W. B. GODDARD.

CLOSURE FOR THE HEADS OF METAL BARRELS, DRUMS, AND LIKE RECEPTACLES.

APPLICATION FILED FEB. 16, 1921.

1,438,757. Patented Dec. 12, 1922.

Fig. 1.

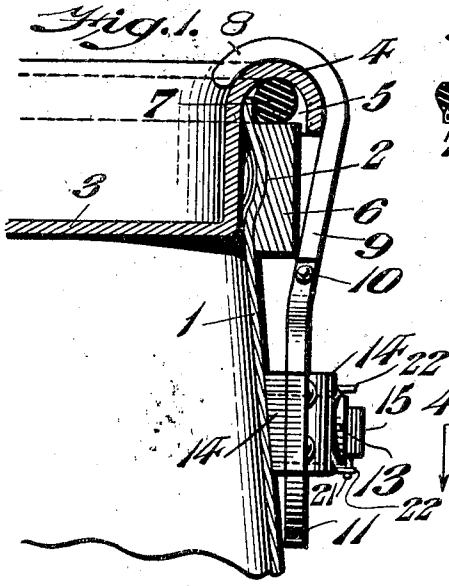


Fig. 2.

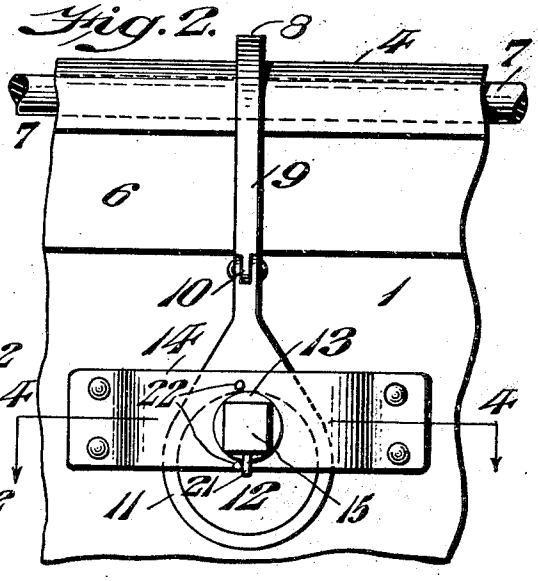


Fig. 3.

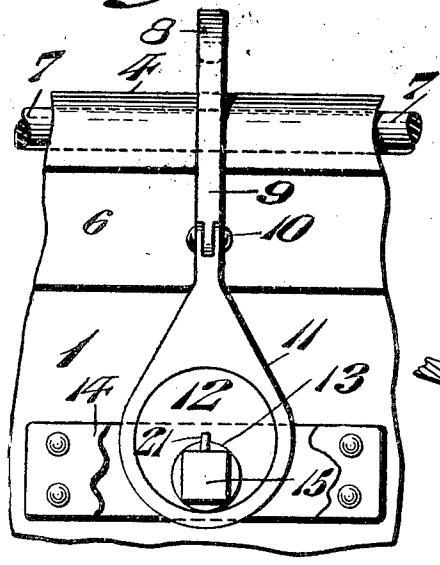


Fig. 5.

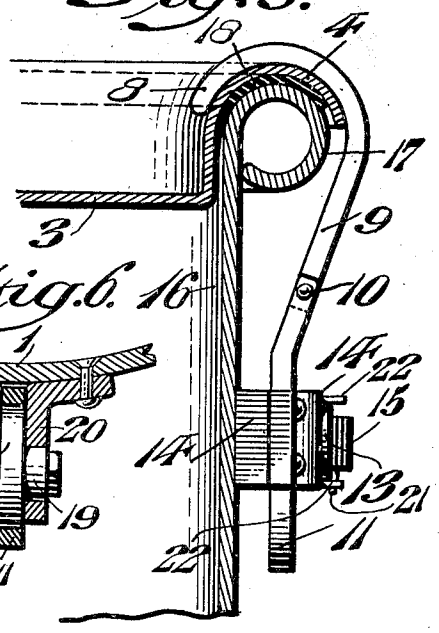
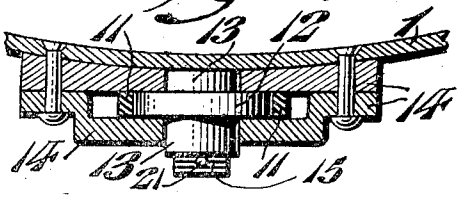


Fig. 6.

Fig. 4.



INVENTOR:
William B. Goddard.
BY
Dyderstheim & Fairbanks.
ATTORNEYS.

Patented Dec. 12, 1922. 1,438,757

UNITED STATES PATENT OFFICE.

WILLIAM B. GODDARD, OF PHILADELPHIA, PENNSYLVANIA.

CLOSURE FOR THE HEADS OF METAL BARRELS, DRUMS, AND LIKE RECEPTACLES.

Application filed February 16, 1921. Serial No. 445,282.

To all whom it may concern:

Be it known that I, WILLIAM B. GODDARD, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Closure for the Heads of Metal Barrels, Drums, and like Receptacles, of which the following is a specification.

My invention consists of a device for closing the head of a metal barrel, drum or other like receptacle on the body thereof, the same embodying means for firmly holding said head in closed position on said body, and compressing a gasket employed thereby forming a tight joint for said body and head, preventing leakage thereat.

The invention is satisfactorily illustrated in the accompanying drawing, but the important instrumentalities thereof may be varied, and so it is to be understood that the invention is not limited to the specific details shown and described, as long as they are within the spirit or scope of the claims.

Figure 1 represents a partial side elevation of a closure for a receptacle embodying my invention including a vertical section of a portion of the receptacle to which the same is applied, the closure being shown engaged with the head of the receptacle.

Figure 2 represents a side elevation at a right angle to Figure 1.

Figure 3 represents a view similar to Figure 1 partly broken away showing the closure raised from the head of the receptacle.

Figure 4 represents a horizontal section of a portion on line 4—4 Figure 2.

Figure 5 represents a view of the closure similar to Figure 1, the invention, however, being applied to a receptacle different from said figure.

Figure 6 represents a section of a modification.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings,

1 designates a portion of the side or wall of a metal barrel, 2 designates the bilge thereof, and 3 designates the head or cover of the barrel, the upper end of said head being outturned forming the rim 4 which is channelled in its underside as at 5.

On the exterior of the bilge is the band or hoop 6 which is secured thereto, and its upper end forms a seat for the cylindrical gasket 7 which formed of suitable pliable material is adapted to enter the channel of the rim 4 and be overhung by the latter, thus serving to close the joint of the bilge 2 and head 3 and prevent leakage thereat.

8 designates a goose neck or hook-like member which is adapted to overhang inwardly the outturned rim 4 it being continuous of the upper end of the vertically extending shank 9 which lower end is pivotally connected as at 10 with the upper end of the yoke 11 in which latter is mounted the rotating eccentric member 12 which encircled by said yoke is provided with a journal 13 eccentric on said member, having its bearings on the front and rear plates comprising the keeper 14, said plates being riveted or otherwise firmly connected with the side of the barrel 1 and serving to contain the eccentric freely between them, the journals 13 of the latter being supported on said plates, thus allowing said eccentric to be rotated in order to raise and lower the yoke, and consequently the goose neck.

As it will take considerable power to tighten and loosen the goose neck upon and from the rim 4 and to prevent the eccentric from being operated by an unauthorized person, the outer journal 13 has thereon an angular head 15 for the application of a wrench or other suitable tool to rotate said eccentric in opposite directions. It is evident that a number of goose necks and appurtenances will be employed around the head and body of the barrel, although only one of the same is shown in the drawing.

It will be seen that when the parts are in position, as shown in Figure 3, the goose neck has been elevated and set out from the rim 4 of the barrel. Then it may be thrown inwardly over the rim 4 of the head 3, and the eccentric is turned whereby the latter draws down the goose neck on said rim and depresses it thereby compressing the gasket 7 and forming the tight joint hereinbefore referred to, as most apparent in Figure 1.

On rotating the eccentric in reverse order the goose neck will be raised by the same above the rim 4 when it may be thrown out from the latter owing to the hinged connection of the shank 9 with the adjacent portion of the yoke. The rim 4 is thus released of said goose neck, and so the head 3 may be raised and removed from the top of the barrel, thus opening the latter.

In Figure 5, the invention is shown as

applied to the metallic drum 16 which has an outturned curled or tubular rim 17 on which is imposed the segmental gasket 18, the latter being adapted to be engaged by the rim 4 of the head 3, and said rim 4 is adapted to be overhung by the goose neck 8 to be operated the same as in the closure of the barrel 1, the connections of said goose neck with the eccentric, and the mounting and operation of the latter being similar to those in the other figures showing said barrel 1.

In Figure 6, I show the eccentric disposed at a right angle to that shown in the other figures. In this case, the journals or gudgeons 19 of said eccentric are mounted on ears 20 which are secured to the side of the barrel or drum, the operation being the same as in the other figures.

In order to limit the degree of rotation of the eccentric there is secured to the head 15 of the journals or axis of the eccentric the finger 21 which projects radially therefrom, and is adapted to engage either pins 22 which project outwardly from the keeper 14 respectively on the upper and lower portions of the latter, whereby when the eccentric is rotated to seat the gooseneck on the rim 4 said finger is adapted to abut the lower pin 22, and when said eccentric is rotated to raise said gooseneck from said rim, said finger is adapted to abut the upper pin 22, thus providing stops for the eccentric in either of its rotated positions.

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

1. A closure for a receptacle of the character stated consisting of a hook-like member, a yoke connected therewith, a rotatable eccentric in said yoke and a journal on said eccentric and a keeper on said receptacle for mounting said journal on said receptacle, said hook-like member being adapted to engage the rim of the closing head of said receptacle.

2. A closure for a receptacle of the character stated consisting of a hook-like member, a yoke connected therewith, a rotatable eccentric in said yoke, and including a journal on said eccentric, and a keeper on said receptacle for mounting said eccentric on said receptacle, said hook-like member being adapted to engage the rim of the closing head of said receptacle, said hook-like member and said yoke having a movable connection.

3. In a closure for a receptacle of the character stated, a rotatable eccentric, a bearing for the axis of the latter connectable with said receptacle, a yoke adapted to freely encircle said eccentric and to be operated by the same in opposite directions, and a hook-like member pivotally connected with said yoke and adapted to engage the rim of the closing head of said receptacle and to be released movably outwardly therefrom.

4. In a closure for a receptacle of the character stated, a rotatable eccentric, a bearing for the axis of the latter connectable with said receptacle, a yoke adapted to freely encircle said eccentric and to be operated by the same in opposite directions, and a hook-like member connectable with said yoke and adapted to engage the rim of the closing head of said receptacle and to be released therefrom, said hook-like member having a pivotal connection with said yoke whereby it may be moved laterally to and from said rim.

5. A closure for a receptacle of the character stated consisting of a hook-like member, a yoke pivotally connected therewith, a rotatable eccentric in said yoke, and means including a journal on said eccentric, and a keeper on said receptacle for mounting said eccentric on said receptacle, said hook-like member being adapted to engage the rim of the closing head of said receptacle, said eccentric and the bearing of its axis being provided with stop members adapted to limit the rotation of said eccentric in either of its positions in lowering and raising said hook-like member.

6. A closure for a receptacle comprising a yoke, a hook-like member rising from said yoke, an eccentric in said yoke, a journal on said eccentric, a keeper on the exterior of said receptacle, said keeper forming the bearing for said journal, and a head on the exterior of said journal adapted for the application of a wrench-like implement thereto for operating said eccentric.

7. A closure for a receptacle comprising a yoke, a hook-like member rising from said yoke and pivotally connected therewith, an eccentric in said yoke, a journal on said eccentric, a keeper on the exterior of said receptacle, said keeper forming the bearing for said journal, and a head on the exterior of said journal adapted for the application of a wrench-like implement thereto for operating said eccentric.

WILLIAM B. GODDARD.

Witnesses:
C. D. McVay,
N. Bussinger.