

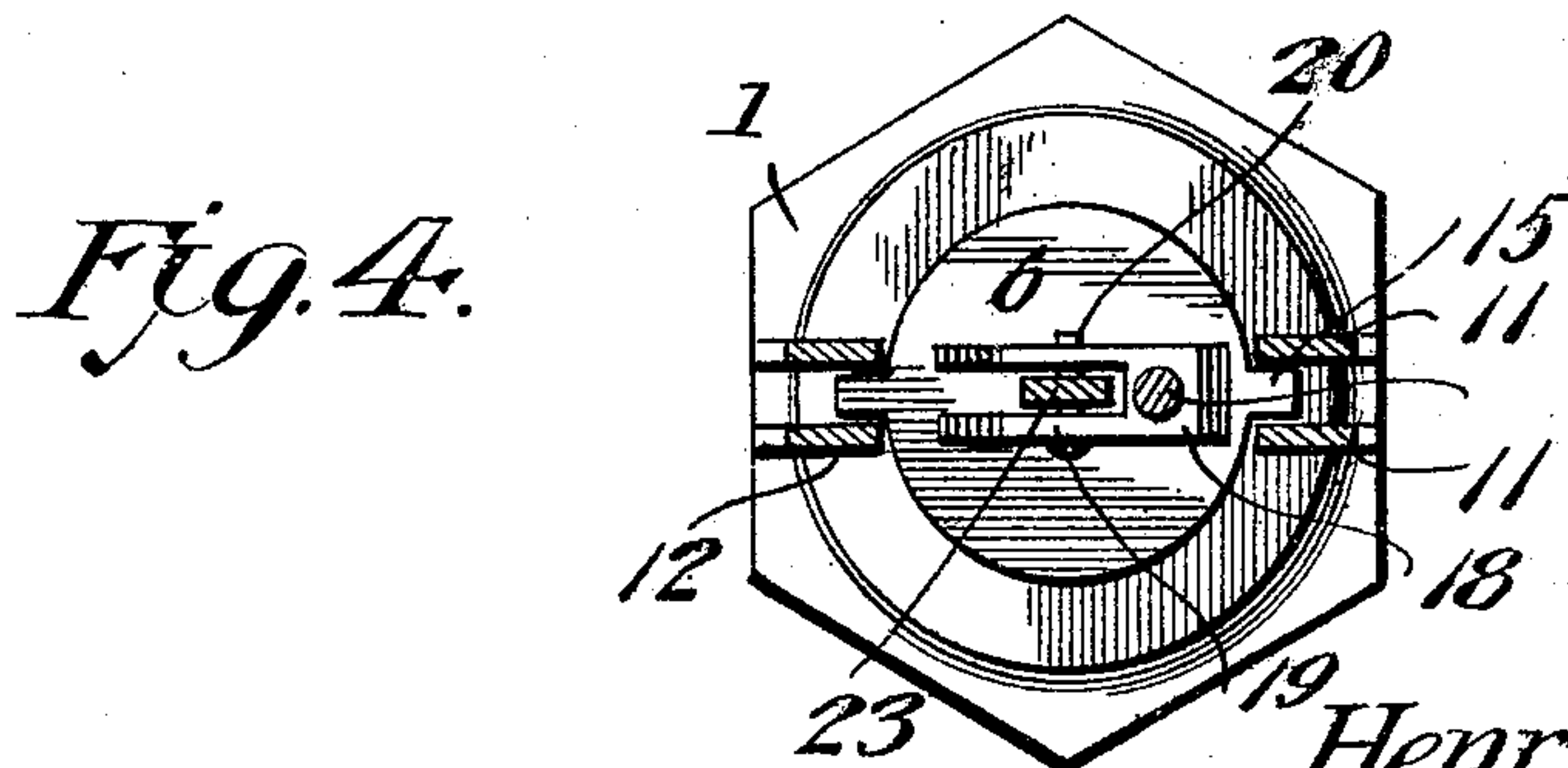
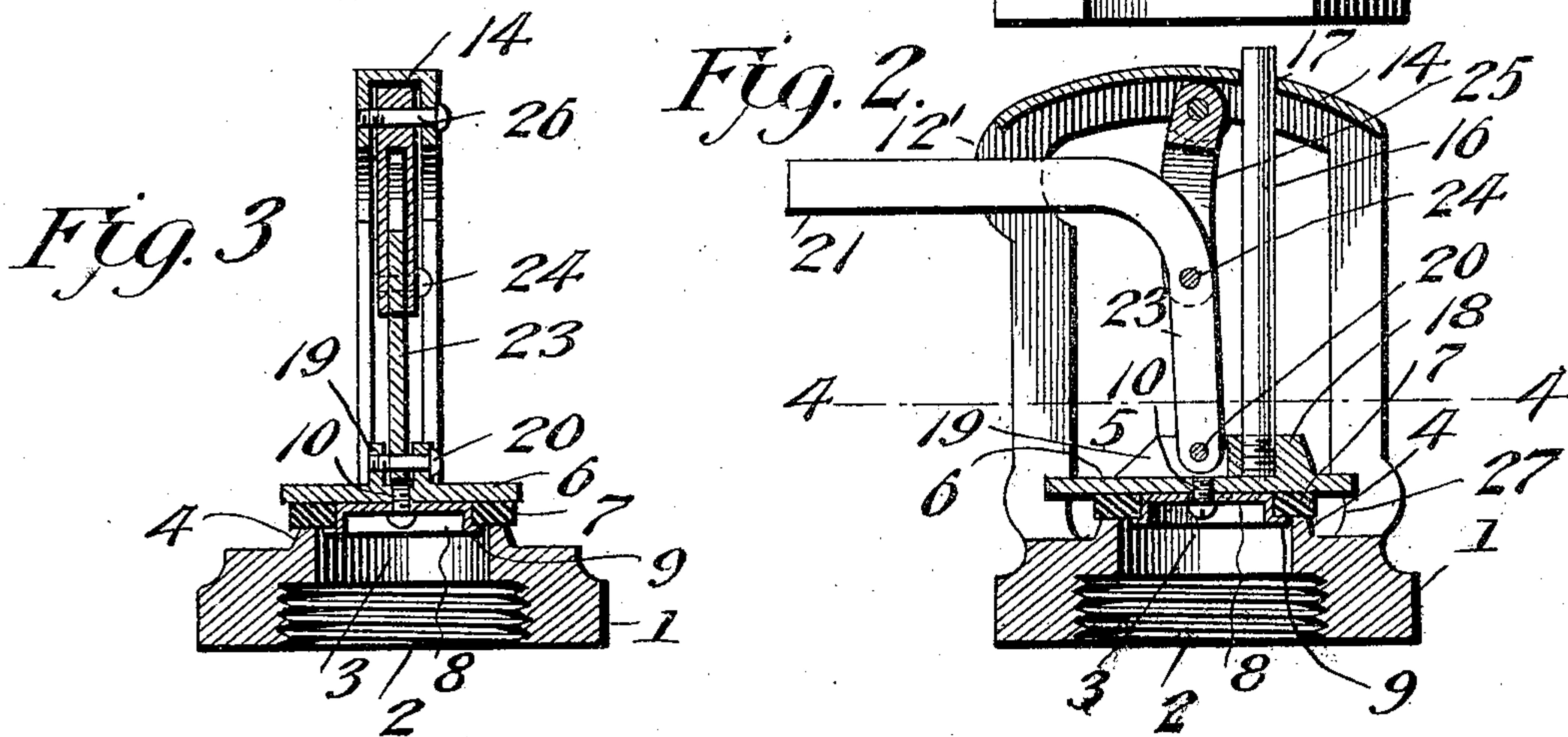
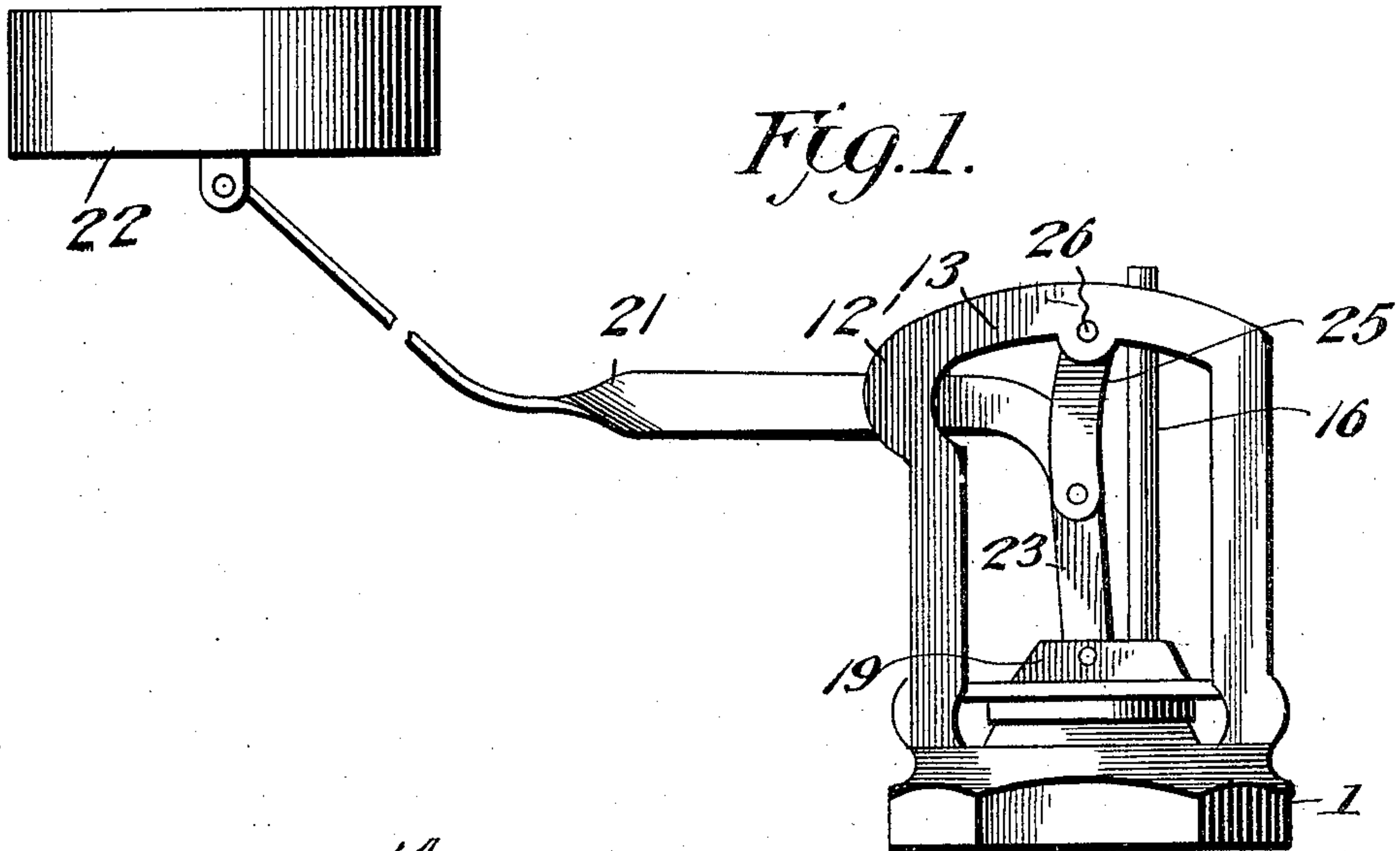
No. 840,954.

PATENTED JAN. 8, 1907.

H. S. PINKERTON.  
VALVE.

APPLICATION FILED MAY 19, 1905.

2 SHEETS—SHEET 1.



Witnesses

*Geckman*  
*C. C. Linn*

Inventor

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By

*Victor J. Evans*  
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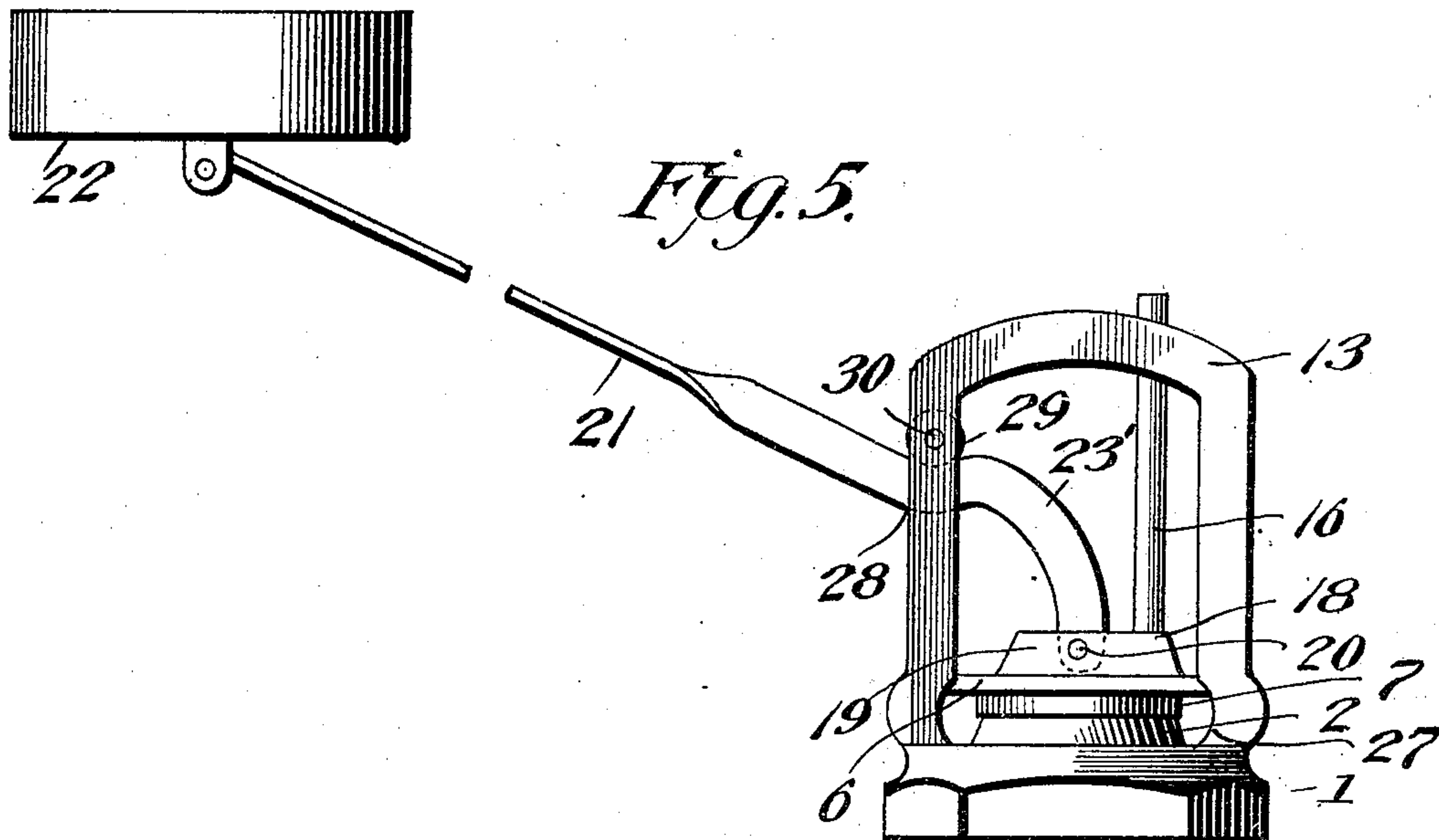
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# UNITED STATES PATENT OFFICE.

HENRY S. PINKERTON, OF JUNO, TEXAS.

## VALVE.

No. 840,954.

Specification of Letters Patent.

Patented Jan. 8, 1907.

Application filed May 19, 1905. Serial No. 261,241.

*To all whom it may concern:*

Be it known that I, HENRY S. PINKERTON, a citizen of the United States, residing at Juno, in the county of Valverde and State of Texas, have invented new and useful Improvements in Valves, of which the following is a specification.

My invention has relation to valves, and is designed as an improvement on Letters Patent granted to me April 25, 1905, and numbered 788,426; and the invention consists of the features of construction, combination, and arrangement of parts hereinafter fully described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a view in side elevation of a float-valve embodying my invention. Fig. 2 is a vertical section through the same, taken on a line parallel with the float-lever. Fig. 3 is a vertical transverse section taken on a line centrally through the valve, the operating-lever, and the controlling-link connected with the lever. Fig. 4 is a sectional plan view taken on the line 4 4 of Fig. 2. Fig. 5 is a view similar to Fig. 1, showing a modification in the construction and mode of mounting the operating-lever.

Referring now more particularly to Figs. 1 to 4, inclusive, of the drawings, the numeral 1 represents a base provided in its under side with a threaded socket 2 to receive the threaded end of a supply-pipe. Communicating with this socket is a valve port or opening 3, opening at its upper end through the top of the base. The base is provided on its upper side with an annular rim 4, surrounding the opening 3 and forming a seat for the reception of the valve proper, 5, which comprises a disk or head 6, carrying upon its under side a packing ring or gasket 7, adapted to engage the rim 4, said ring or gasket being secured to the disk by a cap-piece 8, having a hollow body portion fitting within the opening in the packing-ring, and a surrounding rim-flange 9, which projects beneath the packing-ring and clamps the same firmly in position against the under side of the disk or head 6. A screw or other like fastening 10 passes through the hollow body portion of the crown of the cap-piece and detachably secures the same to the disk or head 6.

Rising from the base 1 is a supporting and guide frame in the form of a double yoke, said frame being composed of opposite sets of standards 11 and 12, arranged upon diametrically opposite sides of the port 3, said

standards being connected at their upper ends by cross-pieces 13 and an intermediate web or top piece 14. The standards 11 and 12 are arranged to form diametrically opposite guide slots or passages to receive guide ears or lugs 15, projecting from diametrically opposite sides of the valve body or head 6, whereby the valve is guided in a true vertical path and held from oscillation. Secured to the boss 18 is a guide-stem 16, which fits and slides at its upper end in a guide-opening 17 in the top piece 14. This stem may be formed integrally at its lower end with the boss 18, but is here shown in threaded engagement with a socket formed in the boss 18, integral with the upper surface of the disk 6. This stem obviates any tendency of the valve to tilt or cant during its opening and closing movement.

The disk 6 is provided at one side of the boss 18 with spaced flanges or ears 19, receiving a bolt 20, to which the inner end of an operating-lever 21 is pivoted, which lever carries at its outer end a float 22. The body portion of the lever extends horizontally out through the space between the standards 12 and is provided at its inner end with a right-angularly-bent arm 23, which is pivotally connected at its lower free end with the bolt 20. The upper end of the arm 23 is pivoted by a bolt 24 to the lower end of a slotted suspension-link 25, pivoted at its upper end by a bolt 26 to the horizontal connecting pieces or members 13 of the yoke-frame. When the valve is seated, the link 25 hangs vertically in the plane of the arm 23 and opposes a resistance to the upward movement of the valve, and thereby serves, in effect, as a lock to hold the valve closed against any tendency of the water to lift it. When the lever 21 is operated, however, as by the downward movement of the float 22, the lever will swing upon the link and draw the latter laterally outward, thus disposing it so as to offer the least resistance to the upward movement of the valve, which will thereby be permitted to rise to its fullest extent without resistance and to open wide the port 3 for the free out-flow of water.

It will be observed that the standards 12 are offset at their upper ends, as indicated at 12', this offset portion serving to form a wider support and brace for the lever and permit the pivotal connections of the link and lever to have free and unobstructed outward movement. The lower ends of both



sets of standards 11 and 12 are further offset at their lower ends to form clearance-passages 27 for the free passage of all sediment over the base outside of the valve-seat, thus preventing clogging of the valve.

In the embodiment of my invention shown in Fig. 5 the construction of the base, frame, and valve mechanism is the same as that previously described; but the operating-lever 21 is here shown provided with a curved arm 23', pivotally connected at its free end to the valve and formed with an offset portion 28, having its concaved side uppermost and adapted to receive and engage a stop-roller 29, revolubly mounted on a spindle 30, carried by the standards 12. This roller forms a bearing on which the arm may swing, and in addition operates in a similar manner to the link 25 (shown in Figs. 1 to 4, inclusive) to, in effect, lock the valve in closed position—that is, oppose a resistance to its upward movement until it is positively operated by the lever 21, so that the valve will remain securely seated until directly raised by the lever.

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.

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

A float-valve for tanks comprising a base with spaced-apart standards rising therefrom, a central screw-threaded socket extending into the body of the base, a valve-port, an annular rim on the upper portion of the base surrounding the valve-port and forming a valve-seat, a valve with a disk having a boss, means for operating and guiding the valve including a guide-stem mounted on said boss, said valve having a hollow cap-piece with a surrounding rim-flange, a packing detachably mounted on the upper surface of the rim-flange and contacting with the crown of the cap-piece, and means serving to clamp the packing between said disk and the rim-flange of the cap-piece.

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

HENRY S. PINKERTON.

Witnesses:

JOSEPHINE EDMONDS,  
BEULAH EDMONDS.