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R. L. JEWELL

WATER SEAL FOR CLEANING DEVICES

Filed Oct. 15, 1924

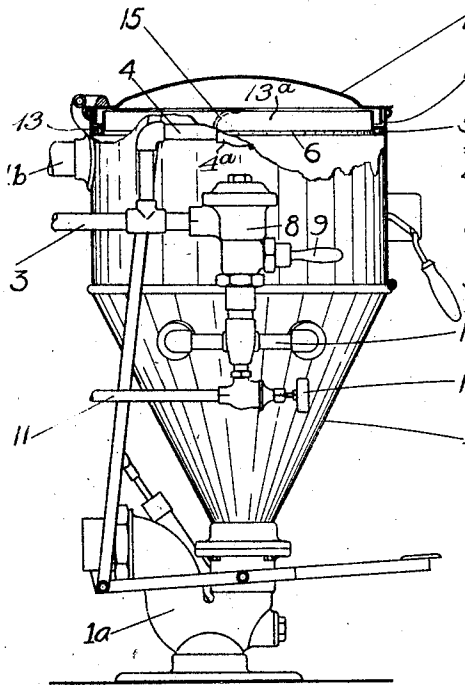


Fig. 1

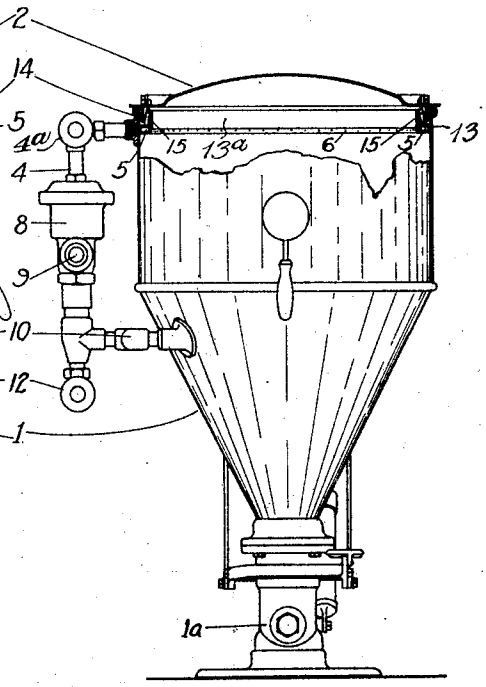


Fig. 2

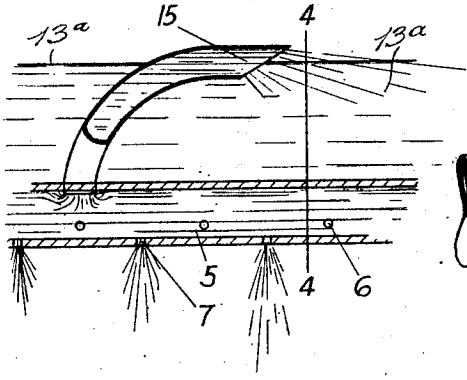


Fig. 3

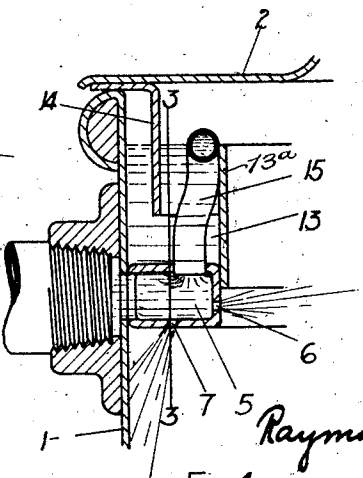


Fig. 4

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UNITED STATES PATENT OFFICE.

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WATER SEAL FOR CLEANING DEVICES.

Application filed October 15, 1924. Serial No. 743,849.

This invention is designed to improve the water seals of cleaning devices especially bed pan cleaners. Heretofore it has been suggested to use water seals for such devices but the water forming such seals has ordinarily become foul and disagreeable or has been gradually dissipated so as to be ineffective for its purpose. With the present invention the water seal is provided and renewed and circulated with each operation of the pan so as to maintain it in working quantity and also to refresh it. Features of the invention will appear from the specification and claims.

The invention is illustrated in the accompanying drawings as follows:

Fig. 1 shows a side elevation, a part being broken away, of a bed pan cleaner with my device in place thereon.

Fig. 2 a similar view at right angles to the view of Fig. 1.

Fig. 3 a section on the line 3—3 in Fig. 4.

Fig. 4 a section on the line 4—4 in Fig. 3.

1 marks the case, 2 the cover, 3 the pipe supplying water, and 4 a branch extending from the supply pipe 3 to the jet ring 5. The ring 5 is rectangular in cross section and is secured to the inner wall of the case near its top by welding, or other convenient means. A valve 4^a is arranged in the branch 4 and controls the flow of the cleaning water as it is delivered from the supply pipe 3 to the ring 5. The jet ring is supplied with jet openings 6 and 7 for delivering water to a bed pan or article within the case for cleaning. A flush valve 8 is connected to the supply pipe operated by a handle 9 and delivers water through a pipe 10 to lower jets for further cleaning the article in the case. Steam is delivered through a pipe 11 and controlled by a valve 12 for sterilizing the cleaned article. The case is provided with the usual discharge trap 1^a and vent pipe 1^b.

A water seal recess ring 13 is arranged directly above the jet ring. This is conveniently formed by welding a band 13^a to the inner face of the jet ring, the band forming the inner wall of the recess, the jet ring the lower wall of the recess and the wall of the case the outer wall of the recess. The cover is provided with a flange 14 which extends around the cover and into the recess of the seal ring 13 when the cover is closed. Water is delivered from the jet ring through a pipe 15, the pipe having a discharge above the bottom of the flange 14 and the discharge being in a downward and tangential direction relatively to the ring as clearly shown in Fig. 3. The effect of the discharge of water through the pipe 15 is to overflow the seal recess and at the same time cause a circulation or annular movement of the water in the recess. Thus the water with each operation of the device is replenished and agitated so that in the ordinary operation of these devices stale water in this recess is avoided and it is maintained at a working level.

What I claim as new is:—

1. In a cleaning device, the combination of an open-topped cleaning chamber; a valve controlled conduit for introducing cleaning fluid into said chamber; a trough arranged in said chamber about its upper edge; a cover for said chamber having a flange adapted to enter said trough; and means for conducting fluid from said valve controlled conduit to said trough.

2. In a cleaning device, the combination of an open-topped cleaning chamber; a valve controlled conduit for introducing cleaning fluid into said chamber; a trough arranged in said chamber about its upper edge; a cover for said chamber having a flange adapted to enter said trough; and means for conducting fluid from said valve controlled conduit to said trough, the discharge to the trough being in a circumferential direction.

In testimony whereof I have hereunto set my hand.

RAYMOND L. JEWELL.