W. B. GODDARD.

METAL BARREL.

APPLICATION FILED APR. 1, 1909.

971,439. Patented Sept. 27, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

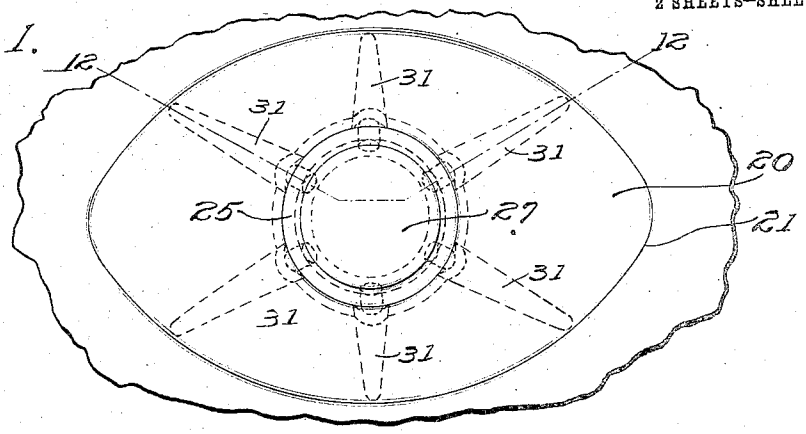


Fig. 2.

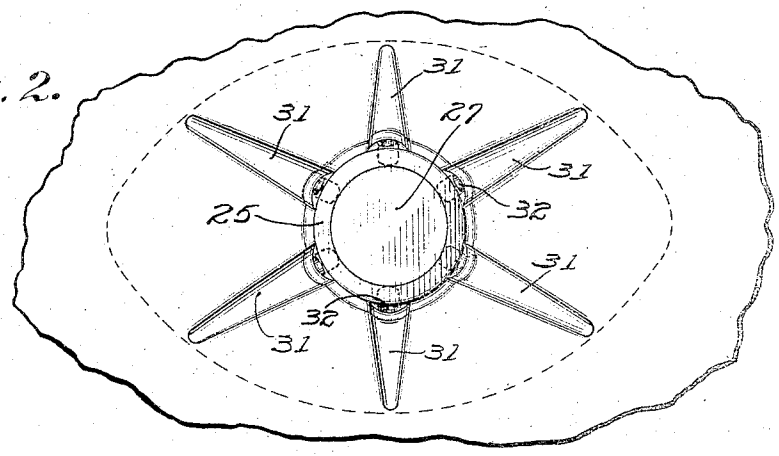


Fig. 4.

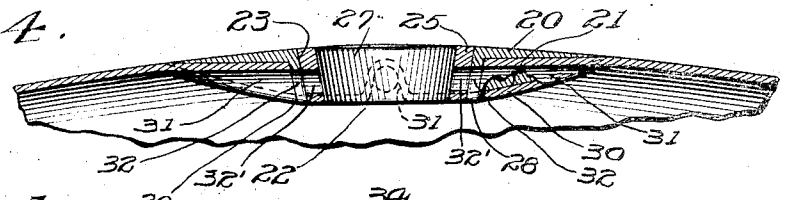


Fig. 5.

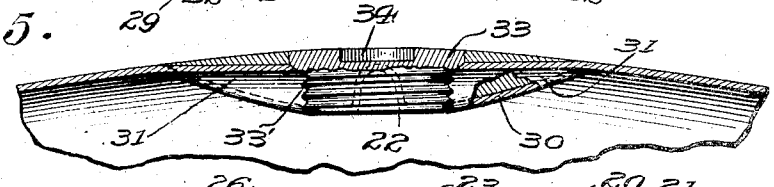
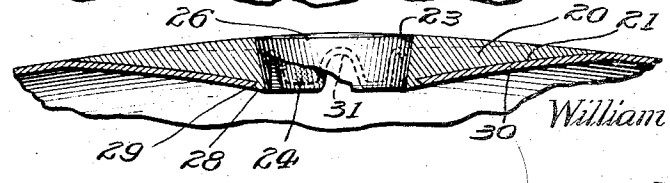


Fig. 3.



INVENTOR

William B. Goddard.

WITNESSES

F. J. Hartman.

A. J. Gardner.

BY

Howe & Tells.

ATTORNEY

W. B. GODDARD.

METAL BARREL.

APPLICATION FILED APR. 1, 1909.

971,439. Patented Sept. 27, 1910.

2 SHEETS—SHEET 2.

Fig. 6.

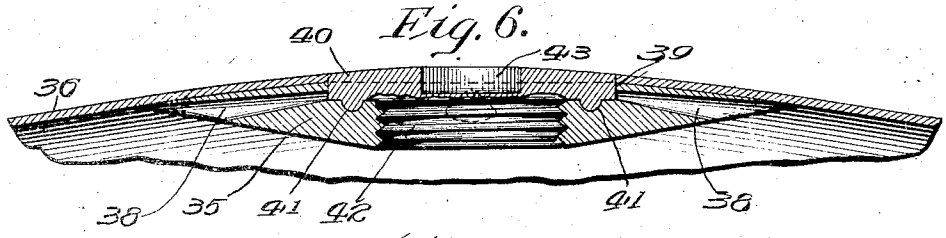


Fig. 7.

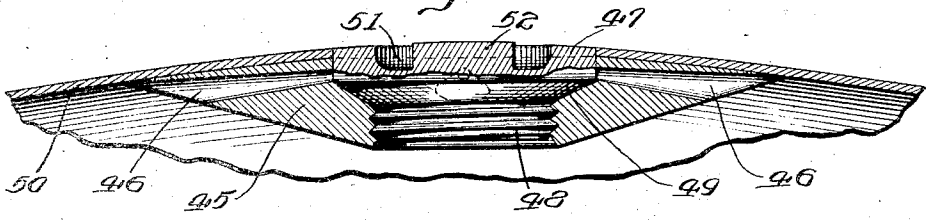


Fig. 8.

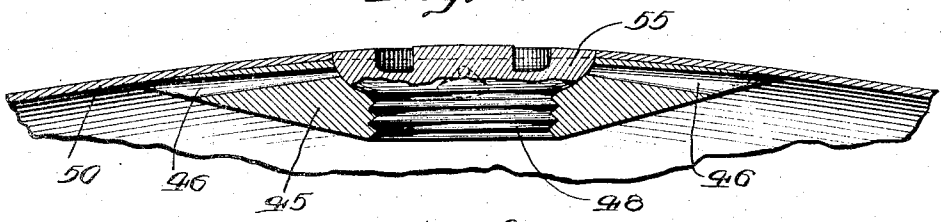


Fig. 9.

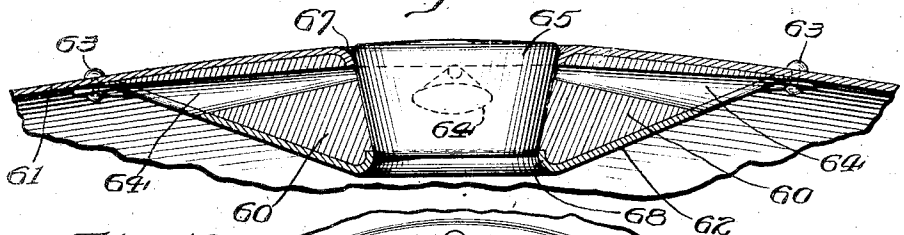
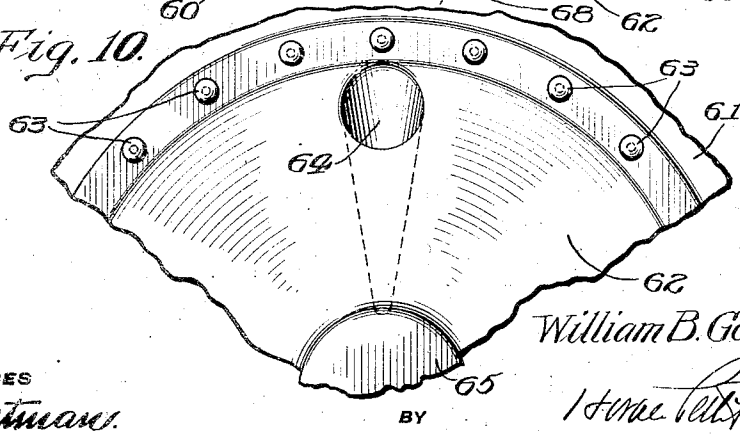


Fig. 10.



INVENTOR

William B. Goddard.

WITNESSES

A. J. Hartman.

A. E. Gardner.

BY

Howe Tetty.

ATTORNEY

UNITED STATES PATENT OFFICE.

WILLIAM B. GODDARD, OF BROOKLYN, NEW YORK.

METAL BARREL.

971,439. Specification of Letters Patent. Patented Sept. 27, 1910.

Application filed April 1, 1909. Serial No. 487,253.

To all whom it may concern:

Be it known that I, WILLIAM B. GODDARD, a citizen of the United States, and a resident of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Metal Barrels, of which the following is a specification.

This invention relates to improvements in metal receptacles, and more particularly to improvements in metal barrels designed especially for holding liquids, such as benzin, naphtha, gasolene, turpentine or other volatile fluids, or oils of any kind, or boiler compounds, liquid chemicals or other liquids or fluids of any kind.

The main object of this invention is to provide in a metal receptacle or barrel, a new form of bung holding device, applied to the outside of the barrel, the barrel having a depressed portion into which the bung holder is fitted and secured, and by the form of the depressed portion, providing means for thoroughly draining the barrel.

In the accompanying drawings, Figures 1, 2 and 3 show the main features of this invention. Figs. 4, 5, 6, 7, 8, 9, and 10 show modifications of the device with various methods of securing the bung, all embodying the feature enabling the barrel to be thoroughly drained.

The form of the bung holder shown in Figs. 1, 2 and 3 comprises a bung holder 20 which fits into a depressed portion of the shell of the barrel 21, and secured by any suitable means, the outer surface of the bung holder conforming to the convex shape of the barrel.

Fig. 1 shows a view of the bung holder viewed from the outside of the barrel, the dotted lines showing the drainage channels 31 and the bung 27 and a ring around the bung 25.

Fig. 2 shows the same as Fig. 1 viewed from the inside of the barrel, the drainage channels 31 shown projecting inward from the general contour of the depressed portion of the barrel; 32 is the end of the drainage channel shut off by ring 25 and bung 27.

Fig. 3 is a sectional view of the depressed portion 21 of the barrel 30 around the bung hole; 31 is one of the drainage channels shown in dotted lines; 24 is the inner surface of the bung holder 26 driven in; 28 is an internal annular flange or rim surrounding the central outlet 23 through the bung holder and engaging the edges 29 of the outlet through the body of the barrel.

Fig. 4 is similar to Fig. 3 with the addition of a ring 25, and a bung 27 inside of the ring 25, the drainage channel in the shell 31 and the bung holder 32 and the compressible ring 32′ being arranged to form continuous drainage channels, being closed by a bung 27.

Fig. 5 shows a sectional view having a bung 33 having screw thread 33′; 34 is a socket in a screw bung adapted to receive a wrench; 22 is the opening in the barrel to which the bung holder is applied; 23 in Fig. 4 represents the openings in the bung holder corresponding with the opening 22.

Fig. 6 shows a modified form of a screw bung 42 having a wide flange 40 and closing surface 39, and having a cavity 43 on the outside surface of the bung adapted to receive a wrench; 41 is a circular ridge on the bung which fits into a groove in the bung holder 35, 36 indicating the shell of the barrel.

Fig. 7 is a modification having a bung holder 45, passage 46, bung 47 threaded as at 48, and having a tapering shoulder 49, the bung holder being placed inside of the barrel 50, the bung having cavities 51 for the application of a wrench; 52 is a solid part of the bung between the cavities 51.

Fig. 8 is similar to Fig. 7, having a curved seat 55.

A further modification of the bung and its holder is shown in Figs. 9 and 10, and comprises a bung holder 60 which is secured upon the inner surface of the body 61 of the barrel by means of a conical annular covering 62 of sheet metal, the outer edge of which is secured to the body of the barrel by means of rivets 63. The internal conical surface of the bung holder forming the seat for the bung, projects radially inwardly within the inner edge of the shell and covering, surrounding the bung to hold the bung free from contact with these edges. This bung holder is provided as heretofore with radial apertures 64, which extend also through the covering 62 of the bung holder.

The central aperture or outlet through the bung holder and body of the barrel is in this case, conical in shape converging inwardly, and the bung 65 is correspondingly shaped, the outer surface of the bung being flush with the outer surface of the barrel when the bung is in position.

The portion of the body of the barrel surrounding the bung is preferably flanged inwardly as at 67, and the portion 68 of the covering of the bung holder surrounding the outlet through the bung holder is also curved inwardly with respect to the bung holder.

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

1. In a metallic barrel having a depressed portion, a bung holder fitted and secured into the depressed portion and conforming on its outer surface to the form of the barrel, the barrel and bung holder having registering openings for the reception of a bung, corrugations made in the depressed portion of the barrel, the bung holder having channels corresponding to the corrugations in the depressed portion of the barrel forming fluid passages through both, substantially as described.

2. In a metallic barrel having a depressed portion a bung holder fitted and secured into the depressed portion and conforming on its outer surface to the form of the barrel, the barrel and bung holder having registering openings, fluid passages formed in the barrel and in the bung holder for draining the barrel, substantially as shown and described.

3. In a barrel having a depressed portion surrounding the bung hole, a bung holder fitted into the depressed surface of the barrel, grooves formed on the inside of the barrel radial from the bung hole, channels in the bung holder corresponding with the grooves in the barrel and forming fluid passages, and a bung adapted to close the passages.

In witness whereof I have hereunto set my hand this 29th day of March, A. D. 1909.

WILLIAM B. GODDARD.

Witnesses:

AGNES GERTRUDE GODDARD,

MABEL GODDARD.