

Dec. 28, 1943.

O. H. HULTIN

2,337,892

PACKAGE

Original Filed Aug. 16, 1941

Fig. 1.

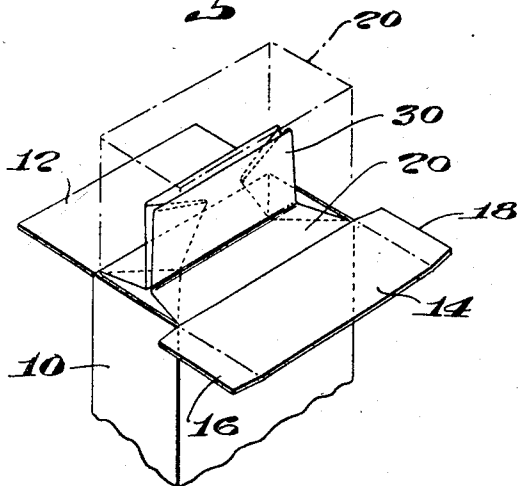


Fig. 2.

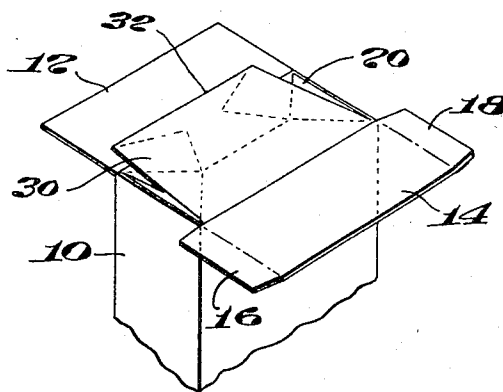


Fig. 3.

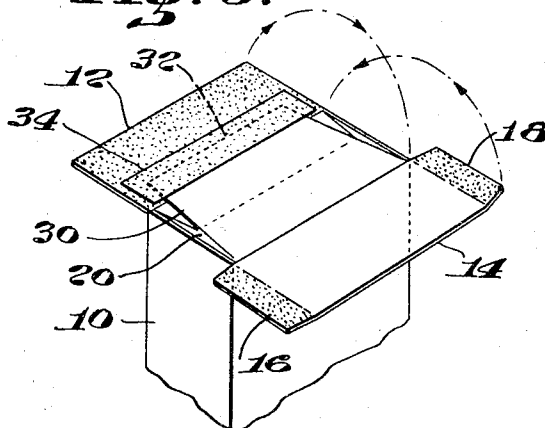
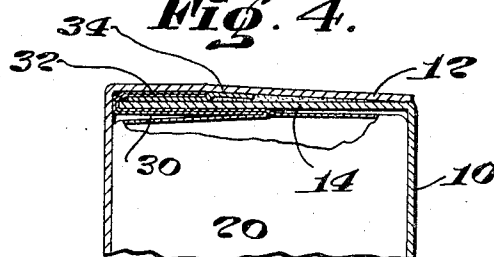


Fig. 4.



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UNITED STATES PATENT OFFICE

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PACKAGE

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Original application August 16, 1941, Serial No. 407,165. Divided and this application July 14, 1942, Serial No. 450,902

1 Claim. (Cl. 229-14)

This invention relates to a package.

The object of the invention is to provide a novel and improved lined package in which provision is made for closing and sealing the mouth of the liner in a novel and improved manner.

With this general object in view and such others as may hereinafter appear, the invention consists in the package hereinafter described and particularly defined in the claim at the end of this specification.

In the drawing illustrating the preferred embodiment of the invention, Fig. 1 is a perspective view of a lined package embodying the present invention; Fig. 2 is a similar view showing the folded lining top closure laid against the top of the package; Fig. 3 is a perspective view illustrating a preferred form of seal for the mouth of the lining; and Fig. 4 is a cross-sectional view showing the construction of the package after it has been closed and sealed.

In general, the present invention finds particular use in the production of a lined package comprising a lined carton having a novel and improved top closure which is characterized by the provision of but two opposed closing flaps for the top of the carton and in which the mouth of the lining is provided with a closure such as to reduce to a minimum the liability of leakage of the material therethrough. The preferred form of top closure for the mouth of the lining bag as illustrated may be formed by folding inwardly two opposed end portions of the extended top of the lining bag to form a pleated closure, the mouth portion of which may be sealed in a novel manner to effectively enclose the contents of the lining bag.

In practice, such top closures for the mouth of the lining bag are preferably performed by suitable mechanism in a packaging machine while the bag is supported in the outer container or carton. When, as heretofore, the lining closure is performed while the bag is supported in the conventional carton provided with the usual four top closing flaps comprising two opposed end flaps and two opposed side flaps, several difficulties are encountered and disadvantages result from the presence of the two opposed narrow end flaps of the carton. In practice, the mechanism for performing the top folding operations of the mouth of the lining must of necessity be disposed so as to sweep through the path of the top closing flaps of the carton so that means for bending the flaps outwardly and for retaining them in this position during the folding operation had to be provided.

In accordance with the present invention, the carton is provided with but two opposed top closing flaps, the narrower opposed flaps being eliminated, whereby to enable such top closures to be more readily and conveniently performed upon existing machines in which the mechanism for bending the end flaps outwardly may be eliminated. In addition, the elimination of the two opposed narrow end closing flaps serves to reduce the bulk or thickness of the complete top closure thus enabling a neater appearing package to be produced.

In order to effectively seal the carton at the ends where the closing flaps are omitted, the present carton is provided with sealing wings upon one of the remaining side flaps which are arranged to close over the adjacent edges of the carton to form a relatively tight and efficient seal for the top of the carton.

Referring now to the drawing, 10 represents a package or carton provided with but two opposed closing flaps 12, 14, the latter being provided with end sealing wings 16, 18. The package is provided with a suitable inner liner or bag 20 within the carton, and the mouth of the lining is arranged to project above the top of the opened package, as illustrated in dotted lines in Fig. 1. The illustrated top closure for the mouth of the lining bag 20 may be formed by folding inwardly two opposed portions of the extended mouth of the lining bag and then bringing together the remaining two opposite sides to form an upstanding closure or tab 30 as shown in Fig. 1. The upstanding tab portion 30 of the closure is then folded down into engagement with the top of the package with the upper or mouth portion 32 thereof extending over the edge of the container and resting upon a part of the side flap 12 as shown in Fig. 2.

In practice, the carton is then passed through suitable adhesive applying mechanism to provide a coating of adhesive over the entire inner surface of the carton side flap 12, and upon the inner surfaces of the sealing wings 16, 18 of the side flap 14. The side flap 14 is then folded inwardly over the top of the closed lining bag and the sealing wings 16, 18 are folded down and pressed into sealing engagement with the adjacent panels of the carton. Finally, the remaining carton flap 12 is closed over the flap 14 and pressed into sealing engagement therewith to provide the completely sealed package as shown in Fig. 4. Thus, an efficient and effective top closure for the lining and the carton is provided without the use of the usual narrow end flaps of the carton.

In order to provide a sealed closure for the mouth portion 32 of the lining in a simple and efficient manner, the mouth portion extending beyond the edge of the closed flap 14 may be closed by a sealing strip 34 which may be secured over the extended mouth portion 32 and in engagement with the inner surface of the closing flap 12, as clearly shown in Fig. 3. Thereafter, the carton closing flap 14 provided with the sealing wings 16, 18, is folded over the top of the lining and the flap 12 together with the sealing strip 34 is provided with a coating of adhesive. The completely closed and sealed carton, as illustrated in Fig. 4 shows the sealing strip 34 and flap 12 adhesively secured to the top of the flap 14, and the mouth portion 32 interlocked between the upper and lower carton flaps in a manner such as to provide a secure and positive seal of the lining bag and the outer carton.

From the above description, it will be seen that the construction of the present package is such as to facilitate the performance of the top closing operation for the mouth of the lining and enables an efficient carton closure to be made in a manner such as to effectively seal the contents of the container in a novel and improved manner with but two of the usual four carton closing flaps.

While the preferred embodiments of the invention have been herein illustrated and described, it will be understood that the invention may be embodied in other forms within the scope of the following claim.

This application is a division of my copending

application Serial No. 407,165, filed August 16, 1941.

Having thus described the invention, what is claimed is:

5 As a new article of manufacture, a lined package containing a commodity comprising a carton having but two top closing flaps formed as extensions of two opposed walls of the carton, a lining bag within the carton having a top closure 10 formed by folding inwardly two opposed portions of the top thereof and bringing the remaining opposed portions together to form an elongated tab having a pleat in each end, said tab being 15 folded to lie flat on top of the lining bag and having the mouth portion thereof extending beyond the adjacent edge of the bag and onto one of said carton closing flaps, said mouth portion being closed and retained in engagement with said one flap by a sealing strip, the second 20 top closing flap being provided with laterally extended sealing wings arranged to be folded down and adhesively secured to the remaining two opposed walls of the carton, the outer edge of said second flap engaging said tab below the mouth 25 portion thereof, said one flap and the sealing strip thereon being provided with adhesive, said one flap being folded over with said extended mouth portion of the lining bag and said sealing strip to adhesively secure said one flap to the 30 top of said second flap whereby to interlock the mouth portion of said tab between said top closing flaps.

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