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PATENTED OCT. 16, 1906.

J. J. MOSER.
CAN CLOSURE.

APPLICATION FILED JULY 11, 1904.

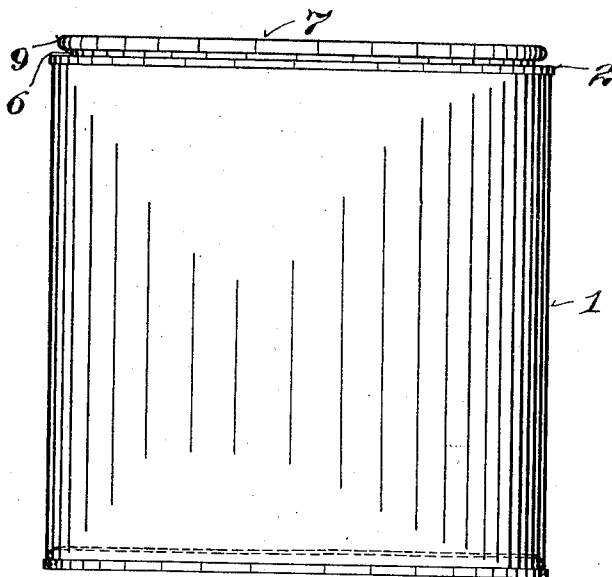


Fig. 1.

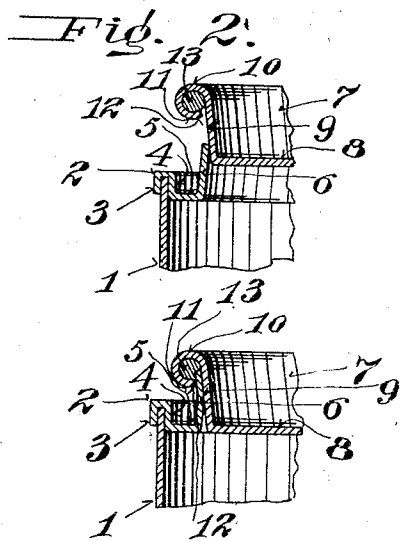


Fig. 3.

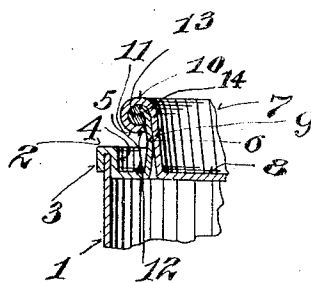


Fig. 4.

Witnesses.
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JOSEPH J. MOSER, OF WEST COVINGTON, KENTUCKY.

CAN-CLOSURE.

No. 833,332.

Specification of Letters Patent.

Patented Oct. 16, 1906.

Application filed July 11, 1904. Serial No. 216,005.

To all whom it may concern:

Be it known that I, JOSEPH J. MOSER, a citizen of the United States, residing in West Covington, in the county of Kenton and State of Kentucky, have invented certain new and useful Improvements in Can-Closures, of which the following is a specification.

It is the object of my invention to provide a new and improved closure for cans; and my invention will be readily understood from the following description and claims and from the drawings, in which latter—

Figure 1 is a side elevation of a can provided with my improved device, showing the same in closed relation. Fig. 2 is an enlarged central vertical section of my improved device, partly broken away, illustrating the can and its cover in relation for applying the cover to the can. Fig. 3 is a similar view of the same, showing the cover in closed relation. Fig. 4 is a sectional detail hereinafter referred to.

1 represents the body of the can. 2 is a rim portion. This rim portion is preferably an annular ring suitably secured to the top of the can. It preferably has an outer depending wall 3 and an inner depending wall 4 for forming a groove into which the upper edge of the can-body takes and in which it may be secured by any suitable means. The rim portion projects inwardly, as shown at 5, and has an inwardly and upwardly projecting lip 6, forming a mouth, preferably of the form of an upright frusto-cone, for receiving the cover 7.

The cover is formed with a transverse web 8, from which a preferably annular wall 9 projects upwardly and outwardly, preferably tapering or in the form of an inverted frusto-cone adapted to be received within the upright-frusto-cone-formed mouth of the can. The mouth of the can and side wall of the cover are tapered in opposite directions, the cover forming a plug for the mouth.

The upper edge of the wall of the cover is preferably curled to the side outwardly, as shown at 10, reversely bent toward said wall, as shown at 11, and provided with a slight upward inner curl, as shown at 12, for forming a bead or channel within which a packing 13 is adapted to be held. This packing or seal is preferably a sticky composition, but slightly subject to evaporation.

The reduced end of the plug or cover is received by the outwardly-projected free end

of the lip of the mouth of the can—that is to say, the free end of the lip of the mouth is presented to the plug when the latter is inserted, the plug tapering to a size larger than the diameter of the outer end of the mouth when the latter is in normal or unspread condition, the mouth being resilient. Upon pressure being applied to the top of the cover the cover is forced into the mouth and caused to hug the lip of the mouth, the tapering sides of the depending part of the cover spreading the same and in turn being squeezed thereby for causing a close joint between the plug and lip, extending a substantial distance longitudinally of the meeting inner and outer faces of the plug and lip, respectively. The outer edge of the lip is preferably the cut edge of the material of which the rim portion is composed—as tin, for instance. The cut edge of the lip affords additional resiliency to the lip increasingly toward the outer edge of the lip for permitting the outer edge to spread relatively more than the inner portion of the lip and permitting a greater belt of contact between the plug and lip. Forcing the tapered cover within the outwardly-projected lip causes the inner face of the lip to conform to the contour of the outer face of the cover, the lateral pressure of the lip acting against the wall of the cover for seeking and finding a close fit. The mouth of the said rim portion 2 is formed by an annular wall of the sheet metal composing the rim portion and terminates in the cut edge of the said lip which extends upwardly above the horizontal plane of the upper edge of the can-body for forming wide belt of contact with the plug after insertion of the latter. By the insertion of the plug in the manner explained that part of the upright-frusto-conical mouth above the horizontal plane of the upper edge of the can-body is spread by the inverted frusto-conical annular wall of the plug to form a widened seat for the latter, whereas said mouth below said horizontal plane is retained in upright-frusto-conical shape, acting with a reflexing tendency upon said seat, thus aiding in maintaining the hugging action and close fit of the mouth with the plug, the upright-frusto-conical shape of the mouth causing the cut edge of its lip to be spread to considerable extent for causing an especially good joint at said lip.

The inturned or reflected edge of the bead of the cover is preferably distanced from the

outer face of the tapering wall of the cover slightly less than the thickness of the lip. When the outer edge of the lip reaches the inturned edge of the bead of the cover, it makes contact with this inturned edge, preferably slightly spreading it and causing an additional joint or close fit between the inturned edge of the bead and the outer face of the lip and in turn causing the inner face of the lip to hug the outer face of the wall of the cover more closely.

Further depression of the cover causes the upper edge of the lip to take into the packing, the cut edge of the lip having joint formed therewith by the packing, forming a seal within the bead of the cover about the mouth of the can for forming an additional tight joint or closure for the can.

The entry of the lip into the body of packing also compresses the body of packing by reason of the packing being confined within the bead, the exit from the bead being closed by the entrance of the lip therein.

If desired, the parts may be made of such relative size and the pressure exerted may be such that the upper edge of the lip is caused to curl slightly within the bead, as shown at 14 in Fig. 4.

The cover may be readily removed or pried off by a suitable instrument inserted under the bead and may be used repeatedly without injury for gradual consumption of the contents of the can or package by the user. My improved device is simple, is capable of being cheaply made, and provides for secure closing and sealing of the can or package.

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

1. A can having an annular rim portion, said rim portion formed with an inner groove extending below the horizontal plane of the top edge of the can-body and an inner upwardly and inwardly tapering annular wall in the form of an upright frusto-cone having an upper cut lip extending above said top edge of said can-body, said cut lip formed by the cut edge of the sheet metal of said wall, with a plug formed of a transverse web from which an annular wall tapers upwardly and outwardly in the form of an inverted frusto-cone, having an annular outer bead, the portion of smaller di-

ameter of said inverted-frusto-conical plug having an outer diameter equaling the inner diameter of the part of smaller diameter of said upright-frusto-conical lip, the said portion of smaller diameter of the former being received by and engaging the part of smaller diameter of the latter, said inverted-frusto-conical plug spreading said lip and mouth above the horizontal plane of said top edge of said can-body for forming a seat for said plug above said top edge of said can-body, with said annular wall of said mouth maintained in upright-frusto-conical shape below said horizontal plane of said top edge of said can-body when said plug is seated, substantially as described.

2. A can having an annular rim portion, said rim portion formed with an inner groove extending below the horizontal plane of the top edge of the can-body and an inner upwardly and inwardly tapering annular wall in the form of an upright frusto-cone having an upper cut lip extending above said top edge of said can-body, said cut lip formed by the cut edge of the sheet metal of said wall, with a plug formed of a transverse web from which an annular wall tapers upwardly and outwardly in the form of an inverted frusto-cone having an annular outer bead, the portion of smaller diameter of said inverted-frusto-conical plug being received by and engaging the part of smaller diameter of said upright-frusto-conical lip, said inverted-frusto-conical plug spreading said lip for forming a seat for said plug, the said spread portion of said lip and mouth being above the horizontal plane of the top edge of the can-body for forming a seat for said plug above said top edge of said can-body, with said annular wall of said mouth maintained in upright-frusto-conical shape below said horizontal plane of said top edge of said can-body when said plug is seated, and packing in said annular outer bead of said plug, said lip taking under said bead and engaging said packing, substantially as described.

In testimony whereof I have signed my name hereto in the presence of two subscribing witnesses.

JOSEPH J. MOSER.

Witnesses:

HERBERT F. HARDEN,
HENRY N. BAUER.