F. H. HOUGHLAND.
FOLDING CONTAINER.
APPLICATION FILED MAR. 8, 1917.

1,253,489.

Patented Jan. 15, 1918.

Fig. 1.

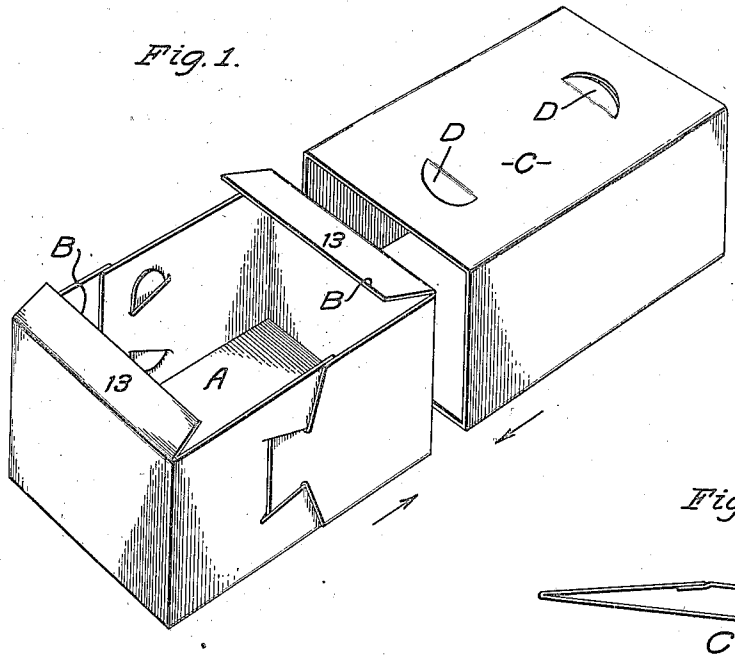


Fig. 2.



Fig. 3.

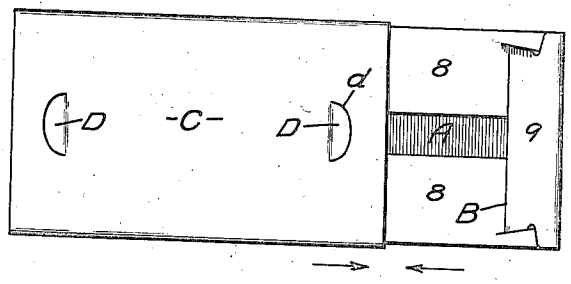


Fig. 4.

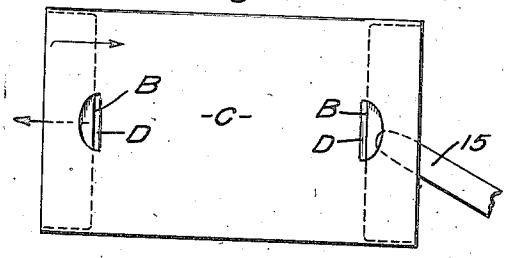


Fig. 6.

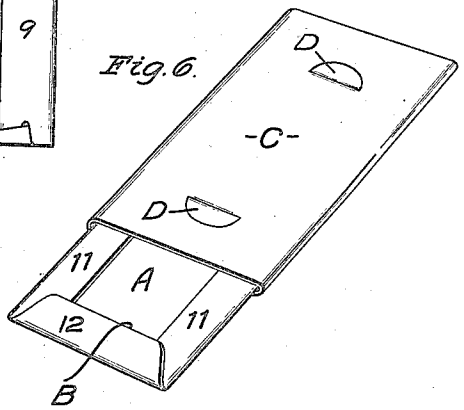
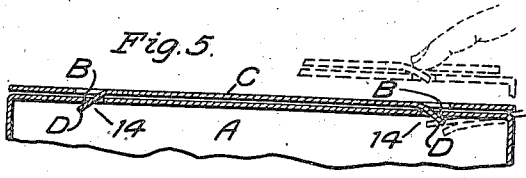


Fig. 5.



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UNITED STATES PATENT OFFICE.

FRANK H. HOUGHLAND, OF CINCINNATI, OHIO, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THE ECONOMY FOLDING BOX CO., OF CINCINNATI, OHIO, A CORPORATION OF OHIO.

FOLDING CONTAINER.

1,253,489. Specification of Letters Patent. Patented Jan. 15, 1918.

Application filed March 8, 1917. Serial No. 153,445

To all whom it may concern:

Be it known that I, FRANK H. HOUGHLAND, residing at Cincinnati, Hamilton county, State of Ohio, have invented certain new and useful Improvements in Folding Containers, of which the following is a clear, full, and exact description, attention being called to the drawing which accompanies this application and forms a part thereof.

This invention concerns boxes and containers made of pliable material, like paper, paste-board or cardboard for instance and which are supplied to users in knock-down form or in flat blanks cut to proper form and creased to permit folding for the purpose of forming the container to its intended shape.

The particular object of my invention is to provide means to hold such containers to their shape, to close them so that they retain their contents and to lock them after closed in a manner whereby the closing means are securely held in place without the aid or use of additional sustaining means such as wrapping paper, twine, adhesive means or devices involving the use of an adhesive substance like stickers for instance.

Another object is to construct these locking means so that a container may be readily opened without impairing its security thus permitting ready inspection of the contents whenever necessary if the containers are sent through the parcel post service of the mails.

In the following specification and particularly pointed out in the claims at the end thereof is found a full description of my invention including its parts, manner of use and construction which latter is also illustrated in the accompanying drawing in which:

Figure 1 shows in perspective view a container in form of a folding box and the closing and locking means provided for it as contemplated by my invention.

Fig. 2 shows an end-view of the closing and locking means as they appear in collapsed state.

Fig. 3 in a top-view illustrates manner of manipulation required for the purpose of closing the container and of locking the closing means in position thereon.

Fig. 4 in a similar view shows the container closed and locked, illustrating also manipulation required for the purpose of unlocking the closing means to permit access to the container.

Fig. 5 is an enlarged longitudinal section through the complementary locking means while in engagement with each other, illustrating also in dotted lines manner of manipulation for locking and unlocking.

Fig. 6 shows in perspective view my invention applied to a flat container in form of a folder which, after closed and locked, assumes the form of an envelop or pocket.

The container itself indicated at A may be constructed in any of the approved ways known to the trade.

As shown in Fig. 1, it is in form of a folding box shaped up from a suitable blank cut to the required shape and creased along the lines where the blank is to be folded to form the sides.

As shown in Fig. 6, it is in form of a flat folder or pocket.

The top of this container may be substantially open as shown in Fig. 1, or, after receiving its contents, it may be entirely or partly closed as shown in Fig. 3 by means of flaps 8—8 which are provided and are turned in from the sides and interlocked with flaps 9 which are turned in from the ends.

As shown in Fig. 6 portions from the edges of a flat sheet are turned up and folded over the contents which are presumed to be in shape of a flat object.

These folded portions form flaps, those turned up from the longitudinal edges being shown at 11, the end flaps being shown at 12.

Irrespective of any particular construction and arrangement of the container it is necessary that the same is provided with two locking edges to co-act with the means provided by my invention for closing and locking the container as will be presently described.

These locking edges are indicated at B and may be obtained by forming flaps 13 for the purpose as shown in Fig. 1 or the free edges of flaps 9 shown in Fig. 3 and of flaps 12 shown in Fig. 6 may serve for the purpose.

They may also be obtained by removing part of the material from a solid top or from any side of the container as shown at 14 in Fig. 5.

The closing means for the container and contemplated by my invention consists of a tubular slide C which may be four-sided as shown in Fig. 1 or it may be flat and in form of a sheath as shown in Fig. 6.

A four-sided slide as shown in Fig. 1, before use may be collapsed and flattened out as shown in Fig. 2.

In one side of such a slide and so as to be capable of coaction with locking edges B, I provide locking tongues D by suitably cutting and creasing the material of the slide to form the tongues and as best shown in the drawing.

The container after having received its contents is closed by means of the slide both being pushed into engagement with each other as shown in Fig. 3 so that the container is within the slide.

If the container has no cover to close its open top, that part of the slide which passes over the open top forms the closing cover for such top.

If the container has a cover, the slide serves to hold it in its closed position.

In pushing the two into engagement with each other, one of the locking tongues, the one at the advancing end of the slide as indicated at *d* is Fig. 3 is pressed down with one finger so that it may pass under its complementary locking edge B (observe dotted lines in Fig. 5).

After in position the other locking tongue is depressed in a similar manner until it slips under its locking edge whereby slide and container become locked to each other and are held against movement in either direction with the slide closing the open top of the container or holding a cover for the top thereof in position.

For disengaging the locking means, to permit removal of the slide and access to the container one of the locking tongues is released from its locking edge by depression of the latter by means of any suitable flat implement, a knife-blade 15 for instance as shown in Fig. 4, also in dotted lines in Fig. 5 after which slide and container may be separated from each other by shifting one with respect to the other in the direction as indicated by the arrows in Fig. 4.

It is preferable to have the locking edges and their complementary locking flaps located in the same plane but such is not absolutely necessary and one may be located in one plane and the other in another plane or both might be located in a plane not coincident with the top of the container as shown at *a* in Fig. 4 which might be a side or the bottom of the container.

Having described my invention I claim as new:

1. A container comprising an inner containing member and an outer member formed to inclose and slide over said inner member, the inner member being formed with spaced locking edges which project toward each other, and the outer member being formed with complementary locking flaps extending in opposite directions from each other and adapted to interlock with the locking edges of said inner member when the parts are assembled, whereby said members are locked together, substantially as set forth.

2. A container comprising an inner containing member and an outer member adapted to inclose and slide over said inner member, said inner member being formed with projecting locking edges spaced from each other and from the ends thereof, and said outer member being formed with complementary locking flaps extending in a direction opposite to that of the locking edges of the inner member, whereby when said members are assembled and said locking elements engaged, the two members are securely locked against relative longitudinal displacement, substantially as set forth.

3. The combination with a container provided with locking flaps, of a collapsible slide fitted to said container and provided with locking tongues projecting in opposite directions to each other and complementary to said locking flaps and adapted to engage them for the purpose of holding container and slide in their engaged position and against movement of either in either direction.

4. In combination with a container provided with foldable locking flaps arranged in spaced relation, of a slide adapted to receive said container and provided with locking tongues projecting from each other and adapted to engage said locking flaps so as to prevent movement of either the engaged slide or the container in either direction.

In testimony whereof I hereunto affix my signature.

FRANK H. HOUGHLAND.