

W. E. GIBSON.

WATER CLOSET.

APPLICATION FILED JUNE 27, 1908.

918,036.

Patented Apr. 13, 1909.

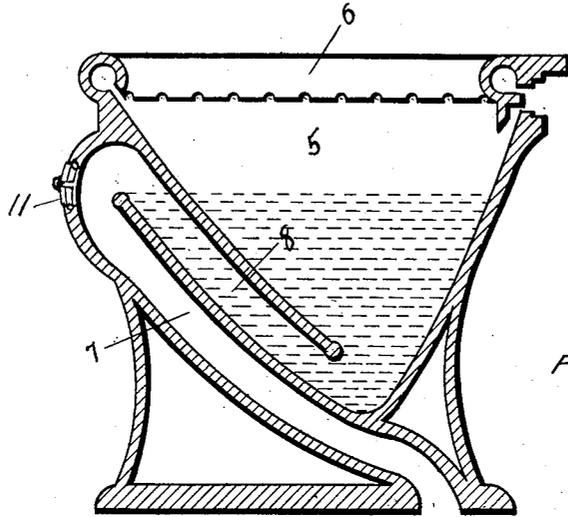


Fig. 1.

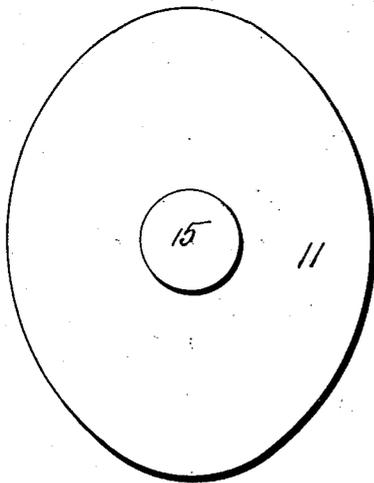


Fig. 2.

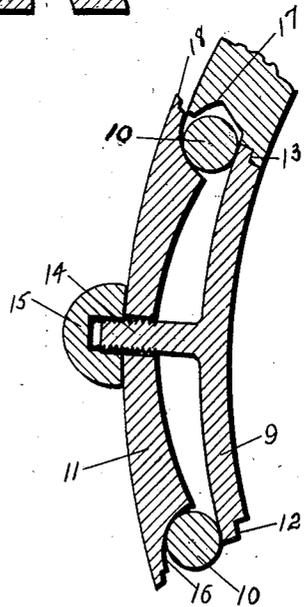


Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM EDW. GIBSON, OF SPOKANE, WASHINGTON.

WATER-CLOSET.

No. 918,036.

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To all whom it may concern:

Be it known that I, WILLIAM EDW. GIBSON, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented certain new and useful Improvements in Water-Closets, of which the following is a specification.

This invention relates to siphon water-closets, and has for its object to provide a hand-hole at the bend of the siphon in order that obstructions may be readily removed.

The invention also has for its object to provide a novel closure for the hand-hole which can be readily put in place or removed, and which will effectually seal the hand-hole and prevent the escape of noxious fumes from the closet.

In the accompanying drawings Figure 1 is a vertical sectional view of a closet-bowl showing the application of the invention. Fig. 2 is a front elevation of the closure. Fig. 3 is an enlarged detail in vertical section of the closure.

Referring specifically to the drawings, 5 denotes a closet-bowl having the usual flushing rim 6, and a siphon forming a trap and outlet, the long leg of the siphon being indicated at 7 and the short leg at 8. At the bend or elbow of the siphon is a hand-hole for cleaning the same in case it becomes stopped up. The hand-hole is so located that both legs of the siphon can be conveniently reached. The closure for the hand-hole comprises a stopper 9, an annular gasket 10, and a compression member 11 for the latter. The stopper 9 is a disk having a shouldered edge 12 engageable with a shoulder 13 on the wall of the hand-hole whereby the stopper is prevented from being pushed into the siphon. The compression member 11 is also in the shape of a disk and has a central opening through which loosely passes a screw stem 14 which projects from the back of the stopper, and on the outside of the member 11 is a nut 15 which is screwed on said stem.

The edge of the member 11 is beveled as indicated at 16, and between said edge and

the back of the stopper, adjacent the edge 50 of the latter, is placed the gasket 10 which is a ring of rubber or other suitable compressible material. The bevel 16 is in such a direction that the gasket can be compressed between the stopper 9 and the member 11 over the joint between the former and the wall of the hand-hole, and also side-wise into an annular groove 17 in the wall of the hand-hole. The edge of the member 11 also has a shoulder 18 which fits over the outer edge of the hand-hole when the parts are in place.

By the device herein described an air and water tight closure for the hand-hole is had and there can be no escape of noxious fumes from the closet-bowl. The closure is simple in construction and can be readily removed and replaced without the aid of a plumber, if it becomes necessary to remove obstructions from the siphon. The gasket 10 is compressed to seal the parts by screwing the nut 15 up against the back of the member 11 which is also shaped to conform to the contour of the outer surface of the bowl. The outline of the stopper and the compression member is oval so that they will be prevented from turning in the hand-hole when they are put in place. The inner surface of the stopper is flush with the wall of the siphon and presents a smooth unbroken surface thereto, so that it will offer no obstruction to anything passing through the siphon.

I claim:

1. A closure for an opening having in its wall an annular undercut recess, comprising a stopper fitting in the opening and against said wall and having a screw stem projecting therefrom, an annular gasket on the stopper, and means for pressing the gasket over the joint between the stopper and the wall of the opening, and into the said recess, comprising a disk with a beveled edge bearing against the gasket and having an opening through which the screw stem extends, and a nut screwed on the stem, against the disk.

2. A closure for an opening the edge of the wall of which has an undercut groove

with inclined walls, said closure comprising
a stopper fitting in the opening beyond the
groove, with the edge of its outer surface
flush with the edge of the inner wall of the
5 groove, a gasket on the stopper opposite the
groove and extending across the joint be-
tween the stopper and the wall of the open-
ing, and means for pressing the gasket in-

wardly upon said joint and laterally into
said groove. 10

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

WILLIAM EDW. GIBSON.

Witnesses:

HOWARD THOMPSON,

H. M. PHILLIPS.