

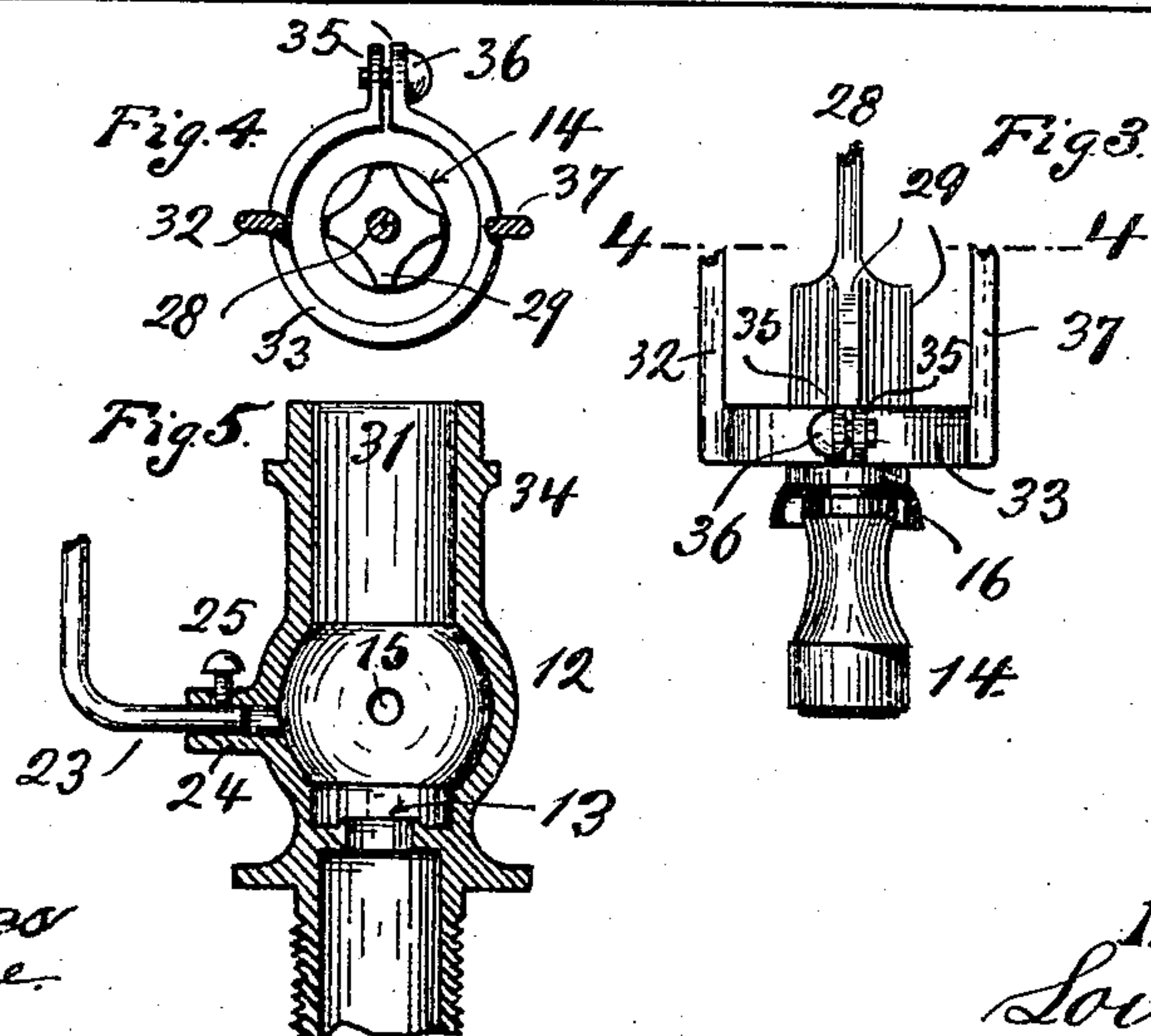
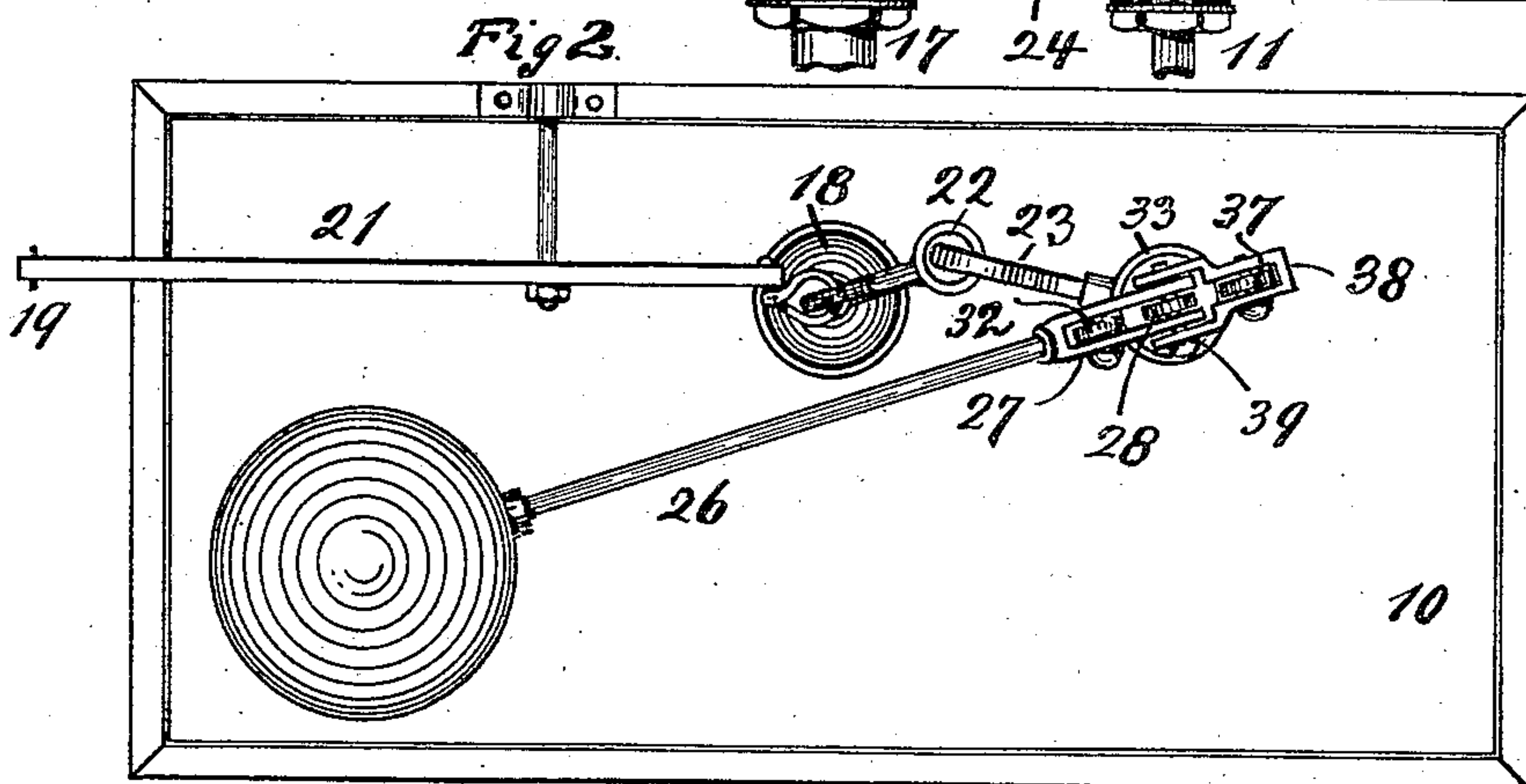
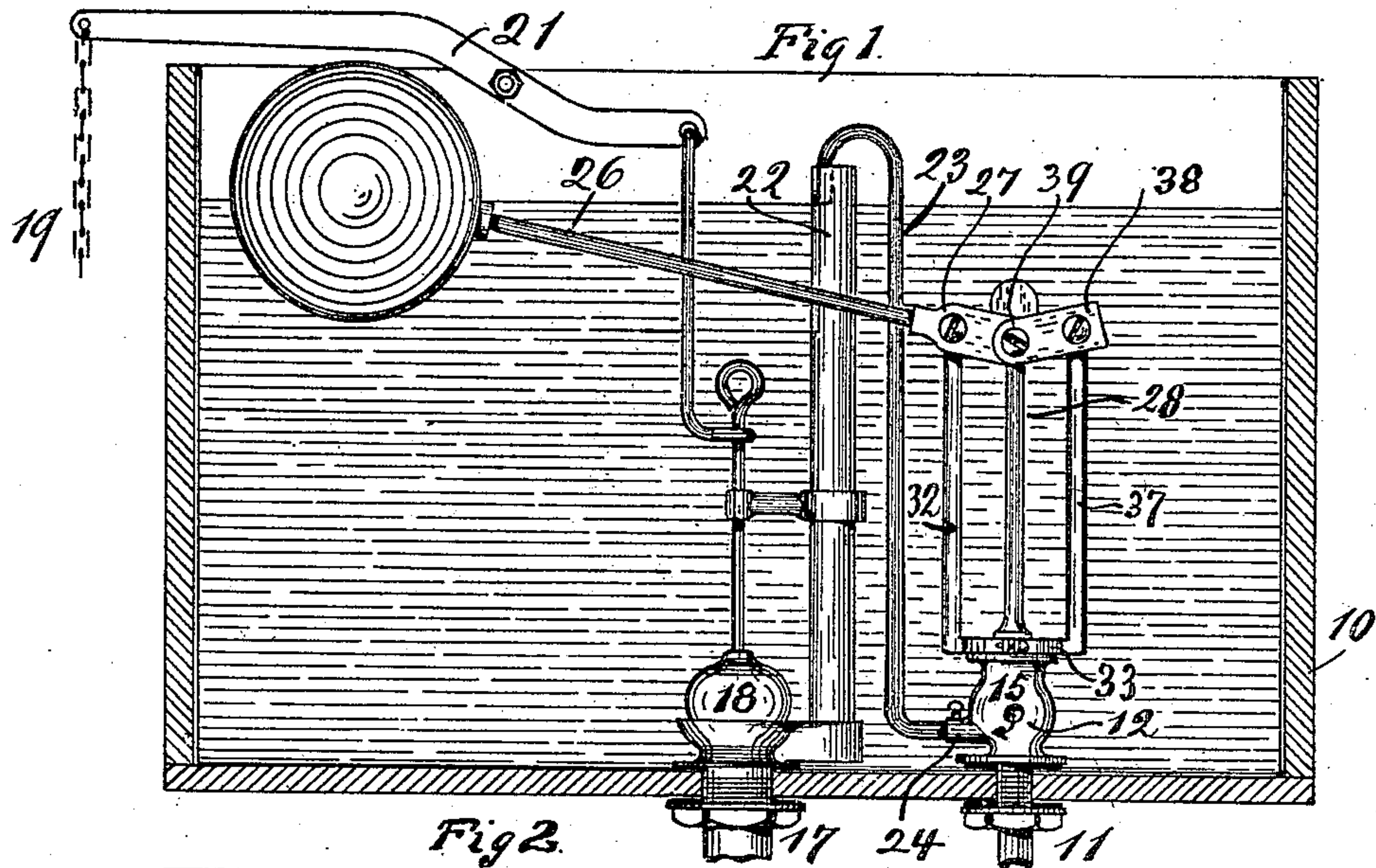
No. 848,381.

PATENTED MAR. 26, 1907.

L. LIPP.

FLUSHING TANK FOR WATER CLOSETS.

APPLICATION FILED MAY 12, 1906.



Witnesses
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UNITED STATES PATENT OFFICE.

LOUIS LIPP, OF MILLCREEK TOWNSHIP, HAMILTON COUNTY, OHIO.

FLUSHING-TANK FOR WATER-CLOSETS.

No. 848,381.

Specification of Letters Patent.

Patented March 26, 1907.

Application filed May 12, 1906. Serial No. 316,484.

To all whom it may concern:

Be it known that I, LOUIS LIPP, a citizen of the United States, and residing at Millcreek township, Hamilton county, State of Ohio, have invented certain new and useful Improvements in Flushing-Tanks for Water-Closets; and I do declare the following to be a clear, full, and exact description of the invention, attention being called to the accompanying drawings, with the reference characters marked thereon, which form also a part of this specification.

This invention relates to improvements of certain parts used in connection with flushing-tanks for water-closets, all as more fully explained hereinafter and as pointed out in the claim.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 shows a flushing-tank in longitudinal vertical section and containing the features concerned in my invention. Fig. 2 is a top view of this tank. Fig. 3 is an enlarged view of the inlet-valve and certain other parts used in connection with this tank and as they appear when detached. Fig. 4 is a horizontal section on line 4 and 4 of Fig. 3. Fig. 5 is a vertical cross-section of the valve-housing which receives and supports the parts shown in Fig. 3.

In the drawings, 10 indicates a customary flushing-tank. 11 is the supply-pipe for it, communicating with a valve-housing 12, secured to the bottom of the tank and in which is formed a valve-seat 13, to which is fitted valve 14, which controls the supply. This supply when the valve is open enters the tank through a port 15. Upwardly the valve-housing is closed by a cup-leather packing 16. (Shown in section.)

17 is the outlet-pipe, controlled by valve 18, manipulated by a pull 19 through the intervention of a lever 21.

22 is the overflow-pipe, communicating directly with the outlet-pipe and independent of control by valve 18.

23 is the afterfill-pipe, communicating at its upper end with the upper end of the overflow-pipe and supplying a limited quantity of water through this latter to cover the bottom of the closet-bowl during the last movements of the closing of valve 14 and after valve 18 has closed the flush-outlet. This afterfill-pipe is seated in a nipple 24, which projects integrally from valve-housing 12 and is held in such position by a set-screw 25.

Opening and closing movements of valve 14 are controlled by a float-operated lever 26, pivoted at 27 and attached to the upper end of valve-stem 28. Wings 29 are provided at the lower end of this stem and fitted into neck 31 of the valve-housing to guide the valve during its movements to and from its seat 13. Where float-lever 26 is pivoted to the upper end of a post or to a projection which forms a rigidly-attached or integral part of the valve-housing, the position of the lever 26 is forced to a fixed location. The objection to this method of construction is that if the lever or its float should interfere with any of the other operating parts within the tank or if the float should come too close to the side of the tank no room or chance is given to fit parts by adjustment. To overcome these objections, I provide a frame consisting of a post 32, rising from a base 33, which is fitted to the upper end of neck 31 and rests upon a shoulder 34 on said neck. Since this base may be rotated about said neck, it is clear that the position of post 32 may be arranged to suit the position of the float-lever with reference to any parts which might interfere with its motion. This base is in form of an open band provided with opposite lugs 35, which receive a clamping-screw 36, whereby after adjustment the parts may be secured in a fixed position. To remove the effects of any lateral action of lever 26 upon valve-stem 28, I provide an additional post 37, equidistant from the center with the other post, and at the upper end of the same I provide a link 38, held to the valve-stem by the same pin 39 which holds the inner end of lever 26. A straight movement free from possible lateral binding strains is thus assured.

The parts may be quickly assembled and adjusted and readily taken apart for repair or repacking of the valve. The loosening of clamping-screw 36 permits the lever-supporting frame to be taken off, which at once gives access to valve 14, since this latter and its stem come up together with this frame. (Note Figs. 3 and 4.) The readiness with which afterfill-tube 13 may be attached or taken off, being simply slipped in or out of nipple 24, greatly adds to the simplicity. In setting up the parts the valve-housing is first set so on the bottom of the tank that the upper end of the afterfill-pipe meets the upper end of the overflow-pipe. Next the lever-supporting frame is mounted on the valve-

housing and turned thereon to bring the float and its lever in proper position within the tank to be free from interference.

Having described my invention, I claim as
5 new—

In a flushing-tank for closets, the combination of a float-controlled inlet-valve having a valve-stem, a housing for this valve having an upwardly-extended neck and an external
10 shoulder thereon, a band-shaped base supported on this shoulder in a manner to be free for rotary adjustment thereon and

about this neck, two posts on this base diametrically opposite each other, a float-operated lever pivotally supported on one of
15 these posts and connected to the valve-stem between them and a link also connected to the valve-stem and to the other post.

In testimony whereof I hereunto set my hand in presence of two witnesses.

LOUIS LIPP.

Witnesses:

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T. LE BEAU