J. K. GOWEN.

RECEPTACLE CLOSURE.

APPLICATION FILED JAN. 23, 1913.

1,075,643.

Patented Oct. 14, 1913.

2 SHEETS—SHEET 1.

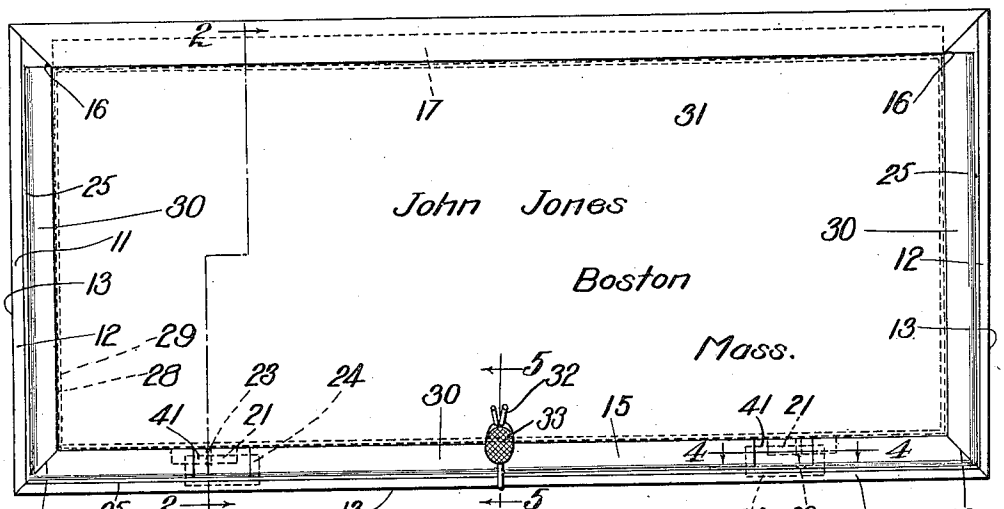


Fig. 1.

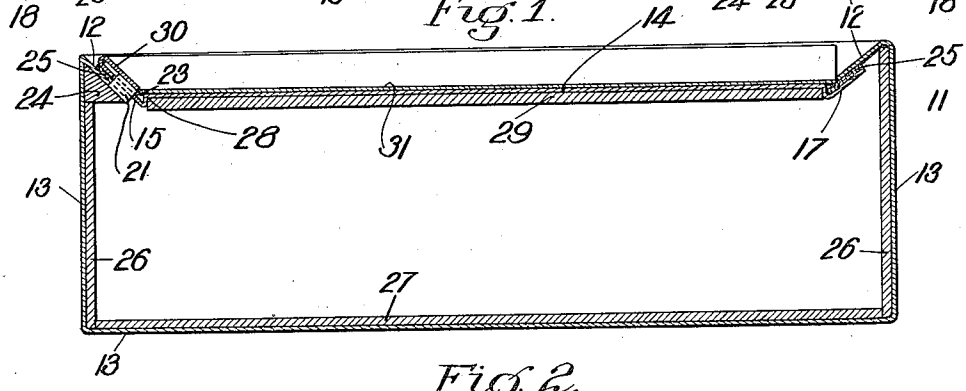


Fig. 2.

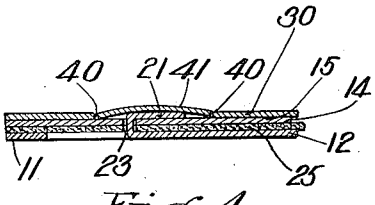


Fig. 4.

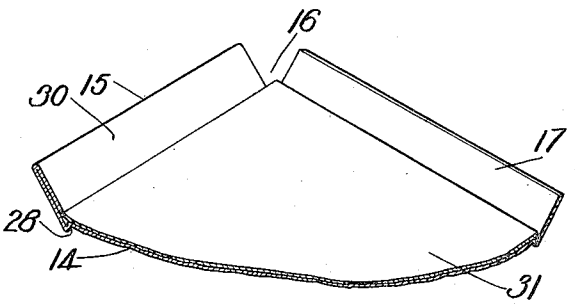


Fig. 3.

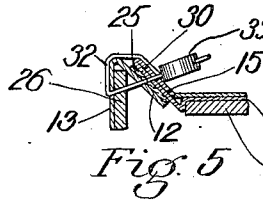


Fig. 5

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COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

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2 SHEETS—SHEET 2.

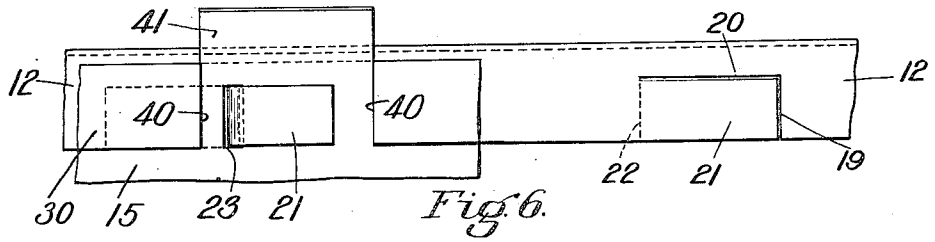


Fig. 6.

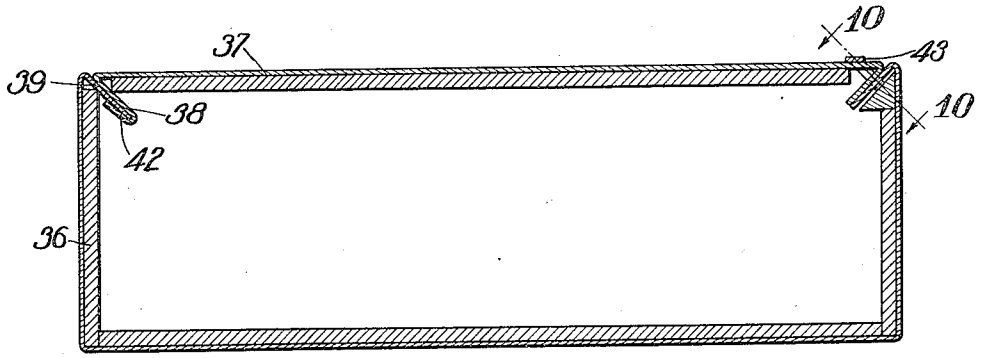


Fig. 7.

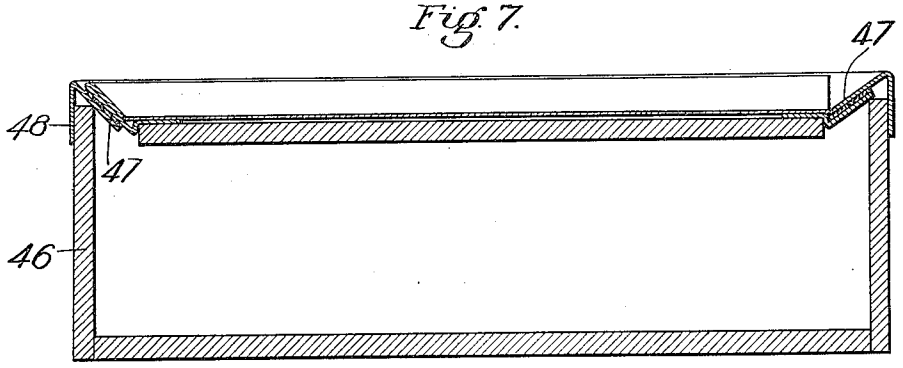


Fig. 8.

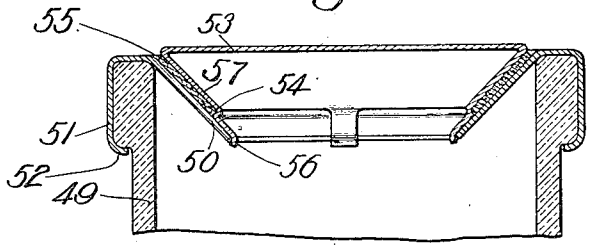


Fig. 9.

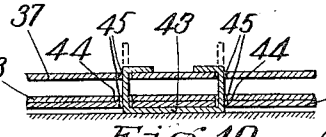


Fig. 10.

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UNITED STATES PATENT OFFICE.

JOHN K. GOWEN, OF SOMERVILLE, MASSACHUSETTS.

RECEPTACLE-CLOSURE.

1,075,643. Specification of Letters Patent. Patented Oct. 14, 1913.

Application filed January 23, 1913. Serial No. 743,751.

To all whom it may concern:

Be it known that I, JOHN K. GOWEN, a citizen of the United States, residing at Somerville, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Receptacle-Closures, of which the following is a specification.

This invention relates to certain new and useful improvements in receptacle closures.

The object of the invention is to provide a strong, inexpensive closure which may be used on receptacles constructed of metal, wood, glass and other substances adapted to contain either liquids or dry stuffs, and particularly adapted to the sending of articles of the above nature through the mails.

The object of the invention is further to provide means for securing and sealing said closure in place on said receptacle in such a manner that a rapid inspection of the contents of said receptacle may be made when desired.

The invention consists in the combination and arrangement of parts whereby the above objects and certain other objects hereinafter appearing are attained, as set forth in the following specification and particularly pointed out in the claims.

Referring to the drawings: Figure 1 is a plan view of a receptacle provided with a closure embodying one form of my invention. Fig. 2 is a section taken on line 2, 2 of Fig. 1. Fig. 3 is a detail view of one of the rear corners of the closure embodying my invention as illustrated in Figs. 1 and 2. Fig. 4 is a section taken on line 4, 4 of Fig. 1. Fig. 5 is a detail section taken on line 5, 5 of Fig. 1 illustrating one method of sealing said receptacle. Fig. 6 is a detail view illustrating one method of securing the closure in place upon the receptacle. Fig. 7 is a detail sectional elevation through a receptacle embodying a modified form of my invention. Fig. 8 is a detail sectional elevation through a receptacle constructed of wood or any other suitable material with a closure embodying my invention shown in connection therewith. Fig. 9 is a sectional elevation of a device embodying my invention applied to a cylindrical jar or bottle. Fig. 10 is an enlarged detail section taken on line 10—10 of Fig. 7, illustrating another method of securing the closure to the receptacle.

Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, referring particularly to Figs. 1, 2, 3, 4 and 5, 11 is a receptacle which is preferably constructed of sheet metal, the form of which may be circular, polygonal, or rectangular as shown in Figs. 1 and 2 of the drawings and comprising an inturned flange 12 arranged about the upper edge or mouth of said receptacle extending substantially therearound and disposed at an angle, preferably 45°, to the sides 13 of said receptacle. A cover or closure 14 is provided having a rim 15 which preferably extends entirely around said closure at an angle substantially corresponding to the angle of said flange 12. The rim 15 is notched at 16, consequently separating or partially disconnecting the portion of the rim 17 upon the rear edge of the closure 14 from the remaining portions of said rim extending along the sides and front of said closure, the sections of the rim constituting said sides and front portions being preferably mitered at the corners 18 and secured together preferably by means of solder. By arranging the notches 16 with the distance between the bottoms of said notches slightly less than the distance between the inner opposite edges of the flange 12 located at the ends of said receptacle, the portion 17 of said rim may be inserted through the opening between the inner edges of said flanges to engage the under face of the flange upon the rear side of said receptacle. By placing said closure upon said flange as described with the edges of the rim 15 at the corners of the notches 16 constituting pivots, said closure may be rocked upon said pivots until the under face of said rim, exclusive of the portion 17, rests upon the flange 12 and with said rim occupying such a position relatively to said flange that the upper face of the portion 17 thereof will engage the portion of the under face of the flange 12 adjacent thereto, thus entirely closing the receptacle. A variety of means may be employed for securing said closure to said receptacle, but when it is desired to send the receptacle, hereinbefore described, through the mail as second class matter it becomes necessary to provide means for securing said closure in place which may be quickly removed in order that an inspection of the contents of said receptacle may be permit-

ted. One method of accomplishing this result consists in partially detaching a portion of the metal constituting the flange 12 along the lines 19 and 20, Fig. 6, at suitable distances apart throughout the length of said flange to form tongues 21 which may be bent along the line 22 laterally of said flange. The rim 15 of the closure 14 is provided with slots 23 which aline with the tongues 21 formed on said flange and as said closure is arranged in its proper position relative to said flange, said tongues will project through said slots 23 after which said tongues may be bent, as in Fig. 2, to clench said closure in contact with said flange. To support the flange 12 during the clenching of the tongue 21 I have provided a block 24 of wood, metal or any other suitable material which may be secured between said flange and the side 13 of the receptacle, thus preventing said flange from being bent downwardly when pressure is applied thereto.

When it is desired to transmit liquids by means of the receptacle herein described, it is necessary that the opening be sealed to prevent leakage. This may readily be accomplished by providing a gasket 25 which may be constructed of rubber, leather or any other suitable material and inserting the same between the flange 12 and said rim and if desired securing said gasket to one or the other of said parts.

As hereinbefore stated, the receptacle illustrated in Figs. 1 and 2 is constructed of sheet metal therefore when it is desired to send fragile articles within the same a lining may be provided of corrugated cardboard, fiber or any other resilient material consisting of side pieces 26 which are first placed in position against their respective sides of the receptacle 13 and are held in place along their upper edges by the flange 12. The bottom piece 27 is then inserted to retain the bottom edges of said side pieces 26 in their proper positions.

The closure 14 is recessed at 28 and into said recess is inserted another section 29 of sheet material which constitutes the lining for said closure.

To still further facilitate the sending of said receptacle through the mail the rim 15 is provided with a turned back portion 30 extending preferably around the rim 15 exclusive of the portion 17, said turned back portion constituting a holder into which a card 31 may be inserted through the opened side adjacent to the portion 17 of the rim 12, said card bearing the address of the party to whom said receptacle is to be sent. In case the closure is exceptionally large the card 31 may be stuck to the top of the closure 14 to assist in securing the same in place.

At certain points along the turned back portion 30 of the rim 15 at points where the tongues 21 are located said turned back portion is slit at 40, 40, see Figs. 4 and 6, to form flaps 41, 41. These flaps are not turned back until after the tongues 21 have been bent back into the position illustrated in Fig. 4 after which they are bent down into position to entirely cover or conceal said tongues.

When it is desired to securely seal said closure, as will be necessary when sending the receptacle by express or freight, a wire 32 is provided which is inserted through holes formed in the side 13, flange 12 and rim 15. The ends of said wire are then brought together as in Fig. 5 and a seal 33 of lead or any other suitable material is pressed upon the ends of said wire in a manner well known to those skilled in the art.

Referring now to Fig. 7, I have illustrated a receptacle 36 which is constructed in the same manner as is the receptacle illustrated in Figs. 1 and 2. In this form however the closure 37 is provided having a rim 38 which extends inwardly instead of outwardly as in Fig. 2, the outer face of said rim engaging the upper face of the flange 39. The rear portion of the closure 37 is provided with a lip 42 which is adapted to interlock with the rear portion of the flange 39 and constitutes a hinge about which the closure may be swung. The front edge of the closure 37 may be secured to the flange 39 in any suitable manner, but I preferably provide a strip of flexible metal 43 which is bent U-shaped, see Fig. 10, and inserted through holes 44 provided in the flange 39 with the free ends thereof projecting upwardly or laterally of said flange, and as said closure is brought down into place against said flange said free ends project through holes 45 formed therein and after being pressed firmly against said flange, the ends of said U-shaped piece are bent or clenched against the upper surface of said closure securely locking the same in place.

In Fig. 8, I have illustrated a receptacle 46 constructed of wood, fiber or other suitable material and to the upper edge is secured the inturned flange 47, said flange and the closure 48 shown in connection therewith being constructed in substantially the same manner as in Fig. 1.

In Fig. 9, I have illustrated my improved closure applied to a jar or milk bottle 49. In this case the inturned flange 50 is formed integral with a rim 51, said rim substantially fitting the outside of the jar 49 and spun down or crimped at 52 to permanently secure said flange in place about the mouth of said jar.

The closure 53 is provided with a rim 57 corresponding with the flange 50 and either said flange or said rim, preferably said rim, may be recessed as at 54 to receive a

gasket 55, while upon the lower edge of said rim 57 may be formed one or more projections 56 which normally inclined outwardly from said rim. Thus when said closure 53 is pressed downwardly against the flange 50 said projections 56 will be bent or deflected inwardly until the end of the flange 50 has been reached whereupon said projections will return to their normal positions and hold said closure in place against said flange firmly and securely sealing said jar. In removing said closure from said jar an instrument having a thin narrow blade may be inserted between said flange and said rim to straighten said projections, thus permitting said closure to be removed.

From the above description it will be seen that many other modifications in the construction, arrangement and combination of parts in my device could be made and substituted for those herein shown and described without departing from the spirit of my invention.

Having thus described my invention, what I claim and desire by Letters Patent to secure is:

1. The combination with a receptacle provided with an inturned flange formed from sheet metal and disposed about the mouth thereof oblique to the sides of said receptacle, of a closure provided with a rim formed of sheet metal and disposed at an angle substantially corresponding to the angle of said flange, a portion of said rim at one side of said closure being partly detached adapted to engage the inner face of said flange the remaining portion thereof engaging the outer face of said flange, and tongues formed adjacent the opposite side of said closure from said partly detached portion by partly detaching portions of the material constituting said flange, said tongues adapted to engage slots in said rim to secure said closure to said receptacle.

2. The combination with a receptacle provided with a flange formed of sheet material arranged about the mouth of said receptacle, of tongues projecting laterally from said flange, a closure provided with a rim corresponding with said flange having slots adapted to receive said tongues and secure said closure to said receptacle, and a flap on said rim adapted to be turned back therefrom to conceal said tongues.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN K. GOWEN.

Witnesses:
SYDNEY E. TAFT,
LEONARD A. POWELL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."