

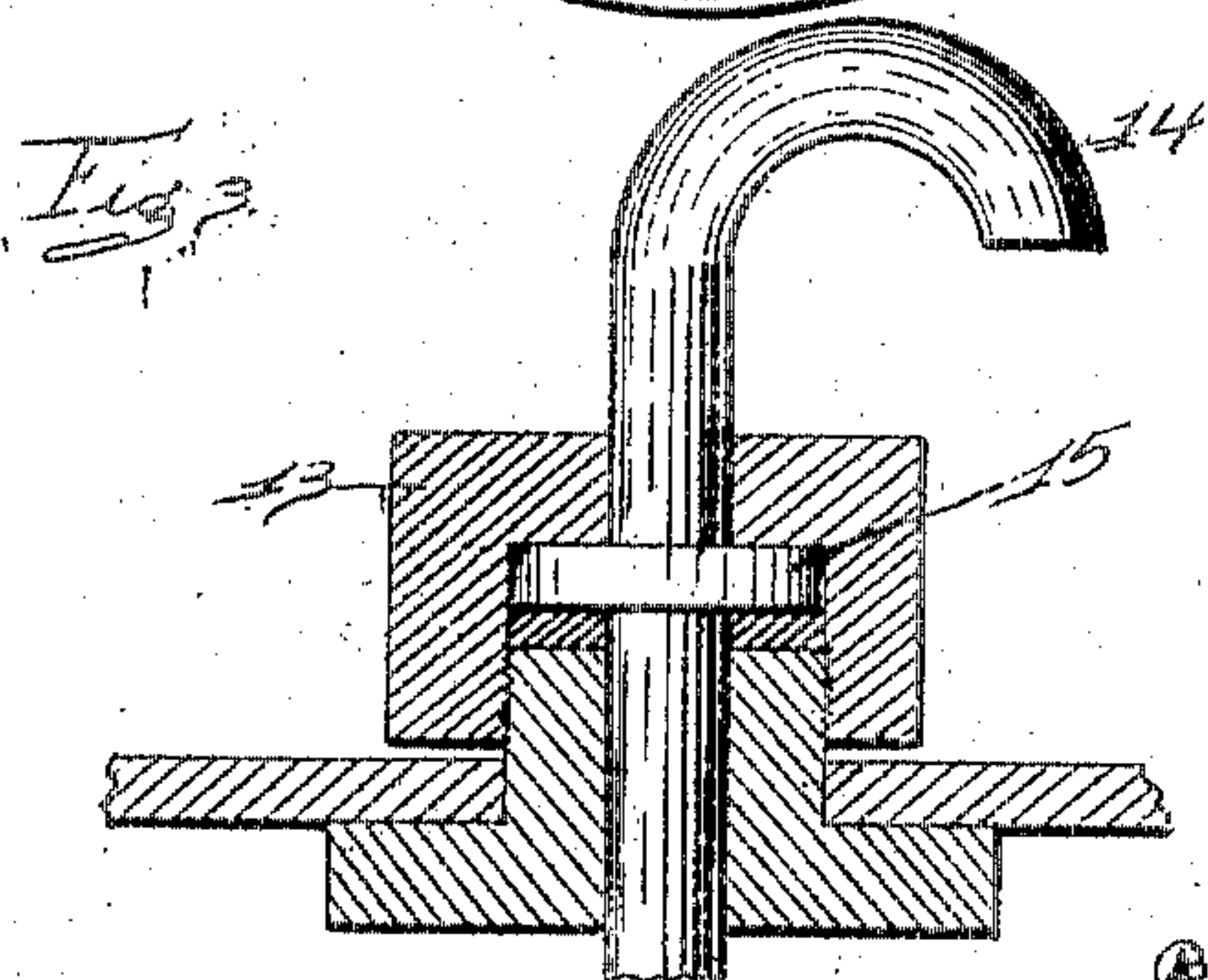
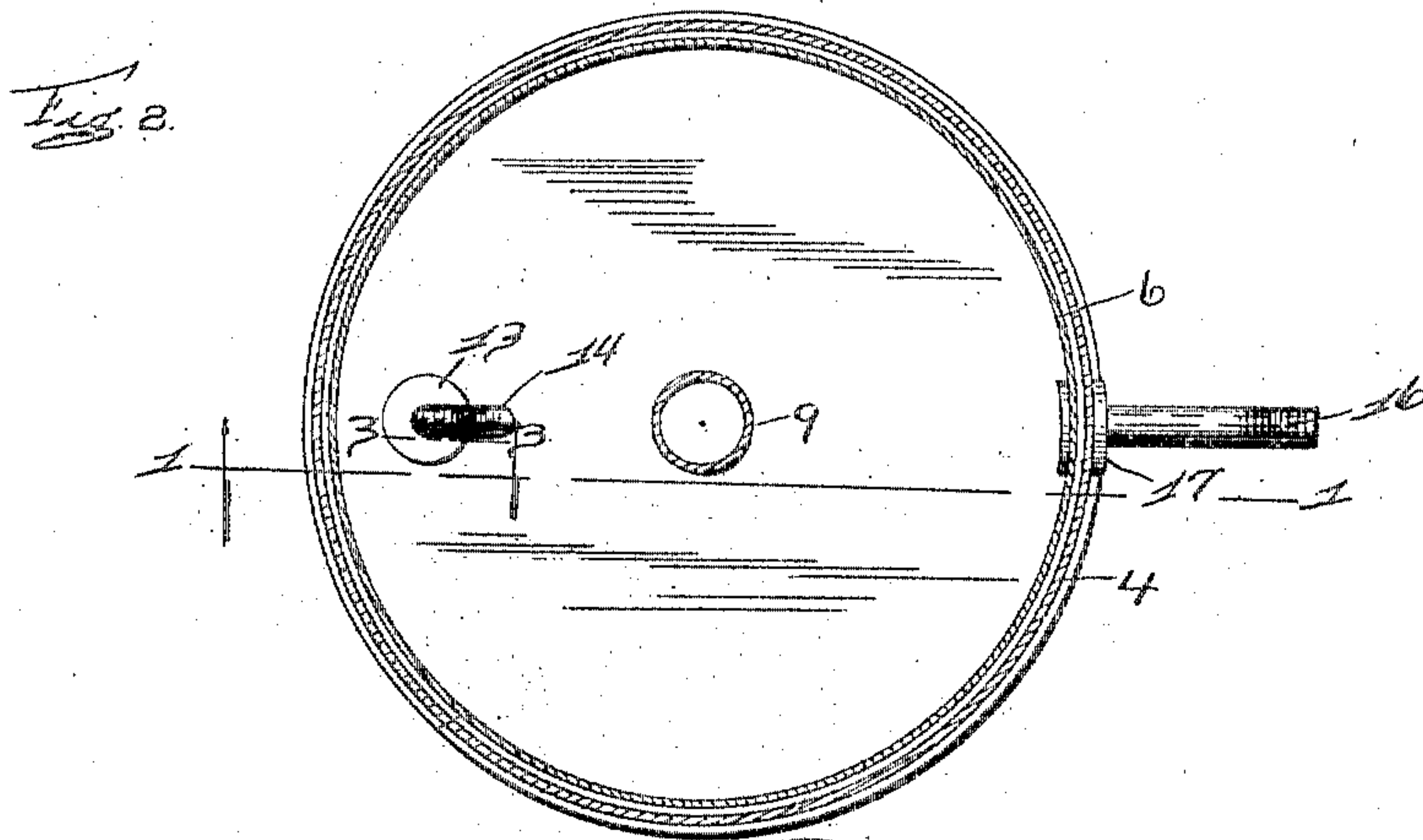
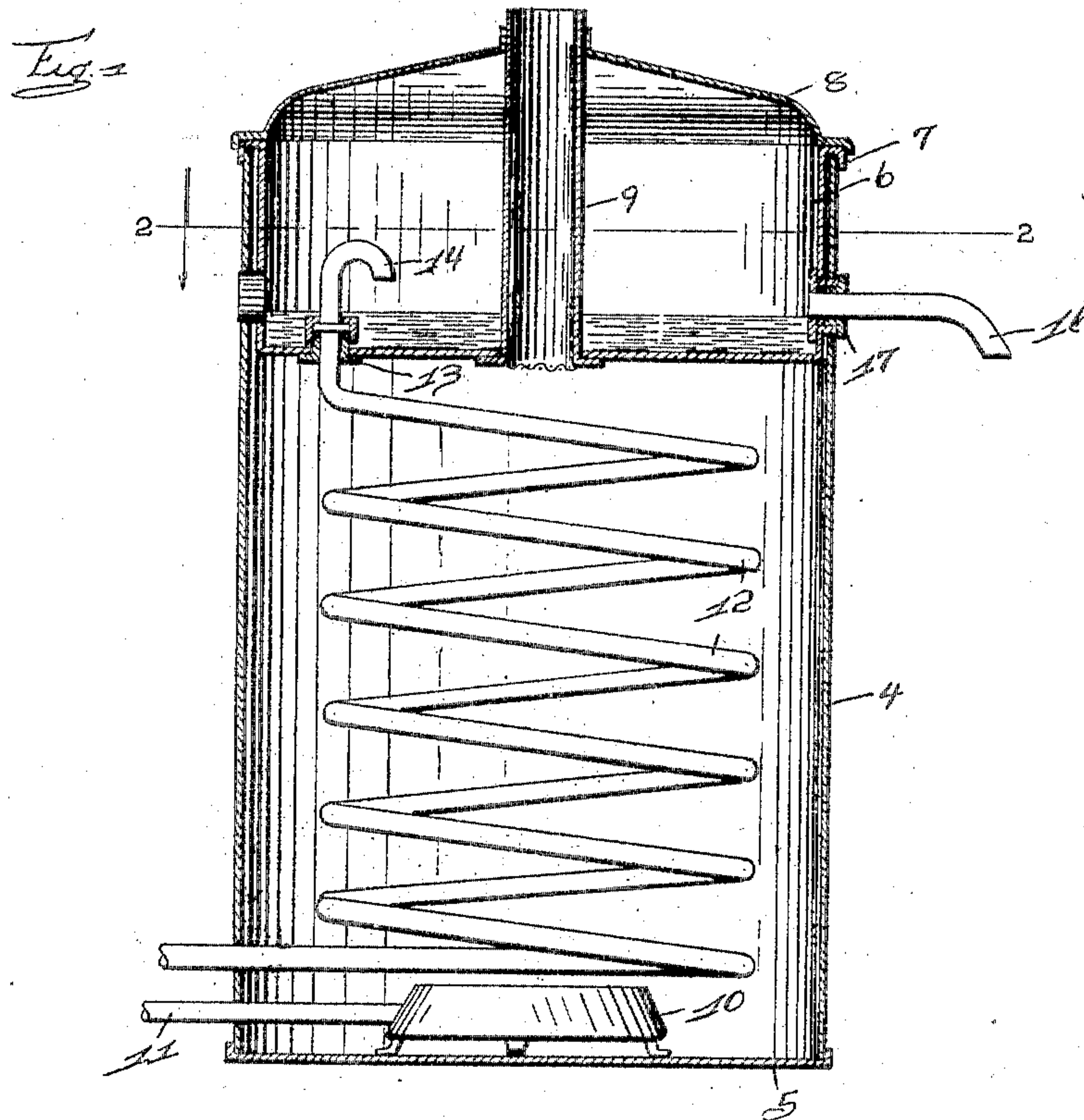
No. 797,380.

PATENTED AUG. 15, 1905.

B. P. SMITH & P. DAUSCH.

WATER HEATER.

APPLICATION FILED DEC. 27, 1904.



WITNESSES:

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UNITED STATES PATENT OFFICE.

BERNARD P. SMITH AND PETER DAUSCH, OF ST. LOUIS, MISSOURI.

WATER-HEATER.

No. 797,380.

Specification of Letters Patent.

Patented Aug. 15, 1905.

Application filed December 27, 1904. Serial No. 238,315.

To all whom it may concern:

Be it known that we, BERNARD P. SMITH and PETER DAUSCH, citizens of the United States, and residents of St. Louis, Missouri, have invented certain new and useful Improvements in Water-Heaters, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

Our invention relates to improvements in water-heaters; and it consists of the novel features herein shown, described, and claimed.

In the drawings, Figure 1 is a vertical central section on the line 1 1 of Fig. 2 and looking in the direction indicated by the arrow. Fig. 2 is a horizontal section on the line 2 2 of Fig. 1 and looking downwardly as indicated by the arrow. Fig. 3 is an enlarged sectional detail on the line 3 3 of Fig. 2 and looking in the direction indicated by the arrow.

Referring to the drawings in detail, the cylindrical shell 4 is closed at its lower end by a bottom 5. A tank 6 is inserted downwardly into the shell and has a supporting-flange 7 to engage the upper edge of the shell, and hold the tank in the upper part of the shell. The tank 6 is closed by a cover 8. A smoke-pipe 9 extends upwardly through the center of the tank and through the center of the cover. A gas-burner 10 is mounted upon the bottom 5 and is supplied with gas through the pipe 11. A water-coil 12 is mounted in the shell 4 above the burner, the upper end of the coil ending in a stuffing-box 13 and the lower end of the coil being connected to the water-supply. The bent nipple 14 has a head 15 upon its lower end within the stuffing-box 13, so as to connect the nipple

to the coil. A discharge-nozzle 16 is connected to the water-tank 6 by a stuffing-box 17.

Before the burner 10 is lighted the water is turned on, so that it will run through the coil 12, through the nipple 14, and be discharged into the tank 6. Then the burner is lighted, and as the flame heats the coil the water is heated as it passes through the coil into the tank, and it is further heated within the tank before it passes through the discharge-nozzle 16.

Thus we have produced a very simple and effective means of heating running water, and it is obvious that many changes may be made in the details of construction without departing from the spirit of our invention.

We claim—

In a water-heater: the cylindrical shell 4; the tank 6 inserted downwardly into the shell and having a supporting-flange 7 to engage the upper edge of the shell; the cover 8 closing the tank 6; the smoke-pipe 9 extending upwardly through the tank and through the cover; the gas-burner 10 in the bottom of the shell; the water-coil 12 in the shell above the burner; the stuffing-box 13 connecting the coil to the tank; the bent nipple 14 having the head 15 upon its lower end within the stuffing-box; and a discharge-nozzle 16 leading from the water-tank.

In testimony whereof we have signed our names to this specification in presence of two subscribing witnesses.

BERNARD P. SMITH.
PETER DAUSCH.

Witnesses:

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