

No. 809,161.

PATENTED JAN. 2, 1906.

D. W. YORK.
WASHBOWL VALVE.
APPLICATION FILED APR. 28, 1905.

Fig. 1.

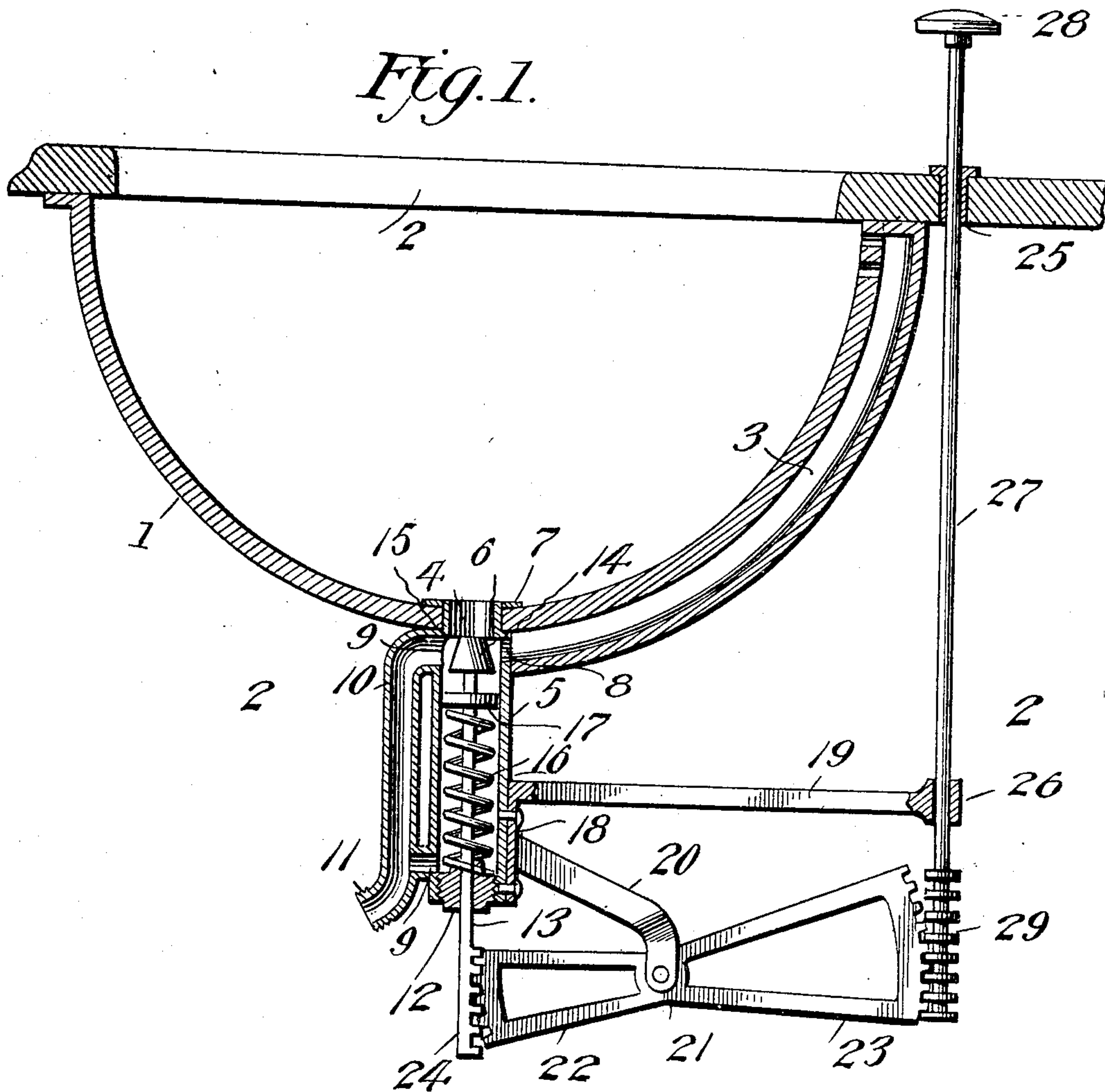
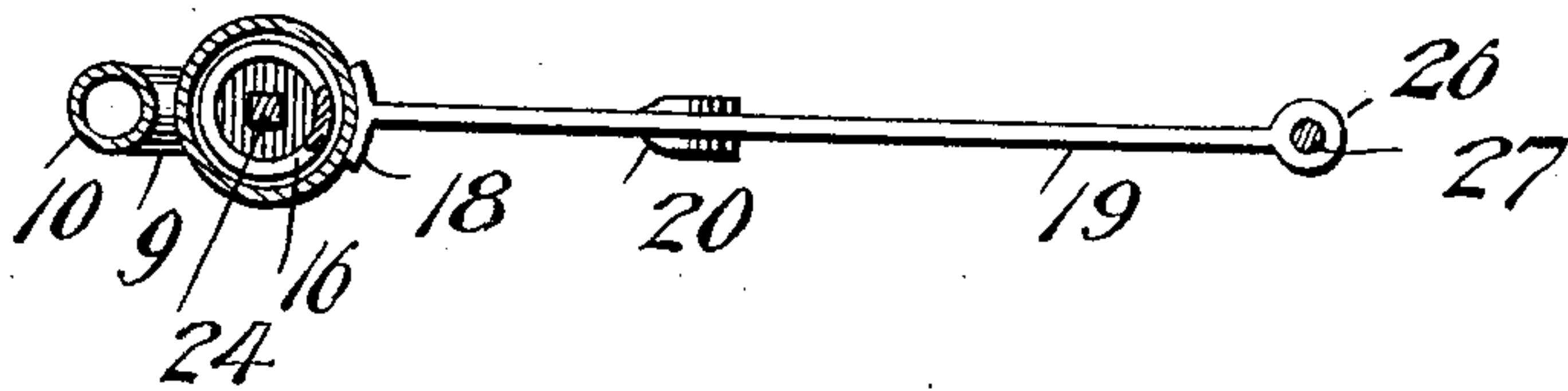


Fig. 2.



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WASHBOWL-VALVE.

No. 809,161.

Specification of Letters Patent.

Patented Jan. 2, 1906.

Application filed April 28, 1905. Serial No. 257,851.

To all whom it may concern:

Be it known that I, DAVID W. YORK, a citizen of the United States, residing at Gardiner, in the county of Kennebec and State of Maine, have invented new and useful Improvements in Washbowl-Valves, of which the following is a specification.

My invention relates to valves controlling the discharge of water from a washbowl or the like. Its primary object is to provide a valve which will be normally retained seated and to provide a highly-novel mechanism for operating said valve.

The invention consists of the construction, combination, and arrangement of parts hereinafter fully described, claimed, and illustrated in the accompanying drawings, which disclose the preferred form of my invention, and in which—

Figure 1 is a vertical central sectional view of a water-bowl and of the mechanism connected therewith, and Fig. 2 is a horizontal sectional view taken on the line 2 2 of Fig. 1.

Referring to the drawings by reference-numerals, 1 designates a bowl of the usual form and construction, and 2 the bowl-top, which is also of the usual form and construction. The bowl is provided with the usual by-pass 3 and the usual discharge-opening 4.

5 designates a sleeve or valve casing having an upper reduced end 6, positioned within the opening 4. The reduced portion 6 of the valve-casing projects slightly above the inner face of the bowl 1, and secured to said projecting portion is a retaining-washer 7, whereby the valve-casing is suspended in applied position. This valve-casing is provided with an opening 8, which communicates with the by-pass 3, whereby any water entering the by-pass may be freely discharged into the casing and from whence it is discharged into a sewer-pipe. This casing is also provided with openings 9, which communicate with a waste-pipe 10, formed integral with the valve-casing. The lower end of the waste-pipe 10 is screw-threaded, as at 11, for connection with the sewer-pipe. It is apparent that the provision of the openings 9 facilitates the discharge of water entering the valve-casing and also obviates any liability of water remaining therein.

A bearing-plug 12 is threaded into the lower open end of the valve-casing, and mounted therein is a valve-rod 13. This valve-rod has positioned upon its upper end a valve 14, which is adapted to be seated

against a shoulder 15, formed by the reduction of the upper end of the valve-casing, to retain water within the bowl. The valve is normally retained seated by means of an expansion-spring 16, which surrounds the valve-rod 13, and interposed between a disk 17, carried by the valve-rod and said bearing-plug 12. A bracket 18 is secured to the valve-casing and is provided with a horizontal bracket-arm 19 and a depending bracket-arm 20. A rocking gear element 21 is carried by the depending bracket-arm 20. This element is composed of two diametrically-opposed gear-segments 22 23, the segment 22 being meshed with a rack portion 24 of the valve-rod 13. The top 2 of the bowl is provided with a bearing-bushing 25, and the extremity of the bracket-arm 19 is provided with a bearing 26, arranged in vertical alignment therewith. Mounted in these bearings for vertical movement is an operating-bar 27, which has its upper end provided with a knob 28 to be made use of in the operation of the bar. The lower end of this operating-bar is provided with a rack 29, which is meshed with the gear-segment 23. The valve 14 is, as is apparent, retained normally seated by means of the spring 16. When it is desired to unseat the valve to permit the outflow of the water contained in the bowl, the operating-bar 27 is raised. This movement of the operating-bar causes the rocking element to be moved so as to cause the downward movement of the valve-rod 13, thus unseating the valve 14. After the operating-bar is released the spring will cause the valve to promptly reseat.

From the foregoing description, taken in connection with the accompanying drawings, the construction and mode of operation of the invention will be understood without a further extended description.

Changes in the form, proportions, and minor details of construction may be made within the scope of the invention without departing from the spirit or sacrificing any of the advantages thereof.

Having thus fully described the invention, what is claimed as new is—

1. A bowl provided with a discharge-opening and a by-pass, a valve-casing having its upper end positioned within said discharge-opening and provided with a waste-pipe formed integral therewith and having communication at an upper and lower point with the valve-casing, said valve-casing being pro-

vided with an opening arranged in alinement with said by-pass, a valve mounted within said casing, and means for operating the same.

- 5 2. A water-bowl provided with a discharge-opening and a by-pass, a valve-casing having its upper end positioned within said discharge-opening and provided with a waste-pipe hav-
10 ing communication at an upper and lower point with said valve-casing, said casing being provided with an opening arranged in alinement with said by-pass, a bearing-nut threaded in the lower end of said valve-cas-
15 ing, a valve-rod having its lower end provided with a rack and having its upper end journaled within said bearing-nut and positioned within the casing, a valve carried by the upper end of said rod, a spring adapted to

normally retain the valve seated, a bracket carried by said casing and provided with a 20 horizontally and a downwardly projecting bracket-arm, a rocking element consisting of two diametrically-opposed segmental gear elements, one of said gear elements being in mesh with the rack portion of the valve-rod, 25 and an operating-bar journaled in a bearing in a horizontal bracket-arm and provided with a rack in mesh with the other segmental gear element.

In testimony whereof I affix my signature 30 in presence of two witnesses.

DAVID W. YORK.

Witnesses:

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