

G. L. O'BRIEN.

BARREL.

APPLICATION FILED JUNE 12, 1909.

951,023.

Patented Mar. 1, 1910.

Fig. 1.

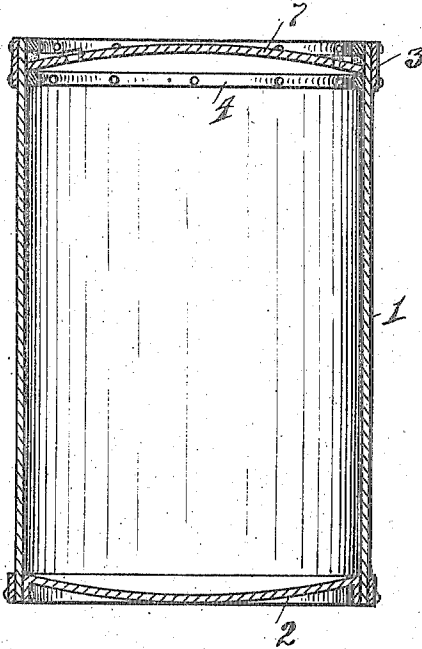


Fig. 2.

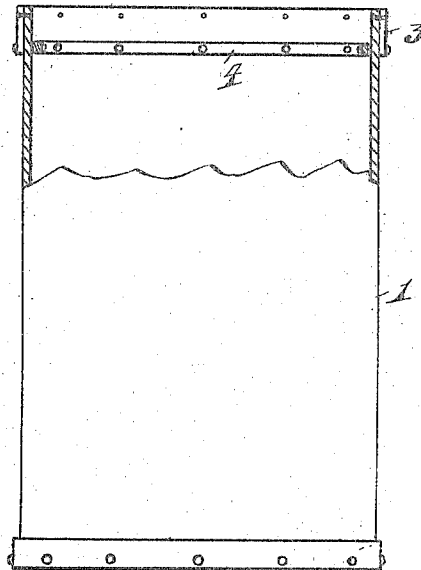
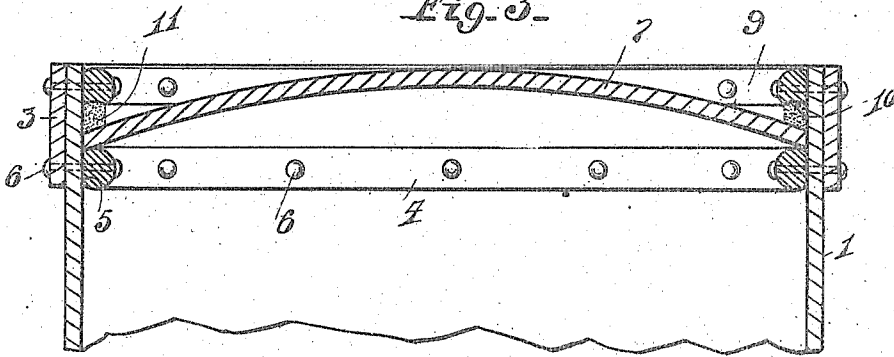


Fig. 3.



Witnesses.

George Olteck.
S.M. Cl.

George L. O'Brien
Inventor

By *[Signature]*
Att'y.

UNITED STATES PATENT OFFICE.

GEORGE L. O'BRIEN, OF SOUTH BEND, INDIANA.

BARREL.

951,023.

Specification of Letters Patent.

Patented Mar. 1, 1910.

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To all whom it may concern:

Be it known that I, GEORGE L. O'BRIEN, a citizen of the United States, residing at South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Barrels, of which the following is a specification.

This invention relates to barrels.

One object of the invention is to provide a removable head particularly for steel barrels wherein the head may be readily positioned and effectually secured against displacement.

Another object of the invention resides in the provision of a barrel whose head may be quickly secured against accidental removal and readily removed when it is desired to gain access to the contents of the barrel or for scraping the interior thereof or for the purpose of straightening out any indentations arising from constant or rough handling of the barrel.

With the above and other objects in view, the present invention consists in the combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes may be made in the form, proportion, size and minor details without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings:—Figure 1 is a vertical sectional view of a barrel illustrating my invention with the head applied thereto. Fig. 2 is a view partly in elevation and partly in section illustrating the barrel prior to the position of the head. Fig. 3 is an enlarged detail fragmentary sectional view illustrating the head in position together with the means for securing it against accidental displacement.

Referring now more particularly to the accompanying drawings, the reference character 1 indicates the body of the barrel having a bottom 2 which may be secured to the body in any suitable manner, the barrel preferably having a strengthening band 3 secured to the outer surface at its upper edge if desired.

The character 4 indicates a flange which is preferably formed of an element which is circular in cross section and provided with a flat outer face 5, so that it may have flush

engagement throughout its outer edge with the inner surface of the barrel, the flange 4 being secured within the barrel near the upper edge thereof in any suitable manner, preferably, however, by means of suitable bolts or rivets 5. This flange 4 is designed to support the concavo-convex or other suitable top or head 7, whose periphery preferably fits snugly within the barrel. It is preferred to pour solder or other material over the head so that the meeting point of the head with the barrel may be perfectly sealed. Secured to the upper edge of the barrel within the latter by means of bolts or other suitable fastenings 8 is a second flange 9 which is similar to the flange 4, but which is spaced from the latter and also from the periphery of the head 7, and which has an annular cavity 10 in its underface for a purpose presently explained.

The barrel illustrated in Fig. 2 is ready for the reception of the head 7, which is placed upon the flange 4. A tight joint is then formed between the periphery of the head 7 and the inner surface of the barrel by means of solder or other material, as stated. The second flange 9 is then bolted within the barrel above the periphery of the head 7 and in spaced relation thereto, and between the flange 9 and the head 7 solder or the equivalent is poured, and as this solder or equivalent material, which is indicated at 11, begins to harden it is calked in order to effect a tight fastening of the head 7, and it is reinforced in its sealing of the head 7 by reason of the annular cavity 10 of the flange 9, because the cavity and the concavo-convex formation of the head 7 will prevent inward movement of the material 11 in whole or in large parts. The rough handling of the barrel which may occasion such jar as to have its effects upon the material 11, will not have such action as will cause complete displacement of the material 11. As a matter of fact the concavo-convex formation of the head 7 and the annular cavity 10 serve to hold the material 11 intact regardless of rough handling of the barrel. When it becomes necessary to remove the head for the purpose of gaining access to the contents thereof or for scraping the interior of the barrel or for the purpose of straightening out any indentations that may arise as the result of constant or rough handling of the barrel, the flange 9 is removed and this

permits the sealing and calking material to be easily chiseled away and the head removed.

What is claimed is:—

5 1. A barrel including a body portion, an annular flange secured to the body portion within the latter slightly below the upper edge thereof, a concavo-convex head disposed upon said flange, a second flange secured within the body at the upper edge thereof in spaced relation to the periphery of the said head, said second flange having an annular cavity in its underface, and a sealing material disposed over the periphery of the head between the latter and said second flange and engaging in said cavity of the second flange.

20 2. A barrel including a body portion, a supporting flange secured to the body portion, a head disposed upon said supporting flange, a second flange disposed above the head and in spaced relation thereto, said second flange having an annular arc-shaped cavity in its under face, and sealing material engaging the flange, the head and the body of the barrel.

30 3. A barrel including a body a supporting flange secured within the body below the upper edge thereof, a head disposed upon the supporting flange, a second flange secured within the body above the head and having a cavity in its underface, and sealing material between the head and said sec-

ong flange and fitting in the cavity of the second flange.

4. A barrel including a body portion, a supporting flange which is substantially circular in cross section and which has a flat face for engagement with the inner surface of the body, means for securing said flange to the body, a concavo-convex head disposed upon said flange, a second flange secured within the body above the head, said second flange having an annular cavity in its underface, and sealing material engaging said cavity and the upper face of the head to seal the head against accidental displacement.

5. A barrel including a body portion, a supporting flange secured within the body portion near the end thereof, a head resting upon the supporting flange, a second flange having an annular cavity in its under face and secured within the body portion at the end thereof and in spaced relation to the head whereby an annular recess is formed between the second flange and the head, and sealing material disposed within the annular recess between the second flange and the head and within the cavity in the under face of the second flange.

In testimony whereof I affix my signature, in presence of two witnesses.

GEORGE L. O'BRIEN.

Witnesses:

GEORGE OLTSCHE,
G. M. COLE.