

No. 830,735.

PATENTED SEPT. 11, 1906.

H. A. OLSSON.
BOTTLE CLOSURE.
APPLICATION FILED FEB. 3, 1906.

Fig:1.

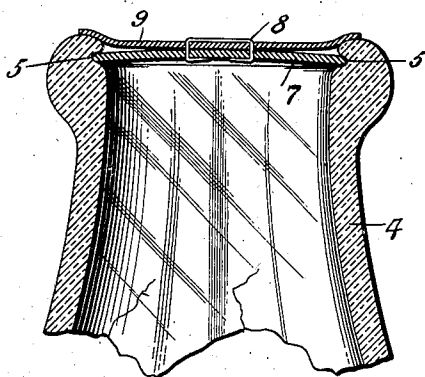


Fig:4.

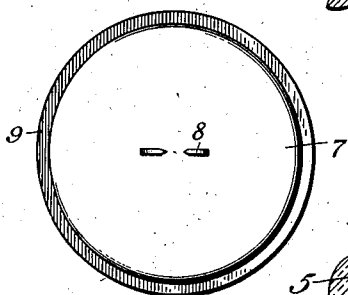


Fig:2.

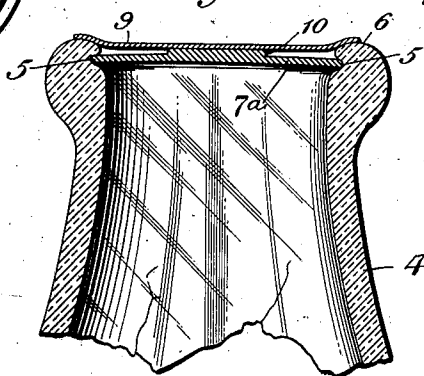


Fig:5.

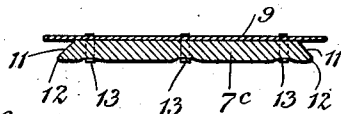
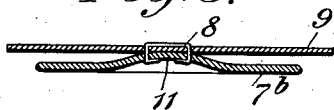


Fig:3.



Witnesses:
John A. Rennie
Henry L. Bauer

Inventor:
Henry A. Olsson
By
Stan Cross & Bowersock
his Attorneys.

UNITED STATES PATENT OFFICE.

HENRY A. OLSSON, OF NEW YORK, N. Y.

BOTTLE-CLOSURE.

No. 830,735.

Specification of Letters Patent.

Patented Sept. 11, 1906.

Application filed February 3, 1906. Serial No. 299,230.

To all whom it may concern:

Be it known that I, HENRY ALBERT OLSSON, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Bottle-Closure, of which the following is a full, clear, and exact description.

This invention relates to closures for bottles and the like, having particularly in mind means for protecting against moisture and foreign matter the pasteboard disks now in common use for temporarily sealing milk-bottles.

The object of this invention is to provide simple means for protecting the cap or sealing-disk and the space immediately thereabove, at the same time providing means for facilitating the operation of removal of said cap, and both at a minimum of cost of manufacture, it being well known that such closures must be secured by dealers at exceedingly small cost.

My invention will be more readily understood by reference to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a vertical section of the top portion of a bottle or jar equipped with a closure embodying my invention. Figs. 2, 3, and 5 are similar views showing modifications of the closure. Fig. 4 is a bottom plan view of the closure shown in Fig. 1, but which, except as to the fastening device, is an illustration of all forms.

Referring now to the drawings in detail, numeral 4 refers to the neck or upper portion of a common form of milk-bottle having the usual annular groove or recess 5 in the interior thereof just below the edge or top 6 of the mouth of said bottle. It is well known that this groove or recess 5 is designed to receive a yielding stopper in the form of a circular disk, usually of stiff paper board, which is forced past the points of smaller diameter and springs into said groove to seal said mouth. I prefer to employ a similar disk-stopper 7, but secure thereto concentrically, preferably by means of a wire staple or fastener 8, a circular covering-sheet 9 of greater diameter than the disk or stopper 7 and adapted to project over the edge or top 6 of the mouth of the bottle.

It will be apparent that where the disk 7 alone is employed there will be provided at the top of the bottle when sealed a disk-

shaped cavity of which said disk 7 forms the bottom. As these bottles are frequently exposed to the weather and to the melting ice in refrigerators and ice-boxes, it is obvious that this cavity forms a cup for the reception and accumulation of water and other foreign matter, which upon the removal of said cap is likely to be wholly or partially precipitated or to drain into the bottle.

The covering-sheet 9 not only prevents the accumulation of foreign matter upon the disk 7, but its projecting edge may be readily grasped by the fingers to effect the removal of the stopper 7, and in such removal any foreign matter which may have accumulated upon the top of the disk or covering 9 will be deposited outside of and not in said bottle.

The two connected disks (illustrated in Fig. 1) exemplify what I consider the simplest form of this invention. The matter of cost of manufacture is of the utmost importance in the provision of temporary stoppers of this kind, and while it might be preferable to avoid a structure wherein the comparative stiffness of the lower disk depressed the central portion of the upper disk as unavoidable in this construction this slight objection is offset by the exceeding simplicity of construction and consequent cheapness of cost of manufacture. These objections may be eliminated, however, at a small sacrifice in cost of production by constructing the lower disk as illustrated in Fig. 2, wherein I have shown the sealing-disk 7^a provided with a central raised portion 10. Such a disk obviously must be the result of more operations than merely that of cutting from a large sheet. It may be prepared by forming or stamping the same from pulp, or it may be of the form illustrated in Fig. 3, where the elevated portion 11 of the disk 7^b is raised by stamping or indenting. If this operation of stamping is done simultaneously with the cutting and with the material in moist and therefore more or less moldable or compressible condition, it will upon drying retain the shape illustrated and have sufficient resiliency to properly perform its function.

In Fig. 5 I have shown a stopper 7^c in the form of a thicker disk having a tapering or beveled periphery 11, which provides the edge 12, adapted to fit in the groove 5. The disk 7^c should be of sufficient thickness to bring the covering-sheet 9 when the device is adjusted to the bottle into a plane parallel to the base of the stopper 7^c. One or more

staples 13 or any other fastening means may be employed, or the two parts may be cemented together throughout the whole area of the top of the stopper. It is similarly obvious that in all constructions any other form of fastening means, such as shellac or any suitable cementing compound, and the modification of minor details of construction such as would naturally suggest themselves to one skilled in this art may be employed without departing from the spirit of my invention.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

15 1. A bottle-closure comprising a disk of comparatively stiff and resilient material and a more flexible disk of greater diameter, said disks being directly secured to each other and the peripheral portions of said disks being free and separable.

20 2. A bottle-closure comprising two disks of different diameters directly secured to each other at their middle portions only.

25 3. A bottle-closure comprising a disk of comparatively stiff and resilient material and a more flexible disk of greater diameter concentrically and directly secured to each other, the major and outer portion of each disk being free and separable from that of the other.

30 4. A bottle-closure comprising two disks of different diameter concentrically and di-

rectly secured to each other at their middle portions only.

5. A bottle-closure comprising an edged stopper adapted to enter the neck of a bottle and a covering-sheet adapted to project over the mouth of said bottle, said stopper and sheet being directly secured to each other.

6. A bottle-closure comprising a disk adapted to enter the neck of a bottle and a disk adapted to project over the mouth thereof, said disks being suitably secured to each other and one of said disks being provided with a raised portion at the points of attachment whereby said disks are spaced from each other at other points thereof.

7. A bottle-closure comprising a disk adapted to enter the neck of a bottle, and a disk adapted to project over the mouth thereof, said disks being suitably secured to each other and the first-mentioned disk being raised at the points of attachment whereby said disks are spaced from each other at other points thereof.

In witness whereof I have signed my name to the foregoing specification in the presence of two subscribing witnesses.

HENRY A. OLSSON.

Witnesses:

HENRY R. BAUER,
FRED H. BOWERSOCK.