

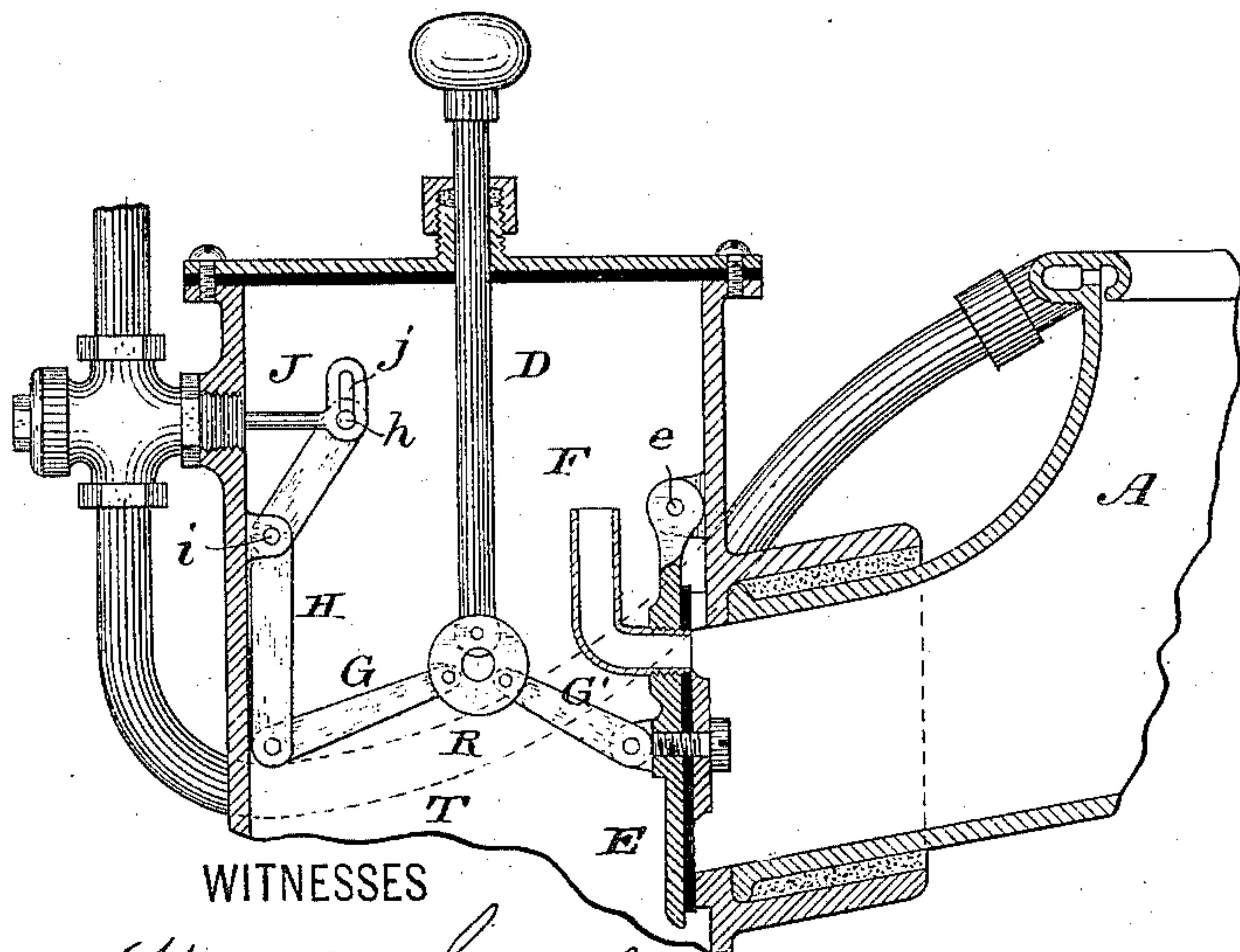
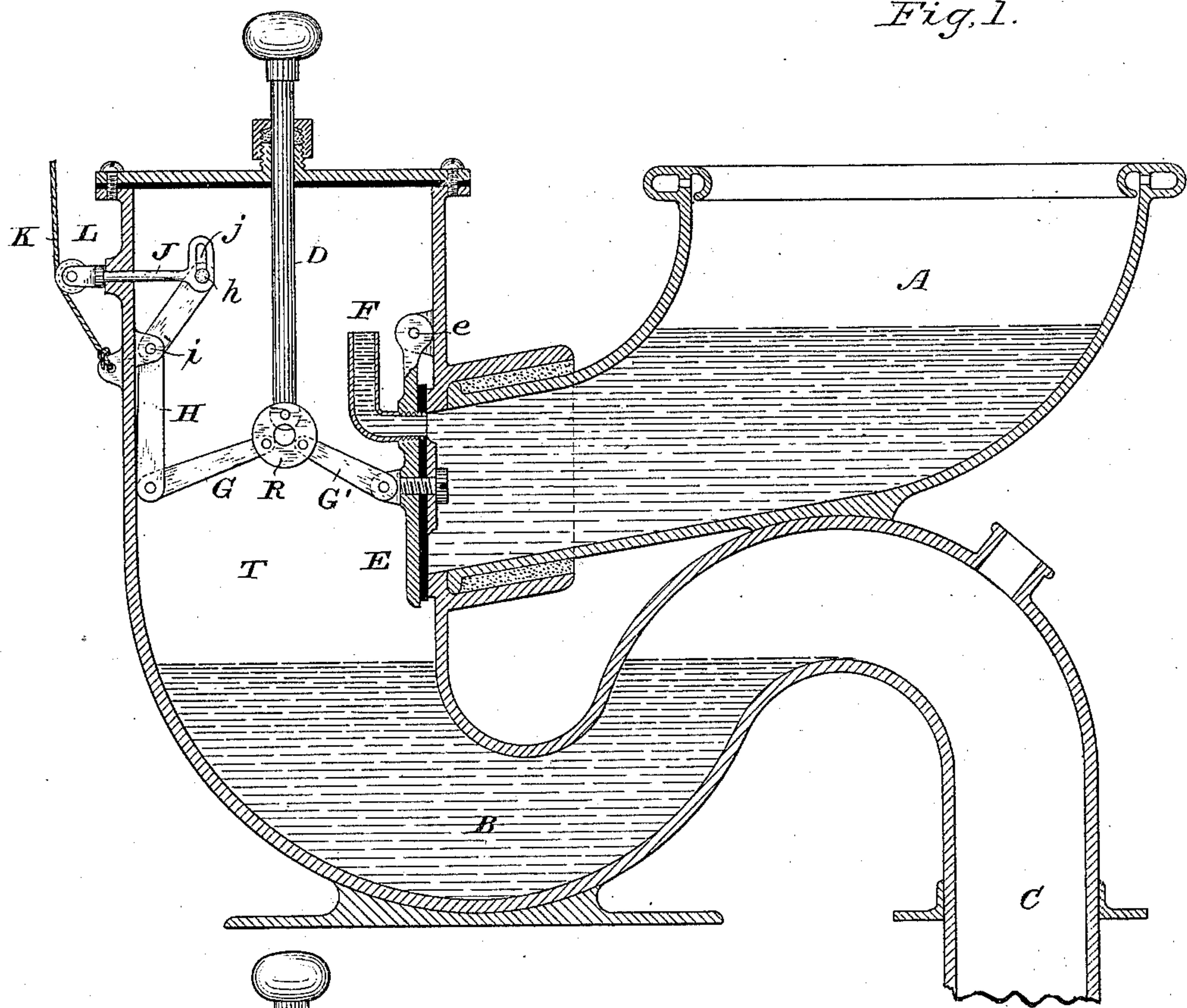
(No Model.)

J. W. BIRKETT.

WATER CLOSET ATTACHMENT.

No. 299,333.

Patented May 27, 1884.



WITNESSES

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WATER-CLOSET ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 299,333, dated May 27, 1884.

Application filed January 14, 1884. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. BIRKETT, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Water-Closet Attachments; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same; reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to certain improvements in water-closet attachments, the details whereof are fully described in the following specification, and clearly shown in the accompanying drawings, in which—

Figure 1 is a vertical longitudinal sectional view of my invention, and Fig. 2 is a similar view of a modification.

Like letters of reference indicate similar parts.

A refers to the bowl. B is the trap, and C the discharge-pipe. D indicates the pull-handle, E the exit-valve, and F the overflow for the bowl.

T is the trunk, within which I place the mechanism for simultaneously operating the exit-valve E and liberating the water-supply; and this mechanism consists of the toggle-lever arms G G', connecting the exit-valve E and the bent lever H, and pivoted at their inner ends to the vertical-moving pull-handle rod. At this point I insert the connecting link or ring R, for convenience and simplicity of mechanism, and to the upper side thereof the pull-handle rod is pivoted, while the toggle-lever arms are pivoted at or nearly at points equidistant from the handle-rod. A less cumbersome joint is thus made, and the toggle-lever arms do not interfere with each other when the pull-handle is raised. At the same time their operation is effective and simple, and the exit-valve E will be tightly wedged, when closed, between the packing and the lower end of the bent lever H. The bent lever H, when the pull-handle is raised, operates to communicate horizontal movement to a push-rod, J, by

means of pin *h* and slot *j*. To the other end of this rod J, I connect the water-supply valve by means of a cord, K, fastened at any desired point, so that it will fall over the line of movement of said push-rod. The pulley L is inserted in the end of rod J, and its grooved face runs on the cord. When the pull-handle is raised, the pulley L pushes cord K out of line, and thus shortens the direct distance between its ends. Power is thus communicated to the water-supply device. It is, however, evident that while this form of connection is described, any suitable or well-known mechanism may be employed that is capable of performing substantially the same function; or the push-rod might be connected direct with the valve, as in Fig. 2, the system of levers remaining the same. The exit-valve E being suitably hung at *e*, when the pull-handle is raised, one arm of the toggle-lever opens said exit-valve, and the other arm operates the water-supply through bent lever H, which is pivoted at *i*.

Through the exit-valve E, and at right angles thereto, extends the tube F, forming the overflow for the bowl. The outer end of this tube is bent and continued upward to a height on a level with the desired water-level of the bowl. At every operation of said valve this overflow-tube is entirely emptied, thus avoiding clogging or stoppage, and facilitating the successful working of the closet.

The fulcrum of the supporting-lever H and the hinge of the valve E being on opposite sides of the trunk, and the lower portion of said lever H and the valve E both moving toward the center of the trunk, the intervening levers and connections between them will move simultaneously, and the power used to elevate or depress said pull-rod will be applied without the intervention of any sliding parts.

I claim—

1. In a water-closet, a toggle-lever having vertically - moving connecting-link, and the outer ends of its arms pivoted to and supported, respectively, by the exit-valve and the water-supply-operating lever, as set forth.

2. In a water-closet, the pull-handle D, push-rod J, pivoted bent lever H, and suitable connecting mechanism, in combination

with a valve-controlling cord fixed at one end and adapted to be drawn downward by the thrust of said push-rod, substantially as described.

- 5 3. In a water-closet, the combination of exit-valve E, provided with suitable overflow, the toggle-levers G G', and connecting-link R, interposed between said toggle-levers and the pivoted bent lever H, said lever H also

being connected to and operating the water-supply-controlling devices, substantially as shown and described.

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

JAMES W. BIRKETT.

Witnesses:

WM. H. CURTIN,
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