

O. W. SCHLAG.
DRAIN AND TRAP.
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1,218,482.

Patented Mar. 6, 1917.

Fig. 1.

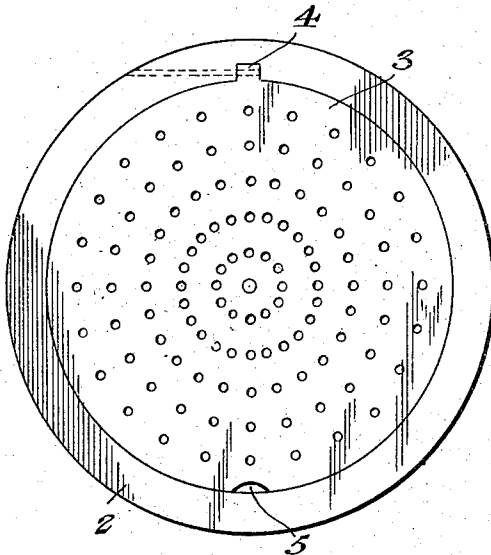


Fig. 4.

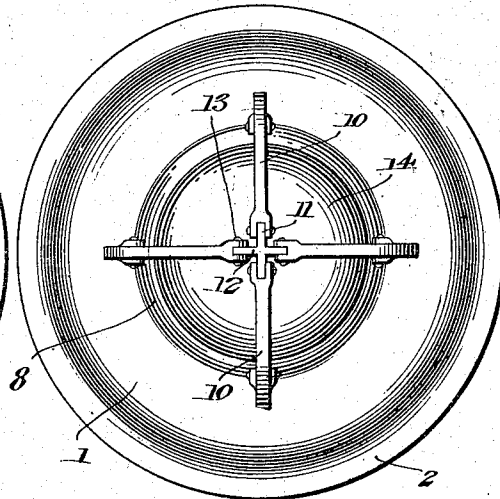


Fig. 2.

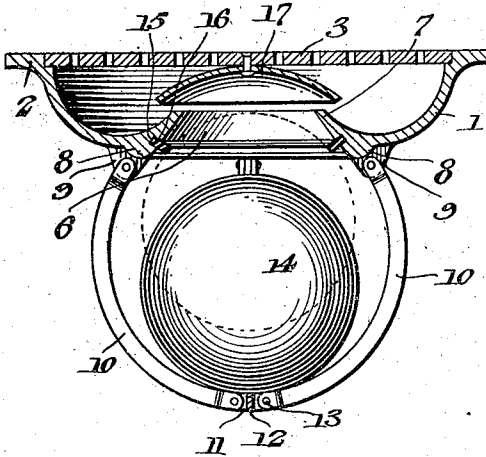
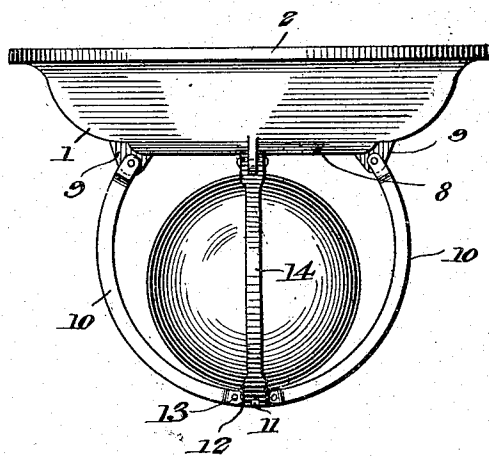


Fig. 3.



Witness

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DRAIN AND TRAP.

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To all whom it may concern:

Be it known that I, OSCAR W. SCHLAG, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Drains and Traps, of which the following is a specification.

The present invention relates to a combined drain and trap for sewer pipes, and the object of the invention is to produce a device of this class wherein the foreign substances may be trapped before being permitted to enter the sewer pipe but which at the same time will permit of the free passage of water into the sewer and which will also prevent the back pressure of the water within sewer flowing outward through the drain, when such back pressure occurs.

With the above and other objects in view the improvement resides in the construction, combination and arrangement of parts set forth in the following specification and falling within the scope of the appended claims.

In the drawing—

Figure 1 is a top plan view of a device constructed in accordance with the present invention,

Fig. 2 is a sectional view approximately on the line 2—2 of Fig. 1,

Fig. 3 is a side elevation of the device, and Fig. 4 is a bottom plan view of the same.

In the drawing the numeral 1 designates the bowl of the improvement. The bowl may be constructed in any desired manner and of any desired material but preferably comprises a metal casting and has its upper and outer edge formed with a flanged ring 2, and the shoulder provided by the said flange is adapted to serve as a seat for the perforated cover 3 of the device. The cover has one of its ends formed with a lug 4 that is adapted to be received in a suitable depression in the flange 2, a pivot member passing transversely through the said lug and through the flange whereby to hingedly secure the cover to the bowl. The bowl upon its edge diametrically opposite that provided with the lug 4 is formed with a curved depression 5, the same providing a finger hold, whereby the said cover may be swung open upon the bowl, as for instance, when access is to be obtained to the bowl.

The bowl 1 comprises a member of an annular formation being formed with a cen-

tral opening 6 and the said bowl to the opposite sides of the said opening 6 is substantially U-shaped in cross section. The inner wall of the bowl terminates a suitable distance below the outer wall thereof, or the wall provided with the flange 2, the said inner wall, indicated for distinction by the numeral 7 having its outer surface flared and thickened, as at 8, and the said thickened portions at preferably four right angularly disposed points are provided with ears 9, and pivotally secured one to each of said ears is a plurality of curved arms 10. The free ends of these arms are preferably bifurcated and receive the angular arms 11 upon a cross 12, the bifurcated ends of the said arms being pivotally secured to the said cross, as indicated by the numeral 13. The curved arms provide a cage for a ball valve 14, and the flared outer surface of the inner wall 7 of the bowl is provided with an annular depression 15 within which is arranged a compressible gasket ring 16, the said ring serving as a seat for the ball valve 14 when the said ball is subjected to the back pressure from the water in the sewer, and thus it will be noted that the ball effectively seals the opening 6 in the bowl, when back pressure in the sewer occurs.

Centrally secured to the perforated top 3, upon the inner face thereof, is a substantially inverted saucer-shaped deflector 17, the same surrounding the central opening 6 of the bowl and directing the water and foreign matter carried therewith to within the bowl; that is, not permitting the said water to flow directly through the central opening 6 of the bowl and thus it will be noted that all foreign matter will be deposited in the bowl, and the said deflector providing a comparatively restricted passage between the central outlet between the same and the central opening or outlet 6 of the bowl.

From the above description taken in connection with the drawing, it will be noted that any one of the arcuate arms 10 of the cage may, by the removal of one of the pivots therefor, be swung to an open position to permit of the insertion of the ball valve 14 to within the cage. The construction of the cage is simple and is cheap to manufacture, and the advantages of my de-

vice will, in view of the foregoing, it is thought, be apparent without further detailed description.

Having thus described the invention, what I claim is:

1. In a device for the purpose set forth, the combination with a bowl having its bottom formed with an inwardly extending centrally flared flange provided with a continuous gasket, said bowl at the bottom thereof and in a line with the flange having spaced ears, of a cage comprising curved arms, one of which being pivotally connected to each of the ears, a member centrally connecting the arms, and the said cage adapted to receive a spherical valve to retain the same below the referred to gasket.

2. In a device for the purpose set forth,

the combination with a bowl having a centrally flared opening and the wall of the opening having a continuous gasket there let in, and spaced ears on the bottom of the bowl and in a line with the opening therein, of curved arms each pivotally secured to one of the ears, each of said ears having its free end bifurcated, a cross having its arms received in the bifurcations of the first mentioned arms, pivot members connecting the curved arms to the arms of the cross, and a spherical member caged between the said curved arms to arrange the said spherical member in the path of engagement with the referred to gasket.

In testimony whereof I affix my signature.

OSCAR W. SCHLAG.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."