

No. 736,488.

PATENTED AUG. 18, 1903.

E. BUMFORD.
GAS VALVE WATER SEAT.
APPLICATION FILED MAR. 11, 1903.

NO MODEL.

2 SHEETS—SHEET 2.

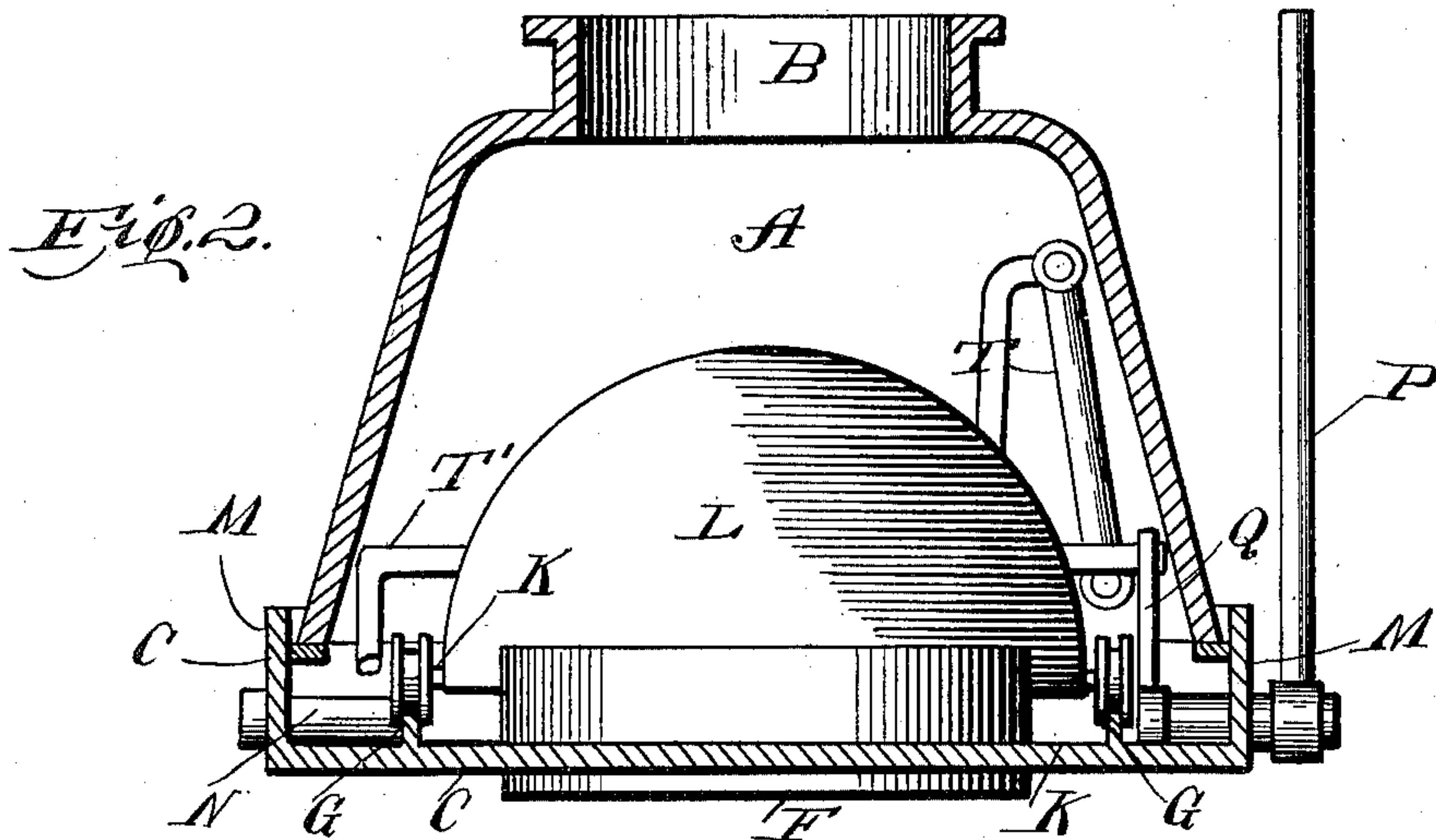


Fig. 4.

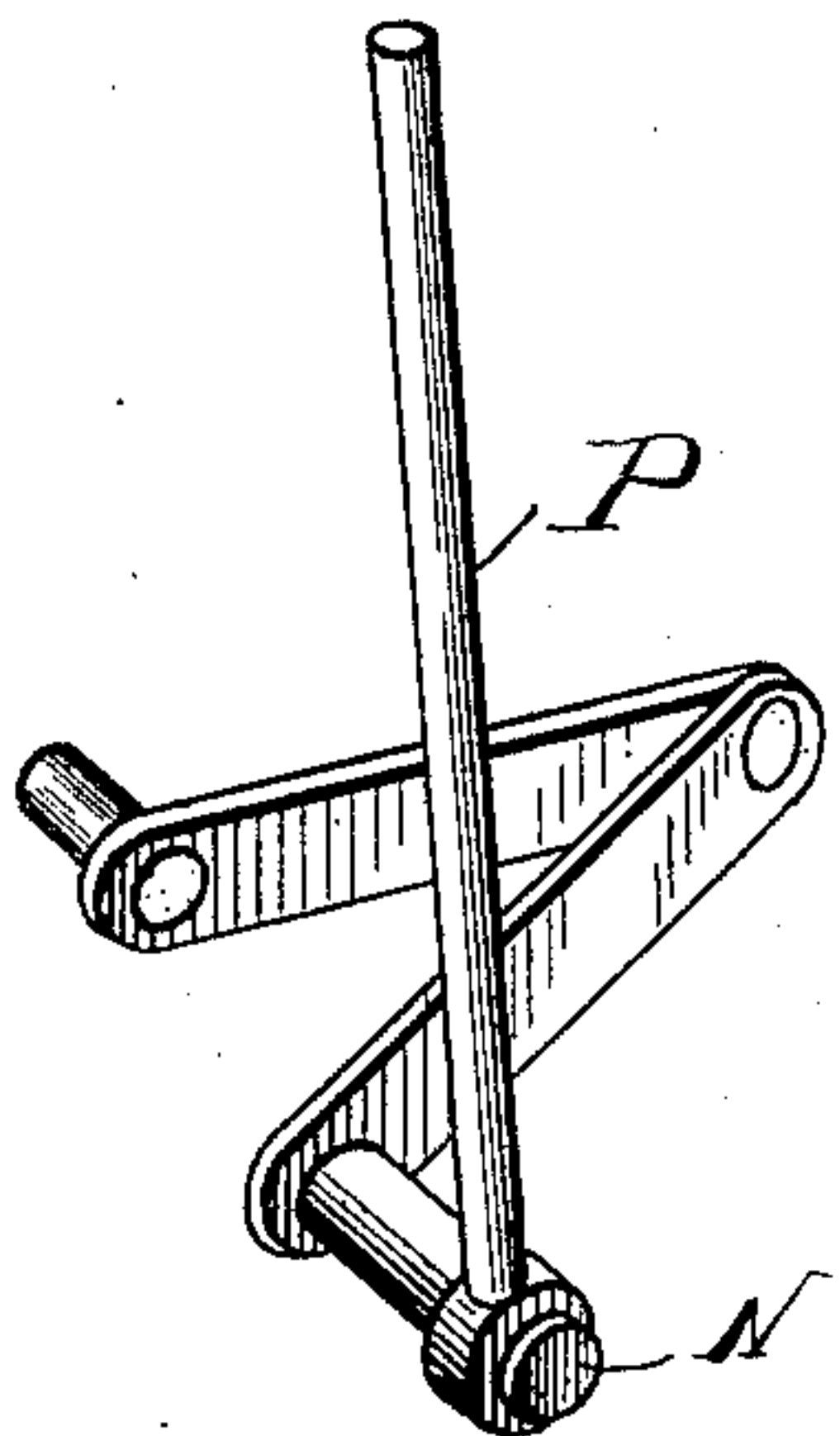


Fig. 5.

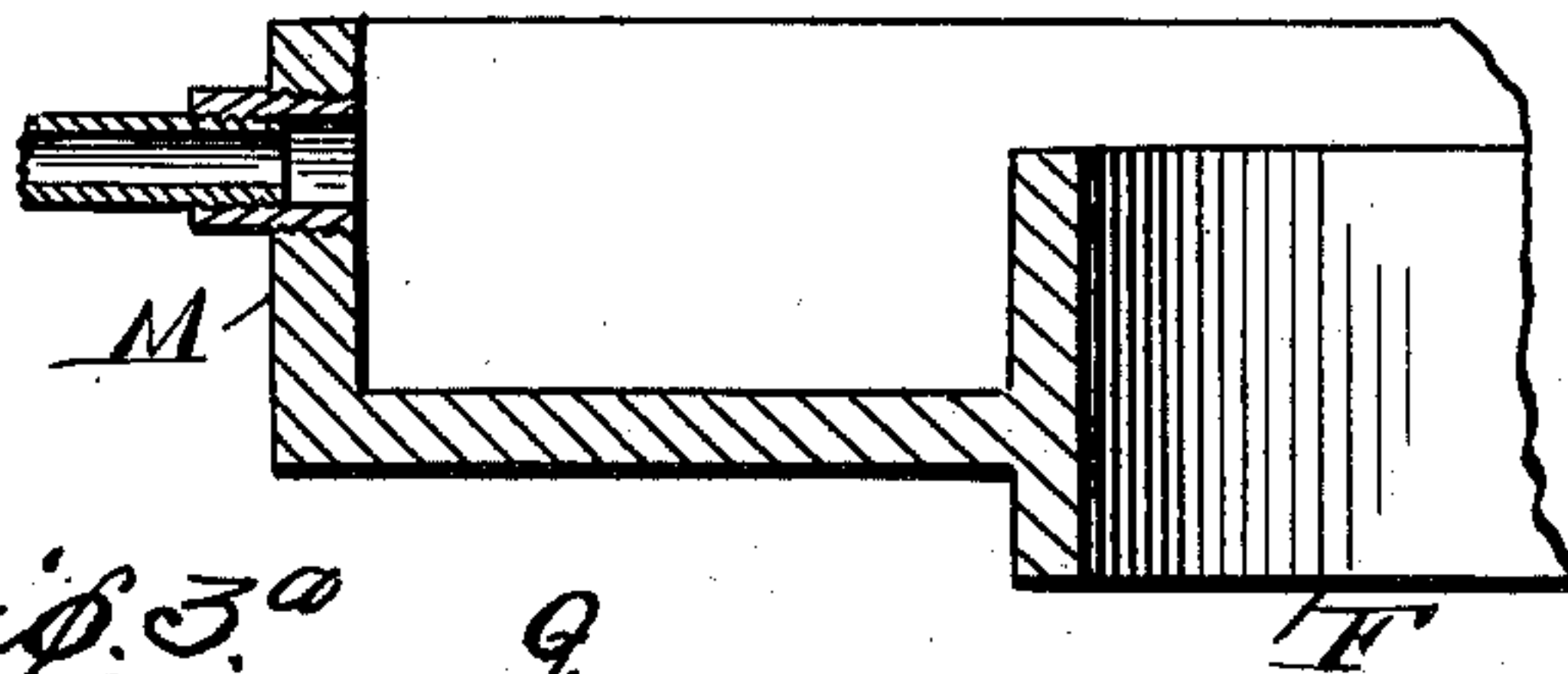
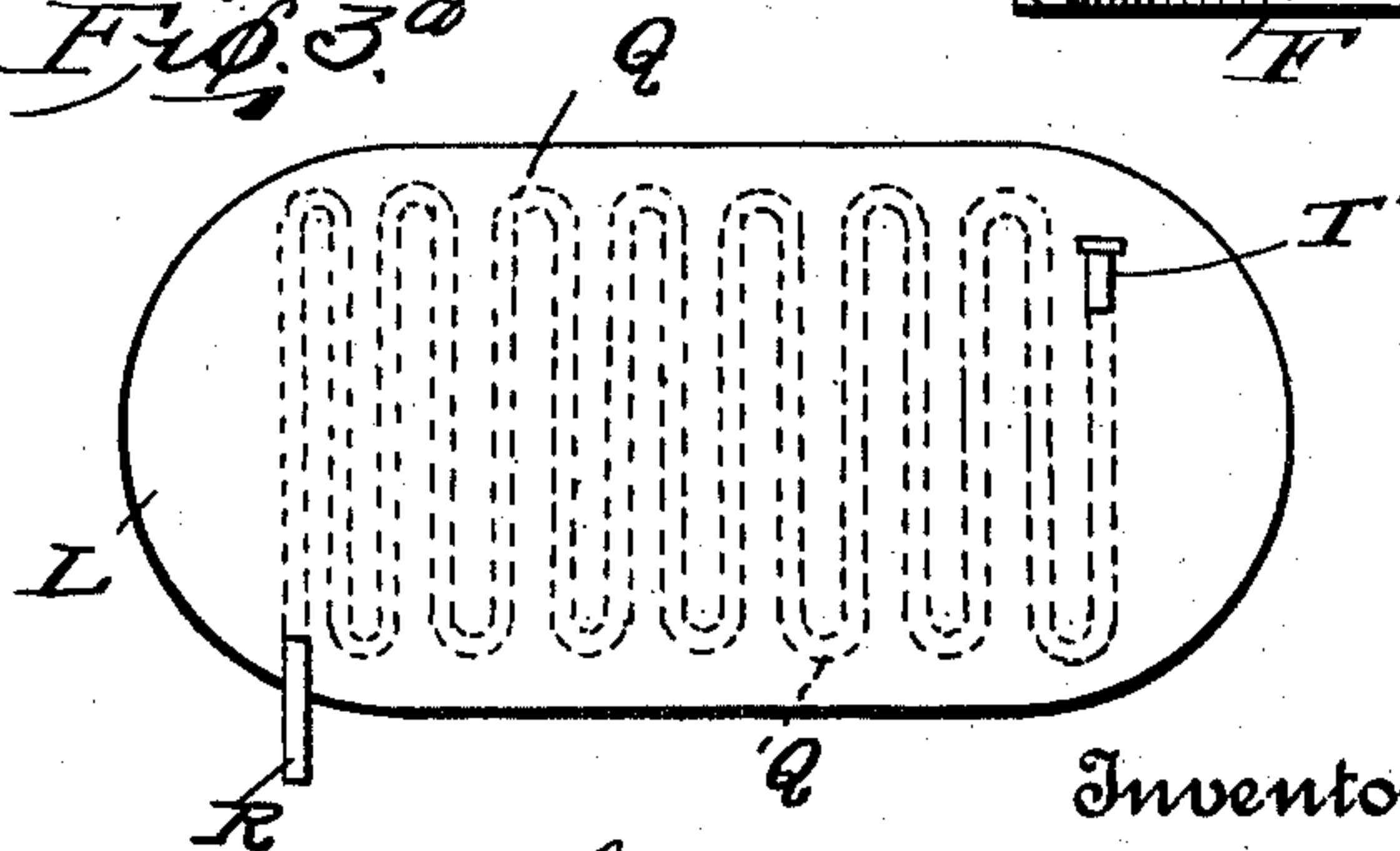


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

EMANUEL BUMFORD, OF BIRMINGHAM, ALABAMA.

GAS-VALVE WATER-SEAT.

SPECIFICATION forming part of Letters Patent No. 736,488, dated August 18, 1903.

Application filed March 11, 1903. Serial No. 147,246. (No model.)

To all whom it may concern:

Be it known that I, EMANUEL BUMFORD, a citizen of the United States, residing at Birmingham, in the county of Jefferson and State of Alabama, have invented certain new and useful Improvements in Gas-Valve Water-Seats, of which the following is a specification.

This invention relates to improvements in gas-valve water-seats; and the main object of my invention is the provision of a simple, durable, and effective device of this character which is useful and practical.

To attain these objects, the invention consists of the valve substantially as disclosed herein, the same being set forth in the accompanying drawings, in which—

Figure 1 is a longitudinal section view of the valve, showing the gas-inlet and the inlet to the furnace and stack. Fig. 2 is an end view with a portion of the casing removed looking in the direction of the arrow of Fig. 1. Fig. 3 shows a cross-section view of the hood. Fig. 3^a is a top plan view of the hood, showing the continuous passage and the shell thereof in dotted lines. Figs. 4 and 5 are enlarged detail views of portions of the mechanism.

Referring to the drawings, A designates a casing, which is provided at its top with the gas-inlet B and is suitably supported upon a base C. Extending from this base are the three circular casings D, E, and F, which provide ports for communication to the furnace, to the stack, and from the furnace. Mounted upon the base are the two parallel tracks G, which are provided with the three depressions H, H', and H'', which are alined, respectively, with the casings F, E, and D, and adapted to roll upon the track are the wheels J, mounted upon the shafts K, said shafts being connected to the hood L, so that the same may be moved within the casing upon the track so as to cover two of the openings or ports D, E, or F at a time. Journaled in the sides M of the base is the shaft N, to which at one side thereof is keyed a lever O, which is pivotally connected at one end to a lever O', said lever O' being secured at its other end to the hood L.

P is a large lever which is adapted to be operated so as to reciprocate the shaft N to give to the hood L, by means of the levers O and

O', a forward or backward movement, said hood being guided by the wheels upon the track, so that when moving over one pair of ports to the other the wheels will pass from the inclines of the depressions to a higher elevation of the track, where the hood will move unobstructed and return to the proper position, when one of the wheels enters the center depressions and the other the end depressions of the tracks and cover the proper ports,

The hood L is provided with a continuous channel or passage through the body thereof, as clearly shown in Figs. 3 and 3^a of the drawings, said channel being constructed in a zig-zag series, so that water is allowed to enter through the pipe R the continuous channel Q, thence through the pipe A and the swivel-pipes T to the exit-pipe T'. By this construction the shell of the hood is kept cooler and at the proper temperature.

From the foregoing description, taken in connection with the drawings, it is evident that when the hood is in the position as shown in Fig. 1 the gas will pass directly through the gas-inlet through the opening or port in the casing F to the furnace; but should the hood be operated by the lever P so as to move forward and cover the port of the casing E and casing F the gas will enter through the port of the casing D from the furnace.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a valve of this character, the combination of a base, having a surrounding rim, a casing mounted upon the base within the rim having a central aperture, said base being provided with a series of three openings therethrough, a pair of parallel tracks upon the base provided with recesses opposed to said openings, and a hood slidably mounted upon said tracks and being adapted to be raised or lowered by the tracks and their depressions so as to cover two of said openings simultaneously.

2. In a valve of this character, the combination of a base provided with a series of three ports therethrough, a surrounding rim extending upward, an inwardly-projecting supporting-flange carried by said rim, a casing mounted upon said flange within the rim, a pair of tracks mounted upon the base upon the outside of said ports, said tracks being

provided with alined depressions opposite the ports, a hood, wheels carried by said hood journaled upon said tracks, and means mounted in the base connected to the hood

5 for reciprocating the same upon the tracks so as to cause the hood to cover two of said ports simultaneously.

3. In a valve of this character, the combination of a base, provided with a series of
10 three ports therethrough, a surrounding rim extending upward, an inwardly-projecting supporting-flange carried by said rim, a casing mounted upon said flange within the rim, a pair of tracks mounted upon the base upon
15 the outside of said ports, said tracks being provided with alined depressions opposite the ports, a hood, wheels carried by said hood journaled upon said tracks, a shaft journaled

on the base, an arm connected to the shaft and to the hood, and a lever for reciprocating
20 the shaft to cause the hood to cover two of said ports simultaneously.

4. In combination with a valve of this character, a base, having a series of ports there-
through, and a casing mounted thereon, of a
25 slidably-mounted hood carried by the base and covered by the casing having a continuous channel through the shell thereof, and means for supplying water through said continuous channels.
30

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

EMANUEL BUMFORD.

Witnesses:

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D. LEWIS.