July 24, 1923 1,463,113

O. BIBB

BAG CLOSURE

Filed April 14, 1921

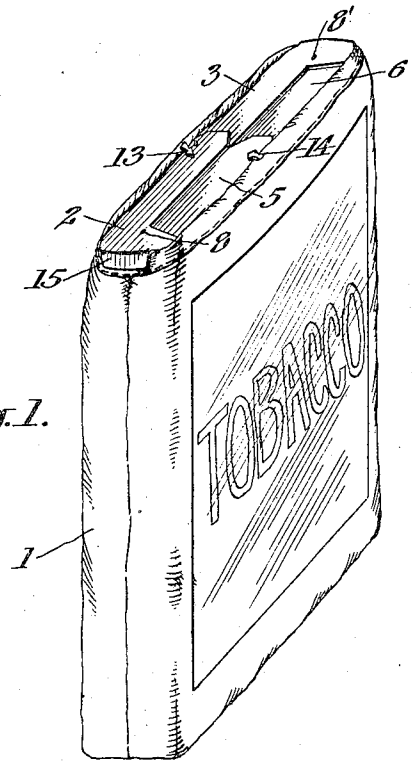


Fig. 1.

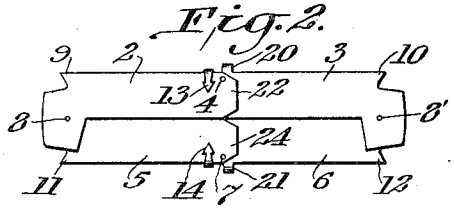


Fig. 2.

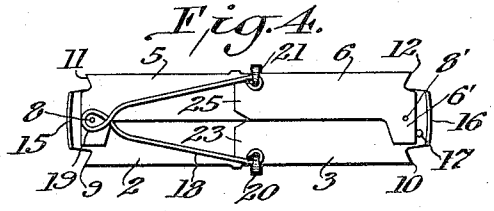


Fig. 4.

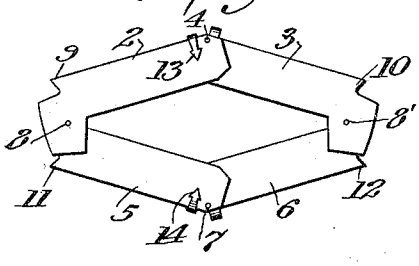


Fig. 3.

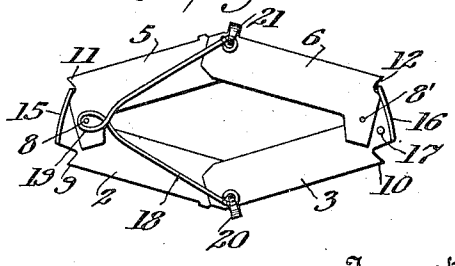


Fig. 5.

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UNITED STATES PATENT OFFICE.

OTIS BIBB, OF LOUISVILLE, KENTUCKY.

BAG CLOSURE.

Application filed April 14, 1921. Serial No. 461,257.

To all whom it may concern:

Be it known that I, OTIS BIBB, a citizen of the United States, residing at 432 East Caldwell Street, Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Bag Closures, of which the following is a specification.

This invention relates to a detachable bag closure which is specially designed for use with the small bags in which tobacco is commonly sold, but the invention is not limited in its application to use with such bags, but may be used with other fabric bags or sacks.

An object of the invention is to provide a bag closure which may be readily attached to a fabric bag and which will be securely retained in place until it is desired to remove the closure therefrom. A further object of the invention is to provide a closure which may be easily opened by the pressure of the thumb and finger of one hand and which will automatically close the bag opening when the pressure is released. A still further object of the invention is to provide a closure as above specified which shall be of simple construction and which can be manufactured at a low cost as it is not desired to provide an expensive or costly closure for use with a relatively inexpensive bag of tobacco or other commodity.

These objects are attained in a specific embodiment of the invention which is illustrated in the accompanying drawing in which

Fig. 1 is a perspective view of a bag with the invention applied thereto;

Figs. 2 and 3 are respectively, top plan views showing the closure in closed and open position; and

Figs. 4 and 5 are, respectively, bottom plan views showing the closure in closed and open position.

In the drawing, the numeral 1 designates the bag to which the closure is applied. The main elements of the closure consist of four L-shaped pieces of metal or other suitable material. One side of the closure comprises the two relatively long L-members 2 and 3 whose long legs overlap at the central part of the closure and are connected by means of a pivot 4. The other side of the closure comprises two somewhat shorter L-members 5 and 6, whose long legs are similarly connected by a pivot 7. The short ends of the four L-members are thereby disposed at opposite ends of the closure and are arranged with the ends of members 2 and 3 overlying, respectively, the ends of members 5 and 6. The adjacent ends of members 2 and 5 and of members 3 and 6, respectively, are connected by pivots 8, 8′, which pivots are located substantially on the line of the meeting inner edges of the four L-members. As the pivots 4 and 7 are located on the opposite sides of the line on which pivots 8, 8′ lie, the L-members at each side of the closure act as toggle levers and the closure may be opened by causing pivots 8, 8′ to approach each other, thus "breaking" the toggles.

The outer corner of each of the members 2, 3, 5 and 6 are notched to provide, respectively, projections 9, 10, 11 and 12, for engagement with the fabric of the bag to which the closure is to be applied. Barbed projections 13 and 14 on L-members 2 and 5 respectively, extend upward a slight distance from the respective members and then extend inwarlly to overlie the same.

For convenience in opening the closure, the longer members 2 and 3 are provided at their opposite ends with short downwardly extending pressure flanges 15 and 16, respectively. The opening movement of the closure is limited by the engaging of flanges 15 and 16 with the inner edge of projections 11 and 12, respectively or by engaging with the fabric of the bag which extends over such projections. The closing movement is limited by a stop 17 which projects from the lower surface of member 3 and is engaged by the short leg 6′ of the member 6. The parts are so arranged that the stop 17 comes into play when the inner edges of the opposed L-members come into the closed position, in which position the inner edges of the opposed members may or may not overlap slightly.

For the purpose of automatically closing the bag when pressure upon the flanges 15, 16 is released, a substantially U-shaped spring 18 is provided, and for securing increased resiliency a loop 19 is provided at the base of spring 18. The spring 18 is held in position by means of projections 20, 21 which extend from the outer edges of members 3 and 6 respectively, at points near the center of the closure, which projections 20, 21 pass through coils at the ends of spring 18, and are bent into engagement

with the lower surface of the respective members 3 and 6.

The ends of the long legs of members 2, 3, 5 and 6 are beveled off as shown at 22, 23, 24, 25, respectively, particularly, for the purpose of preventing the ends of said members which extend beyond the pivotal points from engaging the bag when the closure is moved to open position.

To attach the closure to a bag the opposite top portions of the bag are pierced by the barbed projections 13 and 14 and the ends of the bag are then drawn over and frictionally engaged by the projections 9, 10, 11 and 12. The usual drawstrings, not shown, with which the bag is customarily supplied may then be removed, or if desired, the strings may be drawn taut, tied and the loose ends severed. The bag closure is opened into the position shown in Fig. 3 by breaking the toggles 2, 3 and 5, 6 through pressure applied by the thumb and finger upon the flanges 15 and 16. The inclined inner edges of two lower L-members define a pouring opening, which may be relatively long and shallow when the longer axis of the closure is horizontal, as shown in Fig. 3, or a deep and narrow opening may be used by holding the long axis vertical. When the pressure upon flanges 15, 16 is released the spring 18 operates to return the members to the closed position and to maintain the closed position, thus holding the contents of the bag as effectively as though it were closed by the customary draw strings.

The closure comprises but few and simple parts, and the main elements of the closure may be easily and cheaply manufactured, as by stamping from metal plates.

It is to be understood that my invention is not limited to the specific embodiment herein described, but changes may be made in the various elements, or in the relative size, shape and arrangement of said elements, for instance, for adapting my invention to bags or sacks of other sizes or shapes.

I claim:—

1. A bag closure comprising four flat members arranged within a bag and substantially in the plane of the opening thereof, pivotal connections between the adjacent ends of said members whereby two oppositely disposed toggles are formed, pressure flanges integral with certain of said members and means for urging said toggles to closed position.

2. A bag closure comprising four flat members arranged within a bag and substantially in the plane of the opening thereof, pivotal connections between the adjacent ends of said members whereby two oppositely disposed toggles are formed, means for attaching the members to the bag and means for urging the toggles to closed position.

3. A bag closure comprising four flat members arranged within a bag and substantially in the plane of the opening thereof, pivotal connections between the adjacent ends of said members whereby two oppositely disposed toggles are formed, means for attaching the members to the bag and pressure flanges integral with and extending at right angles to certain of said members, said pressure flanges extending along the edges of the bag to which the closure is applied.

4. A bag closure comprising four pivotally connected members, barbed projections carried by said members for attaching said members to a bag, and projections on said members for frictionally engaging the bag.

5. A bag closure comprising four pivotally connected members arranged to form two oppositely disposed toggles, a U-shaped spring for urging said members to closed position, means for connecting the ends of said spring to certain of said members at points near the center of said closure.

6. A bag closure comprising four flat members arranged within a bag and substantially within the plane of the opening thereof, pivotal connections between the adjacent ends of said members whereby two oppositely disposed toggles are formed, projections extending from the outer edges of said members and providing means for attaching said closure to the bag, a spring for urging the members to closed position, and projections extending from the inner edges of certain of said members providing means for connecting said spring to the closure.

7. A bag closure comprising four flat members arranged within a bag and substantially in the plane of the opening thereof, pivotal connections between the adjacent ends of said members whereby two oppositely disposed toggles are formed, a U-shaped spring lying below and in a plane substantially parallel to the lower face of the closure and means for connecting said spring to certain of said members near the center of the closure.

8. A bag closure for use with fabric bags comprising two oppositely disposed toggles, each of said toggles being formed of two flat L-shaped members and means for pivotally connecting the long legs of said L-shaped members, and means pivotally connecting the short legs of said L-shaped members at the respective ends of said toggles.

9. A bag closure for use with fabric bags comprising two oppositely disposed toggles, each of said toggles being formed of two flat L-shaped members and means for pivotally connecting the long legs of said L-shaped members, means pivotally connecting the short legs of said L-shaped members at the respective ends of said toggles, and pressure flanges extending at right angles to the

short legs of the L-shape members of one of said toggles.

10. A bag closure for use with fabric bags comprising two oppositely disposed toggles, each of said toggles being formed of two flat L-shaped members and means for pivotally connecting the long legs of said L-shaped members, means pivotally connecting the short legs of said L-shaped members at the respective ends of said toggles and projections integral with said members and adapted to be passed through the fabric of the bag, said members having portions cut away to provide projections at the outer corners thereof for frictionally engaging the bag.

11. A bag closure for use with fabric bags consisting of two oppositely disposed toggles, one of said toggles forming one side of the closure and comprising a pair of flat L-shaped members arranged with their short legs at the ends of the closure and their long legs overlapped at the center of the closure, said second toggle forming the opposite side of said closure and comprising a second pair of similarly arranged flat L-shaped members, the short legs of said second toggle members overlying the short legs of the first toggle member, pivotal connections between the overlapped ends of the long legs at the respective sides of the closure and between the overlapped short legs at the respective ends of the closure, means for attaching said members to the inside of a fabric bag and means for urging the toggles to closed position.

In testimony whereof, I affix my signature.

OTIS BIBB.