(No Model.)

T. H. WALKER.

WATER CLOSET.

No. 262,518. Patented Aug. 8, 1882.

Fig: 1.

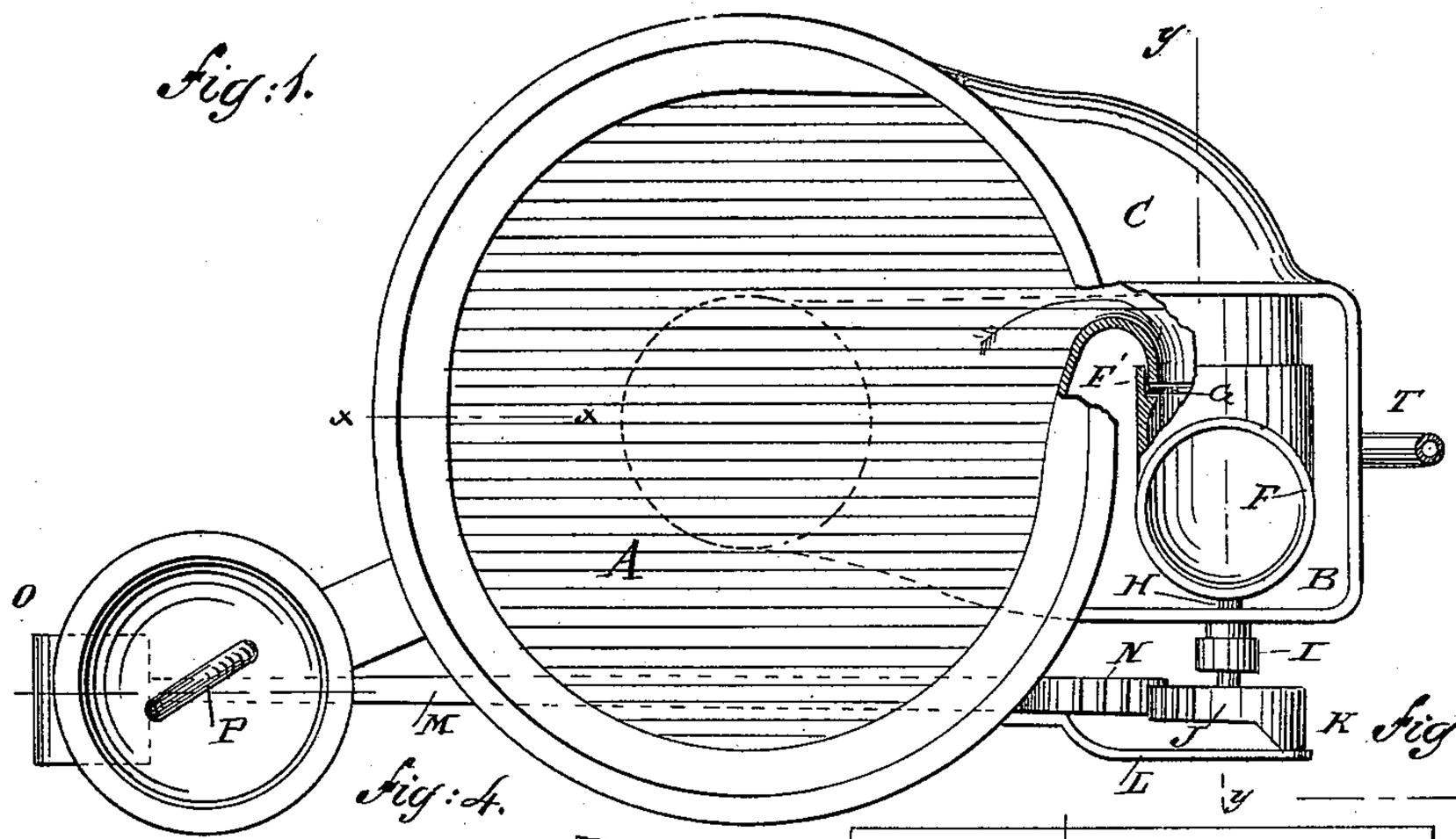
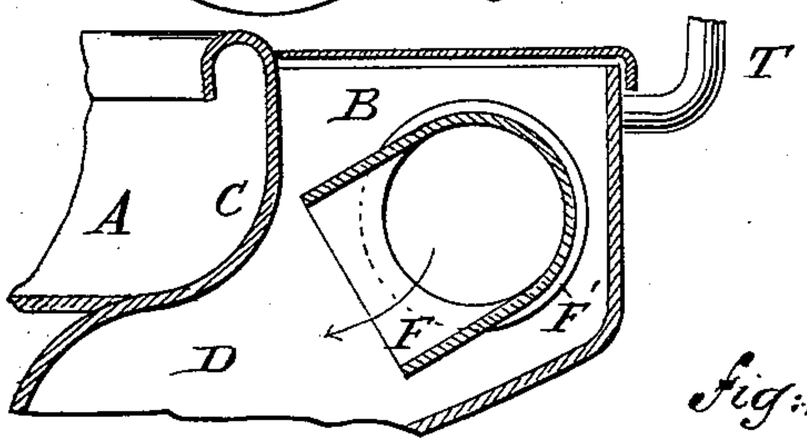


Fig: 4.

Fig: 3.



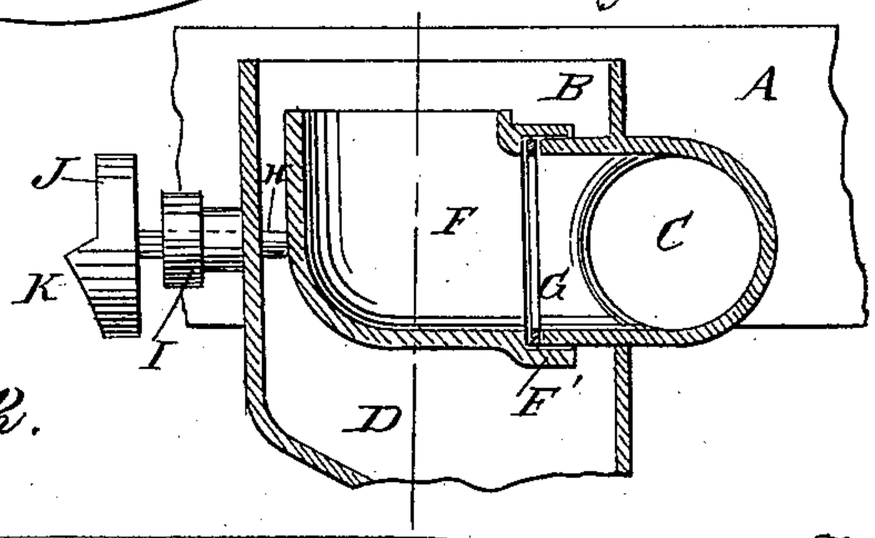
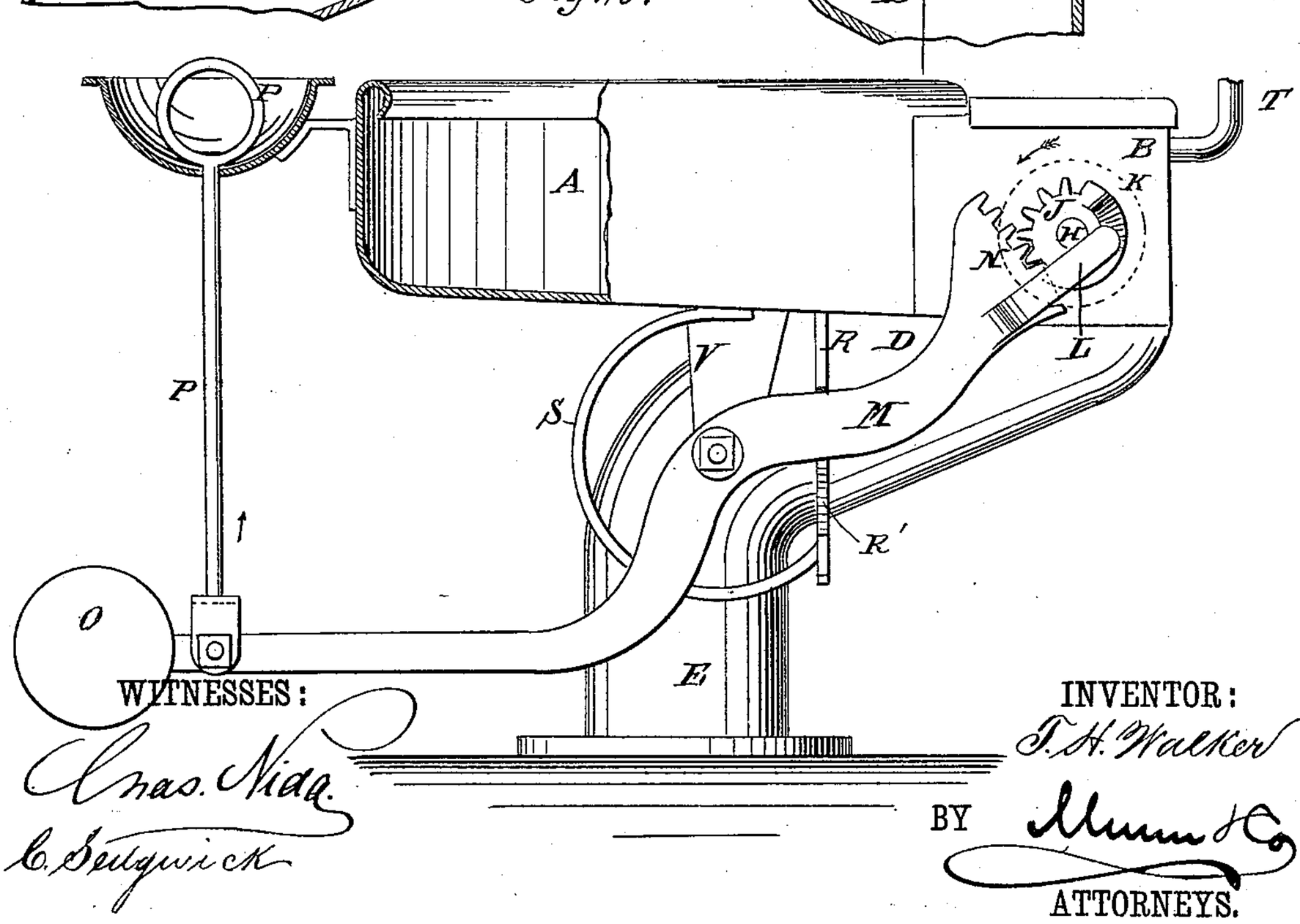


Fig: 2.



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UNITED STATES PATENT OFFICE.

THOMAS H. WALKER, OF KANSAS CITY, MISSOURI.

WATER-CLOSET.

SPECIFICATION forming part of Letters Patent No. 262,518, dated August 8, 1882.

Application filed November 19, 1881. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. WALKER, of Kansas City, in the county of Jackson and State of Missouri, have invented a new and Improved Water-Closet, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved water-closet that will retain the water in the bowl to the desired height without requiring the use of a plug-valve or a pan.

The invention consists in a water-closet formed of a bowl provided with an extension or box connected with the bowl by an elbow only, on the inner end of which elbow a rotating or tilting elbow is mounted, and is connected by suitable mechanism with a lever connected with a pull, whereby the rotating elbow can be tilted by raising the pull, thus permitting the water in the bowl to flow through the fixed and the tilted elbows into the box and from there into the waste-pipe. When the tilting elbow is raised the water in the bowl cannot flow out of the bowl unless it rises to the top of this elbow, and if it should accidentally rise higher than this elbow it flows off through the same, thus permitting me to dispense with an overflow-pipe.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of my improved water-closet, parts being shown in section. Fig. 2 is a longitudinal elevation of the same, parts being shown in section on the line *x x*, Fig. 1. Fig. 3 is a longitudinal sectional elevation of the box at the rear of the bowl on the line *y y*, Fig. 1, the tilting elbow being shown raised. Fig. 4 is a cross-sectional elevation of the box at the rear of the bowl, the elbow being shown tilted.

The flat circular or like bowl A is provided at its rear end with a box or extension, B, communicating with the bowl by means of an elbow, C, extending from the bowl into the box B, and projecting inwardly from one end of this box, as shown in Figs. 1 and 3. A curved conduit or channel, D, leads from this box B into the waste-pipe E, which waste-pipe is not in direct communication with the bowl. An elbow, F, provided with an annular end flange, F′, fitting over the inner projecting end of the fixed elbow, C, is loosely mounted on this end of this fixed elbow C, and a packing-strip, G, of rubber, leather, canvas, or any other suitable material is interposed between the meeting ends of the elbows C and F, the annular flange F′ overlapping the joint formed. A pintle, H, firmly attached to the elbow and projecting from the same, passes through a stuffing-box, I, in the end of the box B, and has a wheel, J, part of the periphery of which is provided with teeth rigidly mounted on its outer end. The pintle H is attached to the elbow F in such a manner that its elongation would strike exactly in the center of the inner end—that is, the end in the box B of the elbow C—thus permitting the elbow F to turn on this pintle H and on the end of the elbow C. The wheel J is provided with a beveled lateral cam-projection, K, against which an elongation or projection, L, of a lever, M, rests, this lever M being pivoted to an arm, V, of the bowl, and provided at one end with a segmental rack, N, engaging with the teeth of the wheel J, and at the other end with a weight, O, and at this end is also pivoted to a pull or rod, P, reaching up to the seat in the ordinary manner. A guide-plate, R, is provided with a longitudinal recess R′, in one of the longitudinal edges, and in this recess the lever M moves, the ends of the recess forming a check for the movements of this lever and preventing it from being raised too high or descending too low. This guide-plate R is stiffened and braced by a curved brace, S.

T represents the ventilating-pipe for ventilating the space between the seal and the bowl.

The operation is as follows: When the pull P is lowered, as shown in Fig. 2, the water in the bowl can rise until it is on a level with the upper edge of the tilting or revolving elbow F, and if the water still rises the water flows over the upper edge of the elbow F into the box B and into the waste-pipe E, so that a separate overflow-pipe is not required with my improved water-closet. If the bowl is to be emptied, the pull or rod P is raised, as indicated by the arrow, thereby partially rotating the wheel J, as indicated by its arrow, and tilting the elbow F, as shown in Fig. 4, and thus permitting the water in the bowl A to flow through the elbows C and F into the channel D and

waste-pipe E. As soon as the rod P is released the weight O draws the end of the lever M downward, whereby the wheel J will be turned in the inverse direction of its arrow and the rotating elbow F will be raised. The water flows into the bowl A again and rises to its ordinary height. So as to prevent leakage at the joint of the elbows C and F, I have provided the projection or extension L, which slides up the beveled cam-projection K on the wheel, and thus presses the wheel J toward the box—that is, the lower end of the elbow F is pressed against the packing-strip G, and this in turn is pressed against the end of the fixed elbow C. The water in the bowl and on the raised elbow F is to rise to such a height as to form a water-trap and prevent the sewer-gases from passing from the waste-pipe E and box B into the bowl A.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a water-closet, the combination, with the bowl A, provided with the extension or box B and the elbow C, and the waste-pipe E, of the elbow F and means for rotating the said elbow, substantially as and for the purpose set forth.

2. In a water-closet, the combination, with the bowl A, provided with the extension or box B and the elbow C, of the elbow F, provided with the annular end flange, F′, the packing G, and means for rotating the said elbow, substantially as and for the purpose set forth.

3. In a water-closet, the combination, with the bowl A, provided with the extension or box B and the elbow C, of the elbow F, the pintle H, the segmental cog-wheel J, and the lever M, provided with the segmental rack N, substantially as and for the purpose set forth.

4. In a water-closet, the combination, with the bowl A, the box B, and the elbow C, of the elbow F, the pintle H, the segmental cogged wheel J, the weighted lever M, provided with the segmental rack N, the pull P, and the guide R, substantially as and for the purpose set forth.

5. In a water-closet, the combination, with the bowl A, of the box B, the elbow C, the tilting elbow F, the pintle H, the cog-wheel J, provided with a cam-projection, K, the lever M, provided with an extension, L, and a rack, N, and of the pull P, substantially as herein shown and described, and for the purpose set forth.

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Witnesses:
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