means whereby either the bottom wall or cover, or both, of a box may be expeditiously and securely fastened to the body thereof.

It also consists in the combination, with a collapsible body, of a bottom, a top or cover, and means for fastening the bottom and top or cover to the body, so as to hold the latter in its open position.

Other advantageous features of the invention will be fully understood from the following description and claims, when taken in conjunction with the accompanying drawings, in which—

Figure 1 is a longitudinal section taken in the plane indicated by the broken line 1 1 of Fig. 2 and illustrating a box constructed in accordance with my invention. Fig. 2 is a transverse section taken in the plane indicated by the broken line 2 2 of Fig. 1. Fig. 3 is a broken perspective view illustrating one corner of the body of the box and one of the keepers with which the same is provided. Fig. 4 is a broken perspective view illustrating one corner of the top or cover and the latch thereon complementary to the keeper shown in Fig. 3. Fig. 5 is a plan view illustrating the body as collapsed or folded. Fig. 6 is a perspective view of the cover or top with its appurtenances in their proper operative positions.

Similar letters of reference designate corresponding parts in all of the views of the drawings.

In the preferred embodiment of my invention the body A of the box is formed of two pieces of pasteboard *a*, which have their ends lapped, as indicated by *b* in Fig. 5, and connected by glue or other adhesive, and are pro-

vided at four points with creases *c*. This manner of making the body A is inexpensive and is also advantageous, because it admits of the body being folded or collapsed, as shown in Fig. 5, so as to take up but a minimum amount of space when not in use and readily opened to a rectangular position when it is desired to connect the bottom and the top or cover thereto. I desire it understood, however, that I do not confine myself to forming the body of pasteboard or to constructing it in such manner as to render it collapsible, for in some cases the body may be formed of wood or other suitable material in permanent rectangular or other open form without departing from the scope of my claims. The body is provided interiorly at its four corners and adjacent to the upper and lower edges of its walls with keepers B. These keepers when the body is made of pasteboard and adapted to collapse are respectively formed of a single piece of pasteboard, which is connected at its ends to adjacent walls of the body and is creased vertically at three points *d*, *e*, and *f*, so as to adapt it to be sprung into the position shown by full lines in Fig. 3 when the body is opened or distended and into the position shown by dotted lines in Fig. 3 and full lines in Fig. 5 when the body is to be collapsed or folded. The creasing of the keepers B in the manner described provides each with two portions *g* *h*, adapted when the keeper is opened, as shown in Fig. 3, to rest at right angles to each other and to the adjacent walls of the body, to which they are connected. The portions *h* of the upper keepers have their lower edges inclined upwardly from the body-walls to the plane of the lower edges of the portions *g*, while the portions *h* of the lower keepers have their upper edges inclined downwardly from the body-walls, to which they are connected, to the plane of the upper edges of the portions *g* of said lower keepers, all as best shown in Fig. 1, for a purpose presently described.

While in the present embodiment of my invention the keepers B are shown as formed of strips of material connected to the walls of the body, I desire it understood that the said keepers may be made in any other manner falling within the scope of my claims. I also desire it distinctly understood that when the

body is made to enable it to rest permanently open the keepers need not be foldable.

C is the bottom, and D the top or cover, of the box, each being preferably formed of a single piece of pasteboard. The cover D is, as best shown in Fig. 6, provided at two opposite edges with latches E in the form of depending flanges, having reduced extensions *i* at their ends and at or adjacent to their lower edges. The latches are formed by creasing the piece of pasteboard, as indicated by *j*, and bending the latch portions downwardly into a position at right angles to the main portion of the piece of pasteboard. From this it follows that when the latches or latch portions are bent inwardly from the positions shown in Fig. 1 they will tend when released to re-assume such positions. At its other opposite edges the cover or top D is provided with depending flanges F, which when the cover is properly placed on the body may rest inside of said body, as shown in Fig. 2, or outside of the same, as preferred. The bottom C is similar in all respects to the cover D, except that its latch portions E and flanges F extend up instead of down from its main portion, as clearly shown in Figs. 1 and 2.

In practice the box is preferably shipped with the body A folded or collapsed and the bottom C and top or cover D in a flat state, so as to take up but a minimum amount of space. When the box is to be set up, the body is opened to a rectangular position, and its keepers—that is, the portions *g h* thereof—are sprung out from the walls into the position best shown in Fig. 3. In placing the top or cover in position the flanges F and the latches E are introduced between the walls of the body with the latches bent inwardly, as shown by dotted lines in Fig. 1, this in order to enable their extensions *i* to clear the adjacent keepers incident to the introduction. When the latches are introduced in the manner described and then released, they will by virtue of their resiliency resume the positions shown in Fig. 1, so as to carry their extensions *i* beneath the portions of the inclined lower edges of the keepers adjacent to the walls of the body. This operation may be expeditiously performed, and it results in the cover D being securely fastened to the body, without liability of casual disconnection. When, however, it is desired to remove the cover, the same may be readily effected by introducing the fingers between the latches and the adjacent walls of the body and bending said latches inwardly, so as to carry the extensions *i* out of engagement with the keeper portions *h*, and then lifting the cover from the body. The bottom C is connected to the body in the same manner as the top or cover, and like said top or cover is held against casual disconnection, and yet may be readily removed when desired.

When desirable, it is obvious that either the bottom or top of the box may be permanently connected to the body, in which event

one set of the keepers B and their complementary latches may be dispensed with. It is also obvious that either the bottom or the top or cover may be flexibly connected or formed integral with one wall of the body in a hinged manner, in which event it will be necessary to provide said bottom or top with but a single latch at its free edge and two complementary keepers on the body.

As before stated, my improved box is designed more particularly for display and space-occupying purposes, and therefore when desirable it may be embellished so as to simulate a wooden or other box and may be provided with any suitable printed matter. While designed more particularly for display and space-occupying purposes, it will be observed that my improved box when made of pasteboard in such manner as to render it collapsible is susceptible of use as a hat-box, and in such connection is advantageous for the reason that it takes up but a minimum amount of space until it is set up and ready for use.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a knockdown box, the combination of a collapsible body, and one or more foldable keepers therein; with a closure-wall having a latch portion flexibly joined thereto and adapted precedent to use to rest in the plane thereof; said latch portion being also adapted to be disposed at an angle to the closure-wall, and arranged to enter between the walls of the body and spring into engagement with the keeper or keepers thereof.

2. In a box, the combination of a body having an interior keeper, and a closure-wall formed of pasteboard and having an angularly-disposed, integral latch at its edge adjacent to the keeper; the said latch being arranged to enter between the walls of the body and spring into engagement with the keeper thereof, substantially as specified.

3. In a box, the combination of a body having an interior keeper, the inner edge of which is inclined or beveled, and a closure-wall formed of pasteboard and having an angularly-disposed, integral latch at its edge adjacent to the keeper; the said latch being arranged to enter between the walls of the body, and spring into engagement with the beveled portion of the keeper, substantially as specified.

4. In a box, the combination of a body having interior keepers at two of its corners, and a closure-wall having an angularly-disposed, integral latch at its edge adjacent to the keepers; the said latch being arranged to enter between the walls of the body and having end portions adapted to engage the keepers thereof when the latch is released, substantially as specified.

5. In a box, the combination of a collapsible body, and one or more foldable keepers therein, with a closure-wall having a latch or

latches arranged to enter the body and engage the keeper or keepers thereof, substantially as specified.

5 6. In a box, the combination of a collapsible body, and foldable keepers arranged therein and provided with beveled inner portions, with a closure-wall having an integral angularly-disposed latch arranged to enter between walls of the body and provided with
10 end portions which it is adapted to carry into engagement with the beveled portions of the keepers, substantially as specified.

15 7. In a box, the combination of a collapsible body, formed of pasteboard, keepers disposed within the body at corners thereof, and creased whereby they are adapted to be folded when the body is collapsed, and extend from the walls of the body when the same is opened, and a closure-wall also formed of pasteboard

and having an inwardly-directed, integral latch, the ends of which are arranged to engage the keepers of the body, substantially as specified.

8. In a box, the combination of a collapsible body, the foldable keepers arranged in said body at the corners thereof, and the bottom and cover having integral, inwardly-directed latches, the ends of which are arranged to enter between walls of the body and engage with the foldable keepers thereof, substantially as specified. 30

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

SIMON DALSHIMER.

Witnesses:

GRAFTON L. MCGILL,
THOMAS E. TURPIN.