(No Model.)

C. F. PIKE.

WATER CLOSET.

No. 271,915. Patented Feb. 6, 1883.

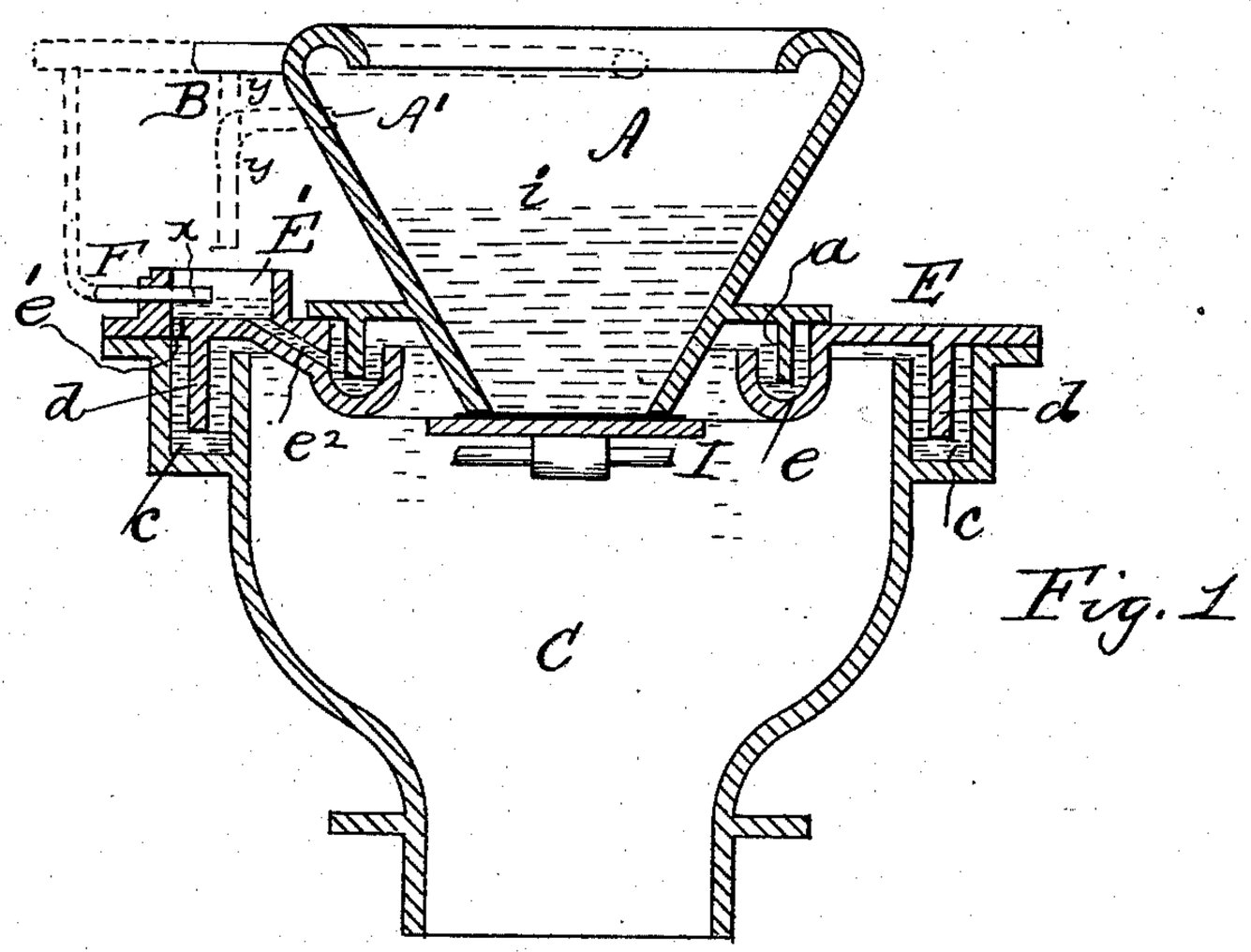

Fig. 1

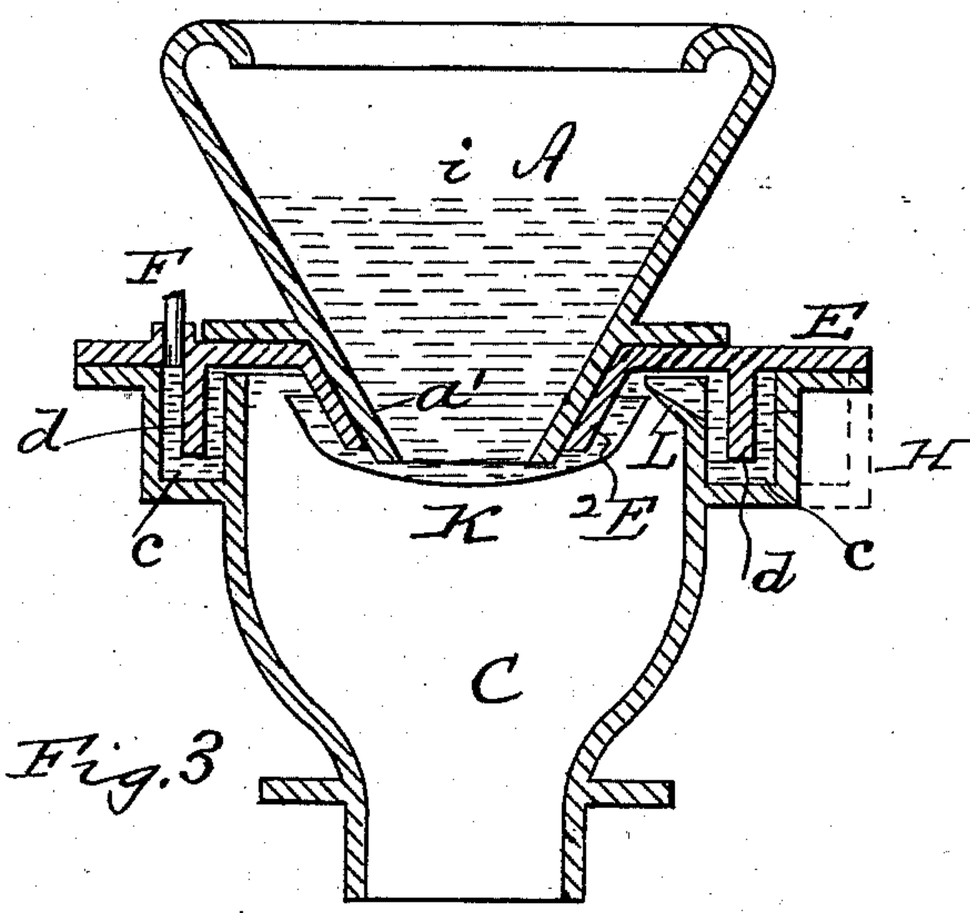

Fig 2

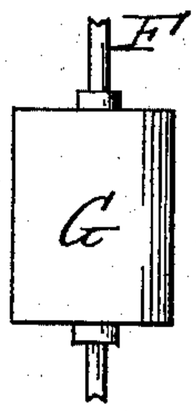

Fig. 3

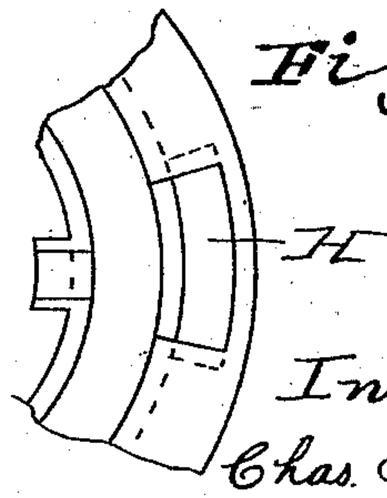

Fig. 4

Witnesses:
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UNITED STATES PATENT OFFICE.

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WATER-CLOSET.

SPECIFICATION forming part of Letters Patent No. 271,915, dated February 6, 1883.

Application filed August 7, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. PIKE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Water-Closets, of which the following is a specification, reference being had therein to the accompanying drawings, wherein—

Figure 1 is a vertical section of a water-closet bowl and container embodying my invention. Fig. 2 is a like view of a modification. Fig. 3 is a detail elevation of reservoir for holding disinfecting material, and Fig. 4 is a broken plan of a part of the container provided with a pocket for receiving a disinfectant.

My invention has relation to water-closets, and has for its object to provide a running-fluid seal joint or joints between the bowl and the container to prevent the escape of sewer-gas and excrementitious odors therefrom.

My invention has for its further object to cause such fluid to pass into or over a disinfecting material before flowing to said joints to provide a disinfecting fluid seal therefor.

My invention accordingly consists of a water-closet and its container having the joints between said parts arranged substantially as hereinafter described and claimed, whereby a running-fluid seal is provided therefor, and, in combination therewith, of a reservoir for holding a disinfectant.

My invention further consists in the novel construction, combination, and arrangement of parts, as hereinafter specifically described and claimed.

Referring to Fig. 1 of the accompanying drawings, A represents the bowl, having water-supply and flushing pipe B, of suitable construction and arrangement.

C indicates the container, of any suitable configuration, having a groove, *c*, formed on its top edge all around the same. Into said groove depends a flange, *d*, cast on container-lid E. The latter is also formed with a groove, *e*, into which enters a flange, *a*, depending from the bowl A, as shown.

E′ represents an open or closed top recess or chamber on lid E, having openings or ducts e' e^2, leading respectively to grooves *c* and *e*, so that if water, mercury, or other suitable fluid is poured into chamber E′ such fluid will pass through ducts e' e^2 to the grooves *c e*, filling the latter to any desired height, or sufficiently to immerse the flanges *d a* and seal said grooves, thereby preventing sewer-gas or odors of excrementitious matter escaping from or passing therethrough. If the fluid is poured into said grooves, as described, mercury may be employed to effect such seal; but I prefer to use water for such purpose, and in that case a pipe, F, from water-supply tube B connects with the chamber E′, as shown in full lines *x*, Fig. 1, or as indicated by dotted lines *y*. Said pipe F may be of very small bore to admit of a minute flow therethrough, or the cock of the pipe B and the branch F may be arranged as shown in an application filed by me October 5, 1881, in order to provide for such small flow for branch F. When the latter is used a constant flow of water is running into and out of the grooves *c e* to form therefor a running-water seal. The branch F may have a reservoir, G, in its path, as shown in Fig. 3. In said reservoir is placed a solid or a fluid disinfectant, which commingling with the water as it flows into and through said reservoir, a disinfecting running-water seal is thereby provided for the grooves; or said reservoir may be dispensed with and a pocket, H, formed on the container may be substituted therefor, as shown in Figs. 2 and 4, the disinfectant being placed in pocket H and pipe F, leading thereto. The bowl A is provided with a clapper or valve, I, having the usual or other operating mechanism, the latter not being shown in the drawings, to form the customary water-seal *i* for bowl A.

In Fig. 2 I have shown my invention applied to a pan-closet, in which case the flange *a* on the bowl is dispensed with, as is also the groove *e* in container-lid E. I lieu thereof, the latter is provided with an annular flange, E^2, surrounding the lower end, a', of the bowl. Said flange E^2 and end a' enter the pan K, as plainly indicated in said figure, and are sealed by the water in said pan. A channel or lip, L, on the container conveys water from groove

c to said pan. The pipe F leads direct to groove *c*, as shown, thereby dispensing with chamber E′. If a running-water seal be not used for bowl and pan K, the channel or lip L is arranged as above described. If, however, a running-water seal be employed for said pan, the lip L may be secured to the pan and project into groove *c* to supply the latter with such sealing-fluid.

If a running-water seal is provided for the bowl shown in Fig. 1, an overflow-pipe, A′, will be employed therefor, and such pipe will then be conducted to chamber E′ and the pipe F dispensed with, as indicated by dotted lines *y y*, said figure. Such overflow passes from bowl A to chamber E′, and thence to the seal-joints, as above set forth.

What I claim as my invention is—

1. The combination, with a water-closet bowl, of a container and lid, having running-water seal-joints between said parts, substantially as shown and described.

2. The combination, with bowl A, having flange *a*, of a container, C, having groove *c*, and a lid, E, having flange *d* and groove *e*, substantially as shown and described.

3. The combination of bowl A, having flange *a*, the container C, with groove *c*, and the lid E, having flange *d*, groove *e*, recess E′, and communicating channels between said recess and grooves *e c*, substantially as shown and described.

4. The combination, in a water-closet, a bowl, and its water-supply pipe, of a container and lid provided with seal-joints, substantially as shown and described, and a pipe-connection between said joints and the water-supply pipe, substantially as shown and described.

5. In combination with container C and lid E, provided with a seal-joint, of a pipe, F, and disinfectant-holding reservoir, substantially as shown and described.

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

CHARLES F. PIKE.

Witnesses:

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