

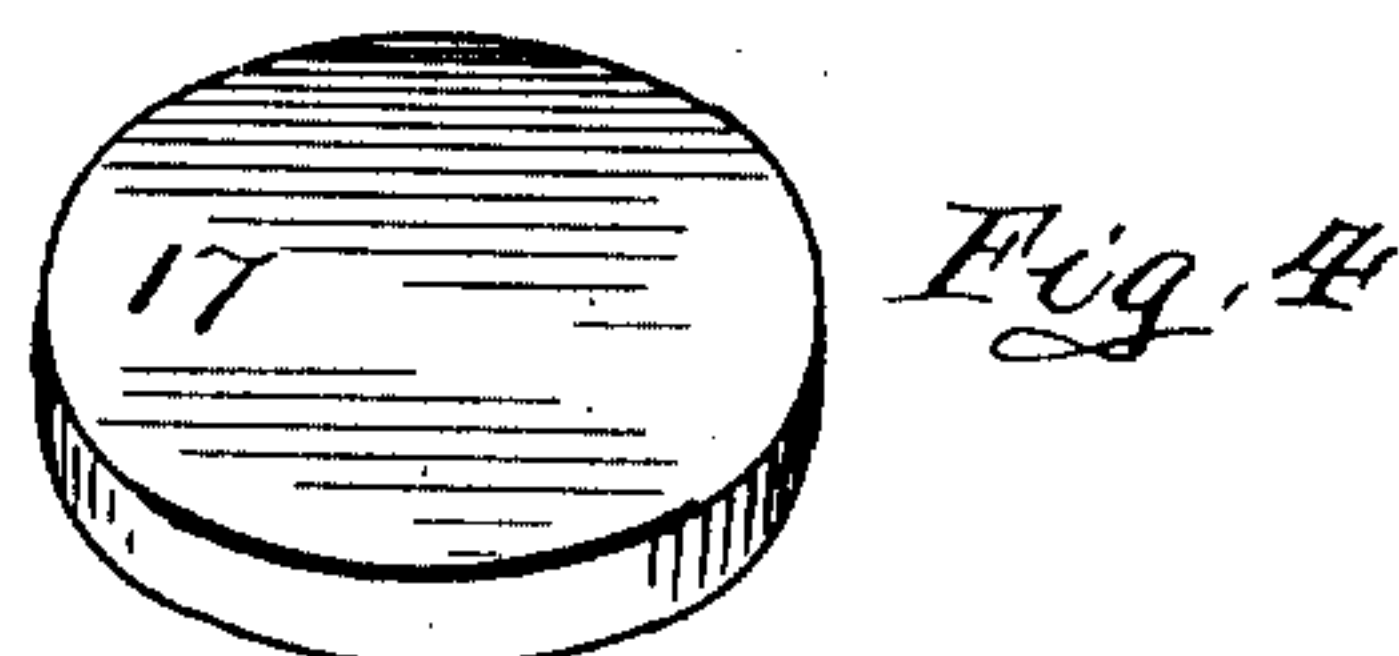
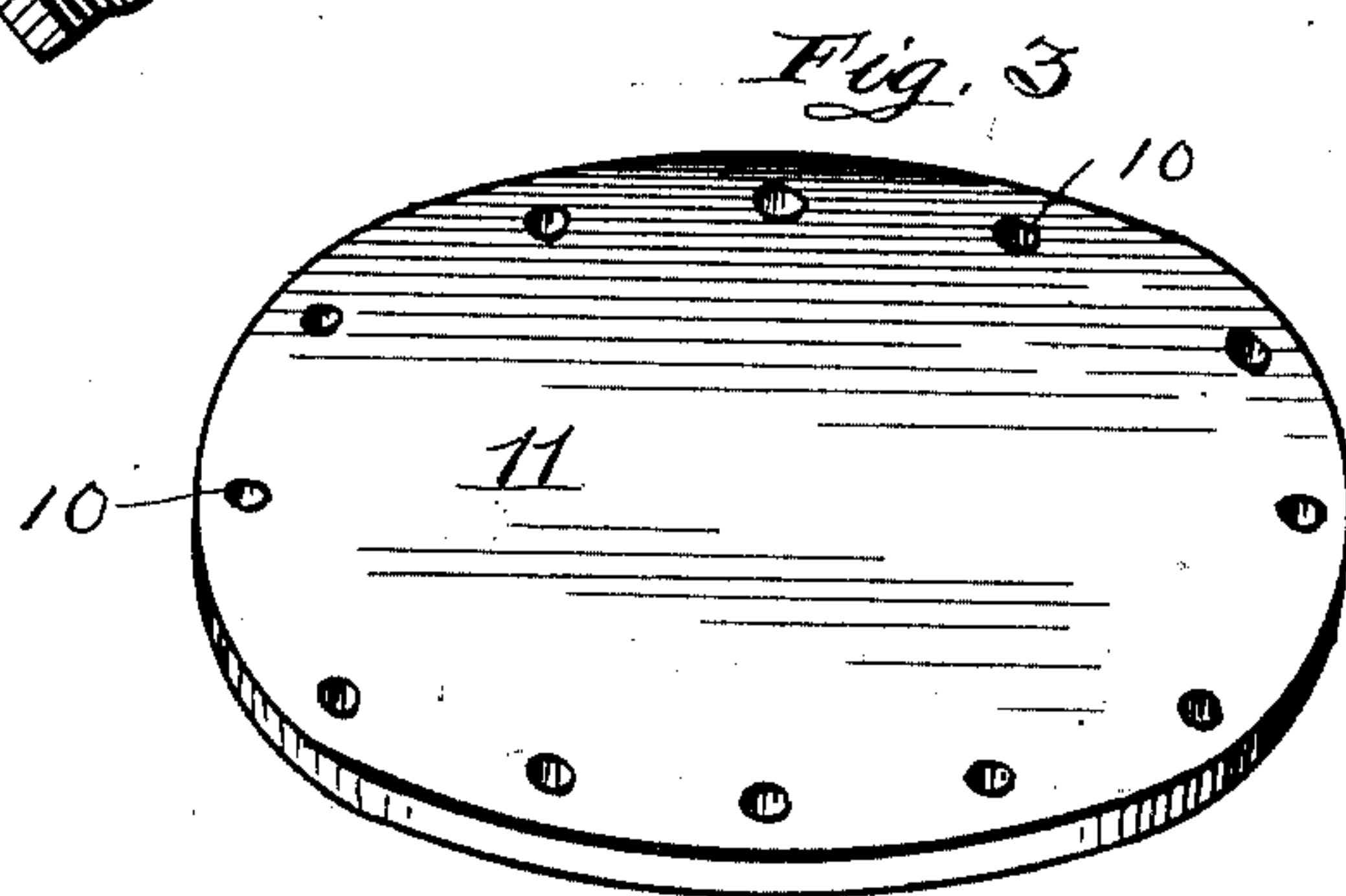
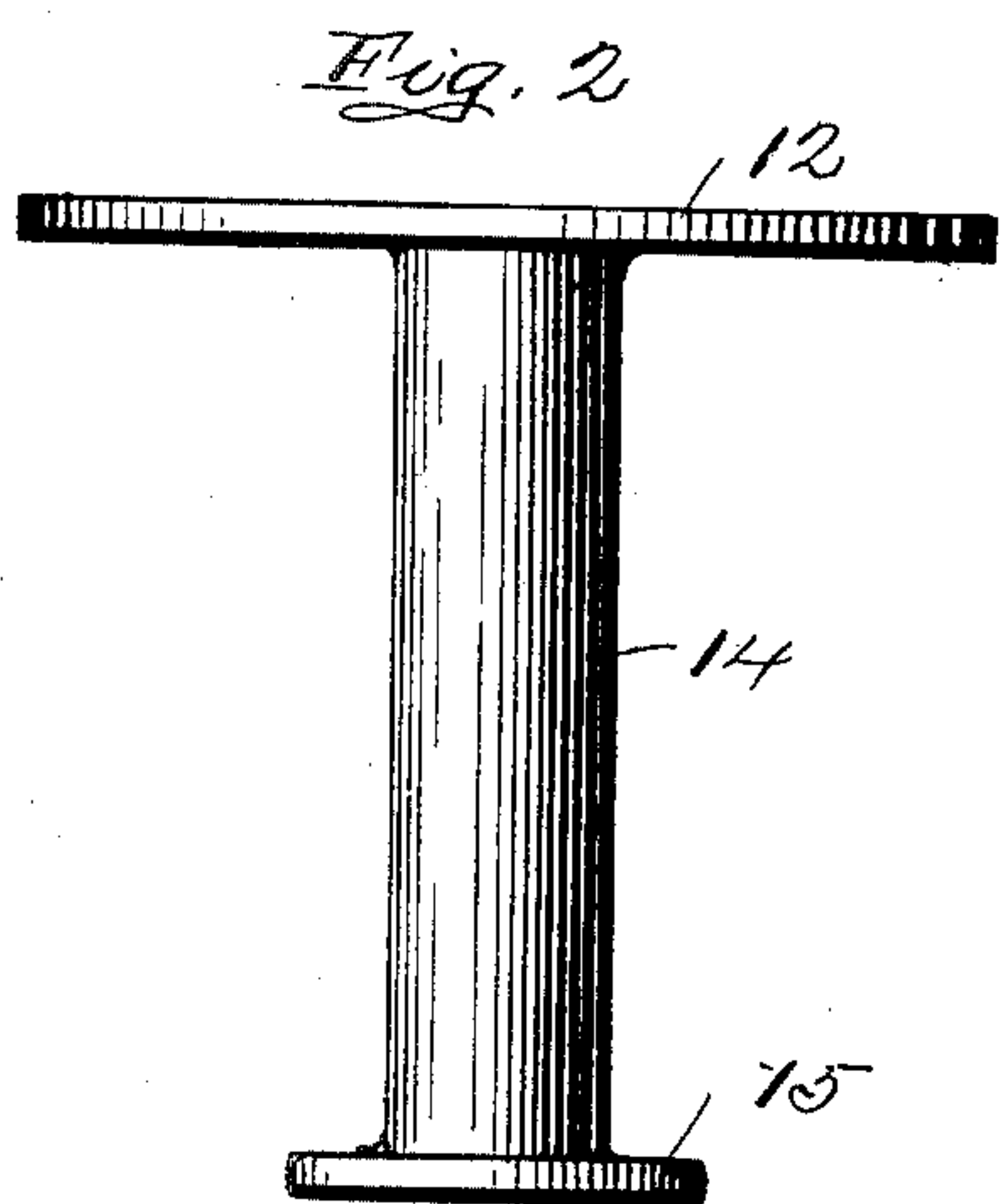
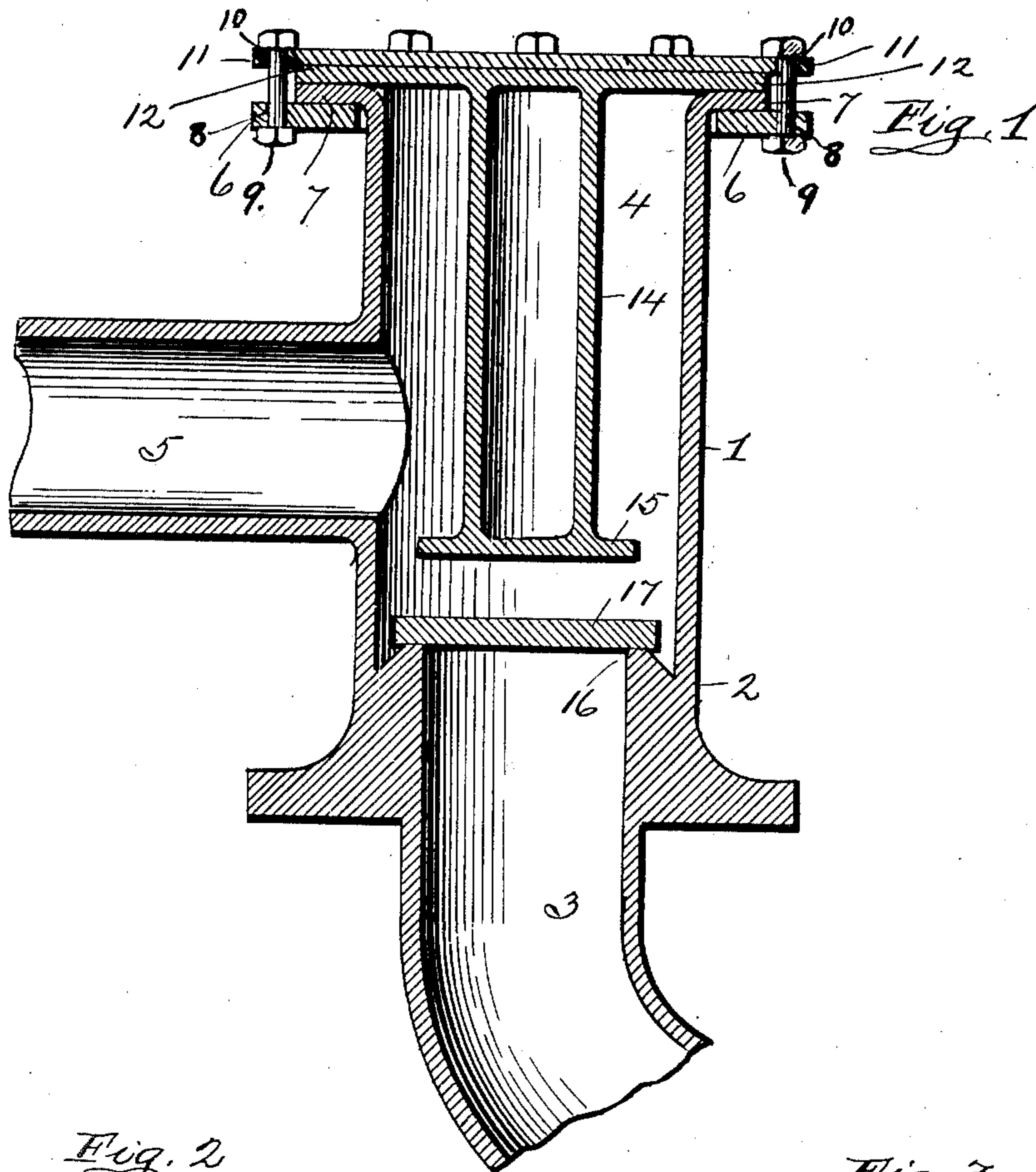
No. 675,622.

Patented June 4, 1901.

W. J. CLINTON.
VALVE.

(Application filed Sept. 10, 1900.)

(No Model.)



Witness:
H. E. Harrison.
J. A. Herrou.

W. J. Clinton,
by his attorney,
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UNITED STATES PATENT OFFICE.

WILLIAM J. CLINTON, OF NATRONA, PENNSYLVANIA.

VALVE.

SPECIFICATION forming part of Letters Patent No. 675,622, dated June 4, 1901.

Application filed September 10, 1900. Serial No. 29,540. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. CLINTON, a citizen of the United States of America, residing at Natrona, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Valves; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in valves, and may be specifically designated as "acid-valves," the same being adapted to be used in that connection wherein the same comes into contact with acids, and has for its object to construct a valve upon which the element-destroying properties of the acid will have no effect.

Briefly described, the invention comprises a valve-casing having an inlet and outlet port, together with a valve-seat and a removable disk-limiting standard or tube, together with the various details of construction, as will be hereinafter pointed out.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate corresponding parts throughout the several views, in which—

Figure 1 is a vertical sectional view of my improved valve. Fig. 2 is a side elevation of the removable tube which limits the movement of the valve. Fig. 3 is a detail perspective view of the plate which secures the said tube in position. Fig. 4 is a detail perspective view of the valve or valve-disk.

In the drawings, 1 indicates the valve-casing, which is provided with a suitable circular base 2, through which extends the inlet-port 3, communicating with the chamber 4 of the valve, and at one side of the casing is an outlet-port 5, which also communicates with said valve-chamber 4.

My improved valve is preferably constructed of lead or like pliable material, the top of which may be bent over, as will now be described.

The ring 6 is placed over the valve-casing

1, as shown in Fig. 1 of the drawings, and after being placed in this position the top of the casing is flanged outwardly, as shown at 7. This ring is provided with a series of circumferentially-arranged apertures 8, which are adapted to receive bolts 9, which also engage through apertures 10, provided therefor in the securing-plate 11. This plate 11 engages the upper face of the plate 12, which has secured to its underneath face a tube or post 14, having a plate 15 on its lower end. The base 2 is provided with a valve-seat 16 inside the valve-chamber 4 and is adapted to have rest thereon a suitable valve or valve-disk 17, which is of a greater diameter than the plate 15. The acid is adapted to enter through the inlet-port 3, the pressure of the same unseating the valve or valve-disk 17 and allowing the acid to pass up into the valve-chamber and out through the outlet-port 5. In event of back pressure through the outlet-port 5 the valve or valve-disk 17 is immediately seated upon the valve-seat and the acid is prevented from passing downwardly into the inlet-port 3. The tube 14 is for limiting the upward movement of the valve or valve-disk 17, the plate 15, carried by said tube, affording such valve or valve-disk a greater purchase and preventing the same being forced upward in the chamber. It will be noted that when desired the tube may be readily removed by loosening the bolts 9, which will permit the removal of the plate 11.

Various slight modifications and changes may be made in the details of construction without departing from the general spirit of the invention.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The herein-described acid-valve, consisting of the casing 1, forming an interior chamber 4, an inlet-pipe 3 entering the base of the said chamber, a valve-seat 16, and disk valve 17, arranged at the entrance of the inlet-pipe, a ring 6 arranged over the casing 1, and the top of the said casing flanged over the said ring, a plate 12, provided with a downwardly-projecting tube 14, to limit the upward move-

ment of the valve 17, a disk or plate 11, arranged upon the top of the plate 12, bolts 9; passing through the said ring, and plate to form a tight connection, and an outlet-pipe
5 5 entering the casing above the valve, all arranged substantially as described.

In testimony whereof I have hereunto af-

fixed my signature in the presence of two subscribing witnesses.

WILLIAM J. CLINTON.

Witnesses:

THOS. MCGRATH,
G. W. FORSYTHE.