

May 13, 1941.

J. R. HALL

2,241,992

STOP HINGE

Filed May 11, 1940

Fig. 1.

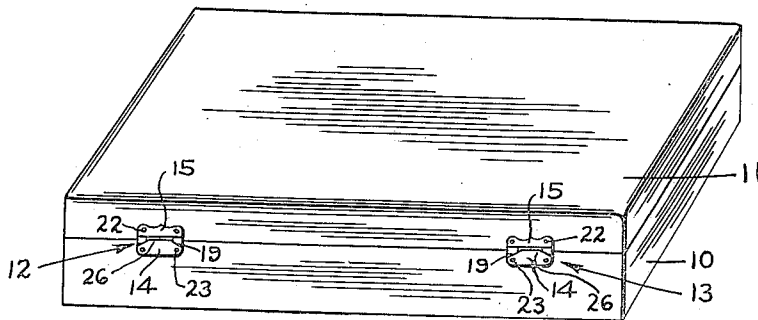


Fig. 2.

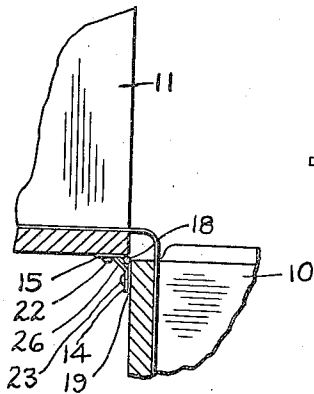


Fig. 3.

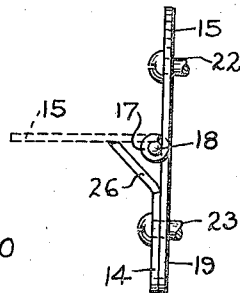


Fig. 5.

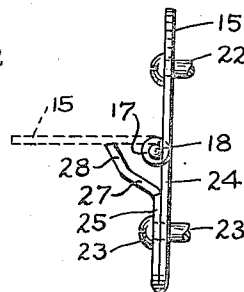


Fig. 6.

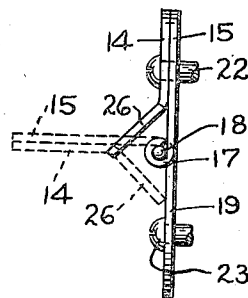
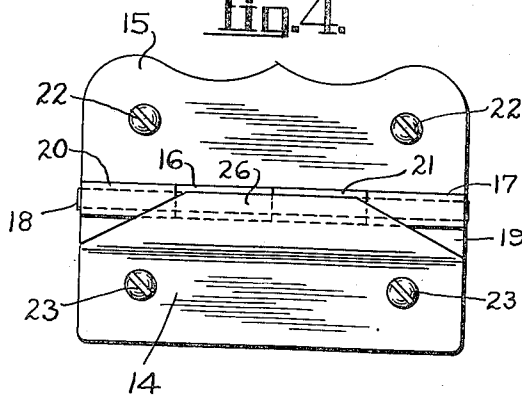


Fig. 4.



INVENTOR
John Rollin Hall.
BY
H. G. Marming
ATTORNEY

UNITED STATES PATENT OFFICE

2,241,992

STOP HINGE

John Rollin Hall, Meriden, Conn.

Application May 11, 1940, Serial No. 334,606

2 Claims. (Cl. 16—191)

This invention relates to stop hinges for silverware boxes or the like, and more particularly to an improved form of stop hinge adapted to support the box cover in open position.

One object of this invention is to provide a stop hinge of the above nature including an angular late member associated with one leaf of a butt hinge and adapted to cooperate with the other leaf thereof to limit the amount of swinging movement between said hinge leaves in one direction.

A further object of this invention is to provide an improved stop hinge of the above nature which will be relatively inexpensive to manufacture, simple in construction, compact, ornamental in appearance, and very efficient and durable in use.

With these and other objects in view, which will appear as the description proceeds, there have been illustrated in the accompanying drawing several forms in which the invention may be conveniently embodied in practice.

In the drawing:

Fig. 1 is a perspective view in closed condition of a box upon which the improved stop hinges of this invention have been installed.

Fig. 2 is an enlarged broken sectional view of the box in open condition, and showing the stop hinge as it appears during use with the cover being supported in open position.

Fig. 3 is an enlarged side view of the stop hinge in closed position.

Fig. 4 is an enlarged face view of the stop hinge shown by itself.

Fig. 5 is an enlarged side view of a modified form of stop hinge.

Fig. 6 illustrates a modified form of stop hinge in which the stop plate member is shown in reversed position on the cover of the box, instead of on the body as in the first two forms.

Referring now to the drawing wherein like reference numerals designate like parts throughout the several views, the numeral 10 denotes a box which may be adapted to hold and display a set of silverware, cigars, or other articles, and having a cover 11 adapted to be supported in open position substantially at right-angles to the body of said box 10, whereby the articles therein may be displayed on a table or, if desired, may be carried about in open condition by using the cover 11 as a handle.

To obviate the necessity of providing foldable or collapsible side straps of fabric or metal within the interior of the box to limit the amount of opening of the cover 11, provision is made of a

pair of butt hinges, generally indicated by the numerals 12 and 13, and each of said butt hinges is provided with an angular stop plate 14 which is adapted to limit the amount the cover may be opened with respect to the body of the box.

While both of the butt hinges 12 and 13 are herein shown provided with the stop plate 14, it will be understood that it is within the scope of the present invention to omit the stop plate from one of said butt hinges if desired. Each of the butt hinges 12 and 13 is identical in form and (as most clearly shown in Fig. 4) comprises a box cover top leaf 15, having loops 16 and 17 formed integral therewith, and adapted to embrace a hinge pin 18, and a box body bottom leaf 19 having loops 20 and 21 formed integral therewith and also adapted to embrace the hinge pin 18 and alternating with the loops 16 and 17, whereby the leaves 15 and 19 may be hingedly secured together. The leaves 15 and 19 are adapted to be securely fastened to the cover 11 and the body of the box 10 respectively by screws 22 and 23, the screws 23 passing through the stop plate 14 as well as the leaf 19.

The stop plate 14 may be formed separately from the leaf 19 (as shown in Fig. 3), or it may be made integral therewith, as indicated in Fig. 5, wherein a member 25 is shown bent upwardly from the base of a leaf 24. In either case the stop members 14 and 25 are adapted to be secured in position upon the lower leaves 19 and 24 of the butt hinges by the screws 23 which secure these respective leaves to the body of the box 10.

In order to afford a more secure base for supporting the upper leaf of the butt hinge, the member 14 is provided with a lip 26 forming a stop member, said lip extending to the mid-point of said butt hinge at an inclination of about forty-five degrees, and being adapted to engage against the upper leaf 15 when the cover 11 is swung upwardly from the position of Fig. 1 into the open position indicated in Fig. 2 to limit the opening movement of said cover.

The stop member 25 of the modified form of stop hinge shown in Fig. 5 is provided with a similar inclined lip 27, but in this case the upper end 28 of the lip is bent inwardly at a steeper pitch angle than the lower end thereof.

In the modified form of the invention shown in Fig. 6, the stop hinge is identical with that shown in the first form of Figs. 1 to 4, except that it is reversed with respect thereto, with the stop plate 14 located upon the box cover 11. In this instance, the inclined lip 26 extends

downwardly and is adapted to engage the leaf 19 secured to the box 10. By arranging the member 14 in this reverse manner, the hinge pin loops 16, 17 and 20, 21 will be partially covered by the stop plate member 14, and dirt will be prevented from collecting in the pocket between said lip 26 and said hinge loops.

While there have been disclosed in this specification several forms in which the invention may be embodied, it is to be understood that these forms are shown for the purpose of illustration only, and that the invention is not to be limited to the specific disclosure, but may be modified and embodied in various other forms without departing from its spirit. In short, the invention includes all the modifications and embodiments coming within the scope of the following claims.

Having thus fully described the invention, what is claimed as new and for which it is desired to obtain Letters Patent, is:

1. In a stop hinge, a hinge butt having a pair of flat leaves pivotally secured together by a

hinge pin, a stop plate coextensive in width with said leaves secured to one leaf thereof and having a reduced tapered lip portion spaced from said hinge pin and inclined from said leaf for engaging the other leaf of said butt to limit the relative opening movement of said leaves and screw means to secure said butts to the lid and body, respectively, of a box, one of the said screw means also passing through said stop plate for holding it in operating position.

2. In a stop hinge, a butt comprising a pair of hinge leaves pivotally secured together, a stop plate member coextensive in width with said butt secured upon one leaf and having an inner lip inclined from the remainder of said member at an angle of substantially forty-five degrees, the edge of said lip serving to engage the other leaf of said butt to limit the swinging movement thereof with respect to said first leaf, said stop plate being integrally connected to and folded over from the bottom of the outer edge of the leaf of said butt to which it is secured.

JOHN ROLLIN HALL.