

Aug. 1, 1933.

T. C. ANDERSEN

1,920,672

RECEPTACLE CLOSURE

Filed March 17, 1931

2 Sheets-Sheet 2

Fig. 5.

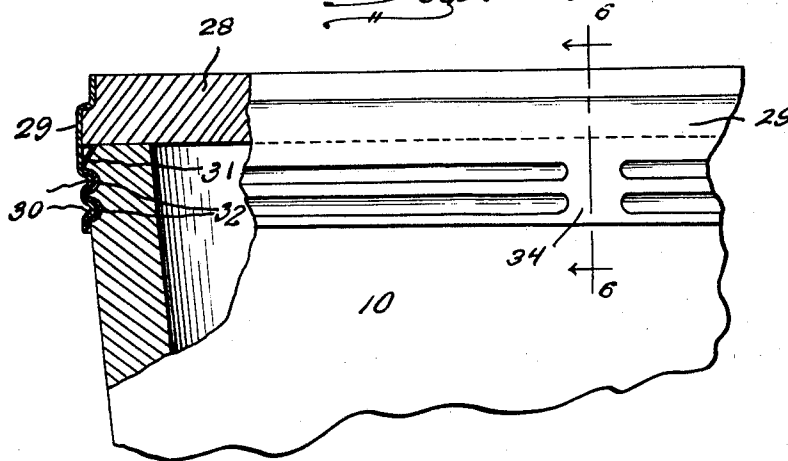


Fig. 6.

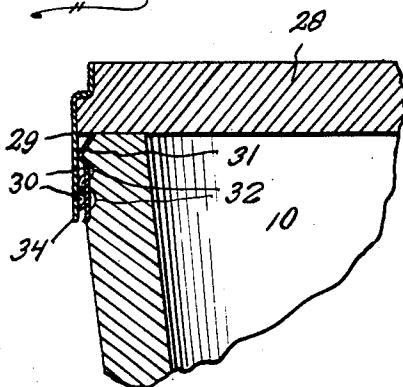


Fig. 7.

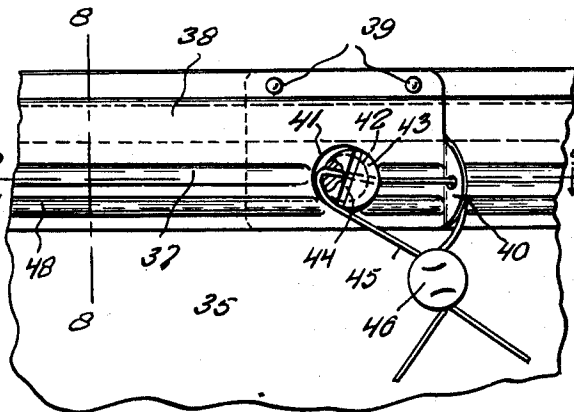
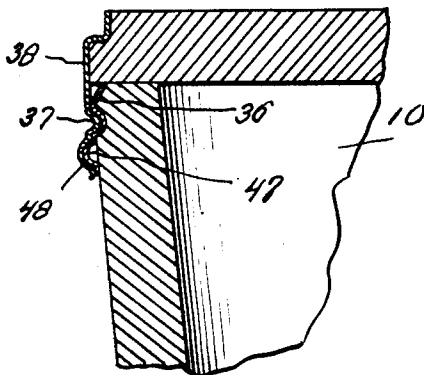
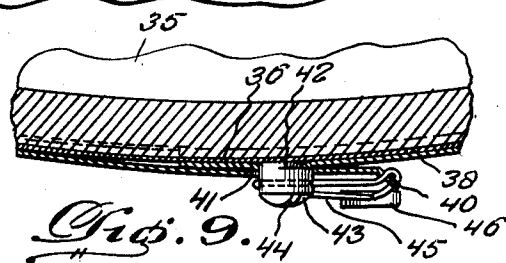


Fig. 8.



Tonnes C. Andersen
INVENTOR.

BY *Stanley Birch*
ATTORNEY.

UNITED STATES PATENT OFFICE

1,920,672

RECEPTACLE CLOSURE

Tonnes C. Andersen, Ruthton, Minn.

Application March 17, 1931. Serial No. 523,310

4 Claims. (Cl. 217-76)

My present invention has reference to receptacles and closures therefor, and my primary object is the provision of means for automatically locking the closure on the receptacle when the said closure is pressed against the receptacle.

A further object is the provision of means for easily and quickly fastening a closure on the receptacle in a manner that will produce a tight joint between these members and permit of the receptacle being subjected to rough usage without liability of the closure becoming detached therefrom.

A still further object is the provision of a device for this purpose in which the fastening means between a closure and receptacle also afford a hinged joint between these members.

A further object is to provide a cover or closure for a butter tub or like receptacle with a resilient rim to snap into a grove formed in the body of the receptacle adjacent its upper edge.

A further object is the provision of means whereby the covers may be brought to frictional engagement with each other to permit of the same being nested in stacks.

To the attainment of the foregoing and other objects which will present themselves the improvement also resides in certain other novel features of construction, combination and operative association of parts, satisfactory embodiments of which are disclosed by the accompanying drawings.

In the drawings:

Figure 1 is a side elevation of a receptacle having a closure embodying the present invention.

Figure 2 is an enlarged fragmentary vertical sectional view thereof taken approximately on the line 2-2 of Figure 1.

Figure 3 is a similar sectional view taken on a plane with the hinge joint between the closure and receptacle.

Figure 4 is a similar sectional view taken on a line with the seal.

Figure 5 is a fragmentary side elevation to illustrate a slight modification.

Figure 6 is a sectional view approximately on the line 6-6 of Figure 5.

Figure 7 is a fragmentary elevation illustrating a further modification.

Figure 8 is a sectional view approximately on the line 8-8 of Figure 7.

Figure 9 is a sectional view approximately on the line 9-9 of Figure 7.

In the drawings I have illustrated the invention in connection with a butter tub and its cover, although it is intended for use with other types of receptacles and its general application is contemplated by the claims.

In the drawings the numeral 10 indicates a tub or wooden receptacle having its outer corner and its mouth beveled and provided below the bevel

with an annular groove 11. The mouth of the receptacle is surrounded by a metallic band 12 shaped to conform with the beveled corner 13 of the receptacle and likewise corrugated, as at 12', to provide an internal groove which is received in the groove 11 of the receptacle.

The cover or closure of the receptacle is in the nature of a wooden disc and is indicated by the numeral 13'. The closure has a rabbet in the upper portion of outer edge to provide the same with an annular depression 14. Arranged around the periphery of the cover there is a metal strip that affords a rim 16. The rim is formed with an inwardly offset upper portion 17 to occupy the shoulder provided with the rabbet or recess in the cover. The rim is extended a suitable distance below the inner face of the cover and is corrugated to provide the same with an annular inwardly rolled bead 19 that is designed to snap into the groove of the receptacle, as illustrated by Figures 2, 3 and 4 of the drawings. To permit of the exact coengagement of the bead 19 with the groove 11 the rim 16 is slit and has its upper portion at one end of the slit projected to provide a tongue 18 which is riveted or otherwise connected to a portion of the rim and lapped by the said tongue.

The band 12 is slitted longitudinally and transversely at one point and the metal bound by this slit is bent outwardly and downwardly to form the same with a finger 20 designed to be received in an opening 21 in the depending portion of the rim and thereby affording a hinged connection between the cover and the tongue. At a diametrically opposite point the band has its lower portion bulged outwardly from the top and the angle wall 22 provided by this bulged portion is formed with an opening. The resilient band, at a point diametrically opposite the part thereof provided with the opening 21 is formed with laterally extending portion or finger 23 that is also provided with an opening, and there is designed to pass through these openings a metal strap 24 that carries a seal 25, and thus prevent the cover from being surreptitiously removed from the tub.

The rim has a portion of its rolled bead 19 flattened and pressed outwardly as at 26 for affording a space between the rim and the band 12 so that a prying tool may be readily engaged behind the rim for removing the cover from the tub.

Only a slight downward pressure need be exerted upon the cover to bring the same into locking engagement with the closure and it will be noted that the cover is not only effectively locked on the tub but is hingedly connected therewith.

In Figures 5 and 6 the construction is substantially similar to that just described, the

cover 28 being provided with the annular groove for the reception of the shouldered portion of the annular resilient rim 29. The rim has its depending portion or skirt formed with spaced corrugations providing inwardly rolled beads 30—30. The beads do not extend the entire circumference of the rim but terminate away from each other. In a like manner the metal rim 31 that is arranged around the mouth of the tub is provided with spaced corrugations to afford inwardly directed grooves 32 of the same length as the beads 30. The non-corrugated portions 34 of the rim permit of the insertion of a sharp tool to spread the rim and to permit of the cover being readily removed from the tub.

In Figures 7, 8 and 9 the tub 35 has its mouth surrounded by a metal ring or band 36 provided with a circumferential inwardly directed corrugations in which snap the inwardly rolled beads 37 of the split metal and resilient rim 38. In this instance the rim 38 is also in the nature of a split member and the beads do not extend around the entire circumference thereof. The split ends of the rim are arranged in lapping relation and are connected together adjacent to their outer ends by means 39. The overlapping end of the rim is provided with an outturned flange 40 and inward thereof is provided with a round opening 41. There is pivotally secured to the underlying end of the rim the reduced and rounded end 42 of a stud 43 whose outer face is kerfed, as at 44. The enlarged and rounded body of the stud is freely passed through the opening 41 and the flange or lip 40 as well as the stud is provided with openings for the reception of a wire 45 to which is attached a seal 46. When the stud is turned to the position disclosed by Figure 7 of the drawings it will be noted that the same is in contacting engagement with the outer wall provided by the opening 41, that is the wall nearest the flange or lip 40 and this obviously forces the ends of the split rim toward each other so as to bring the beads thereof into tight frictional engagement with the grooves in the mouth of the tub. By the employment of a screw driver or like instrument inserted in the kerf of the stud the latter is turned in an opposite direction to bring the body portion thereof away from the said wall provided by the said opening and further to contact with the opposite or inner wall provided by the opening to spread the beaded portion of the band and to permit of the cover being readily removed from the tub. In this instance the ends of the band exert a tension toward each other and the body or skirt of the band normally springs inwardly but, of course, is yieldable outwardly. As disclosed by Figure 8 the ring or band 36 may have a lower outward corrugation 47, and the rim 38 may have a lower outward corrugation 48 to fit over the corrugation 47 when the cover is applied.

The offset portion 17 afforded in the upper edge portion of the cover permits a plurality of the covers to be nested one over the other, the reduced or inwardly offset upper portion of the rim on one of the covers being received by the corrugated lower or skirt portion of the cover superposed thereon. Thus the covers may be stacked and effectively nested and held in en-

gagement without liability of accidental disassociation.

While it is believed that from the foregoing the nature and advantages of the invention will be readily apparent I desire to have it understood that I do not limit myself to what is herein illustrated and described and that such changes may be resorted to when desired as fall within the scope of the appended claims.

Having described the invention, I claim:

1. In combination, a wooden receptacle having a grooved upper edge, a band surrounding the receptacle and having a groove to be received in the groove of the receptacle, a wooden cover, a split resilient rim carried by the cover, depending therefrom and having an inwardly directed bead to snap in the groove, and a slot above said bead, and a finger projecting from the band and passed through said slot of the rim to provide a hinged connection between the cover and receptacle.

2. In combination, a wooden receptacle having its outer edge, at its mouth, beveled, and provided with a groove below the said beveled portion, a metal band surrounding the mouth of the receptacle and having a beveled portion to rest on the beveled portion of the receptacle and a groove to be received in the groove of the receptacle, a finger projecting from said band, a cover, and a resilient rim carried by the cover, depending therefrom and having an inwardly directed bead to snap into said groove of the band, and a slot above said bead to receive said finger and provide a hinged connection between the cover and receptacle.

3. In combination, a wooden receptacle having a groove adjacent to the mouth thereof, a wooden cover, a resilient split band around the periphery of the cover having a depending rim corrugated to provide an inwardly directed bead to be snapped in the groove of the receptacle, the lapping ends of the band being connected to each other and to the cover above the bead, an eccentrically pivoted stud on the inner end of the band passing through a round opening in the outer end of the rim below the connection between the lapping ends of the band and having its outer end kerfed to permit of the stud, when turned, contacting at the opposite walls provided by the opening to circumferentially compress or expand the rim.

4. In combination, a wooden receptacle having a groove adjacent to the mouth thereof, a wooden cover, a resilient split band around the periphery of the cover having a depending rim corrugated to provide an inwardly directed bead to be snapped in the groove of the receptacle, the lapping ends of the band being connected to each other and to the cover above the bead, an eccentrically pivoted stud on the inner end of the band passing through a round opening in the outer end of the rim below the connection between the lapping ends of the band and having its outer end kerfed, to permit of the stud, when turned, contacting at the opposite walls provided by the opening to circumferentially compress or expand the rim and said stud and the outer lapping portion of the band having openings for the reception of a seal.

TONNES C. ANDERSEN.