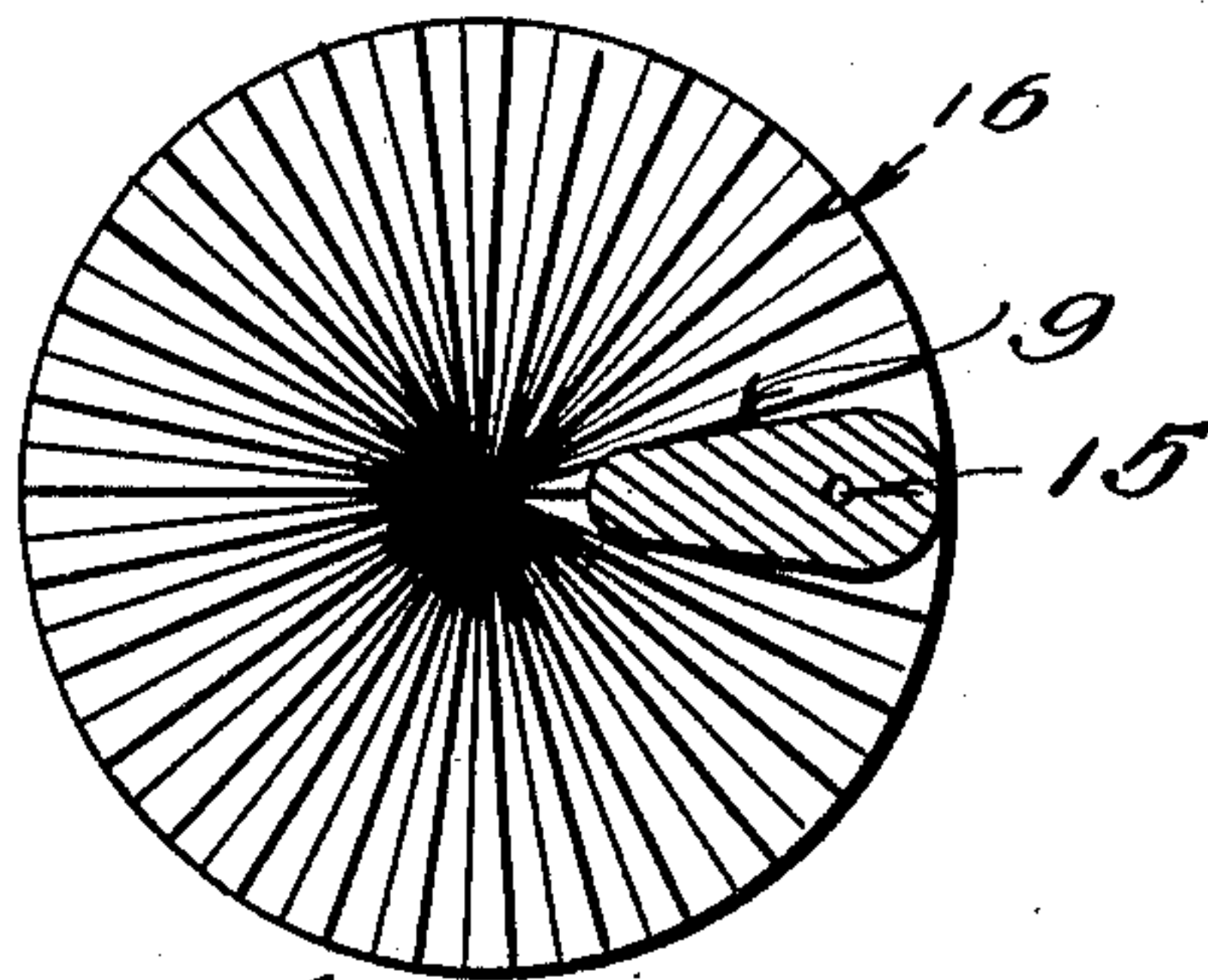
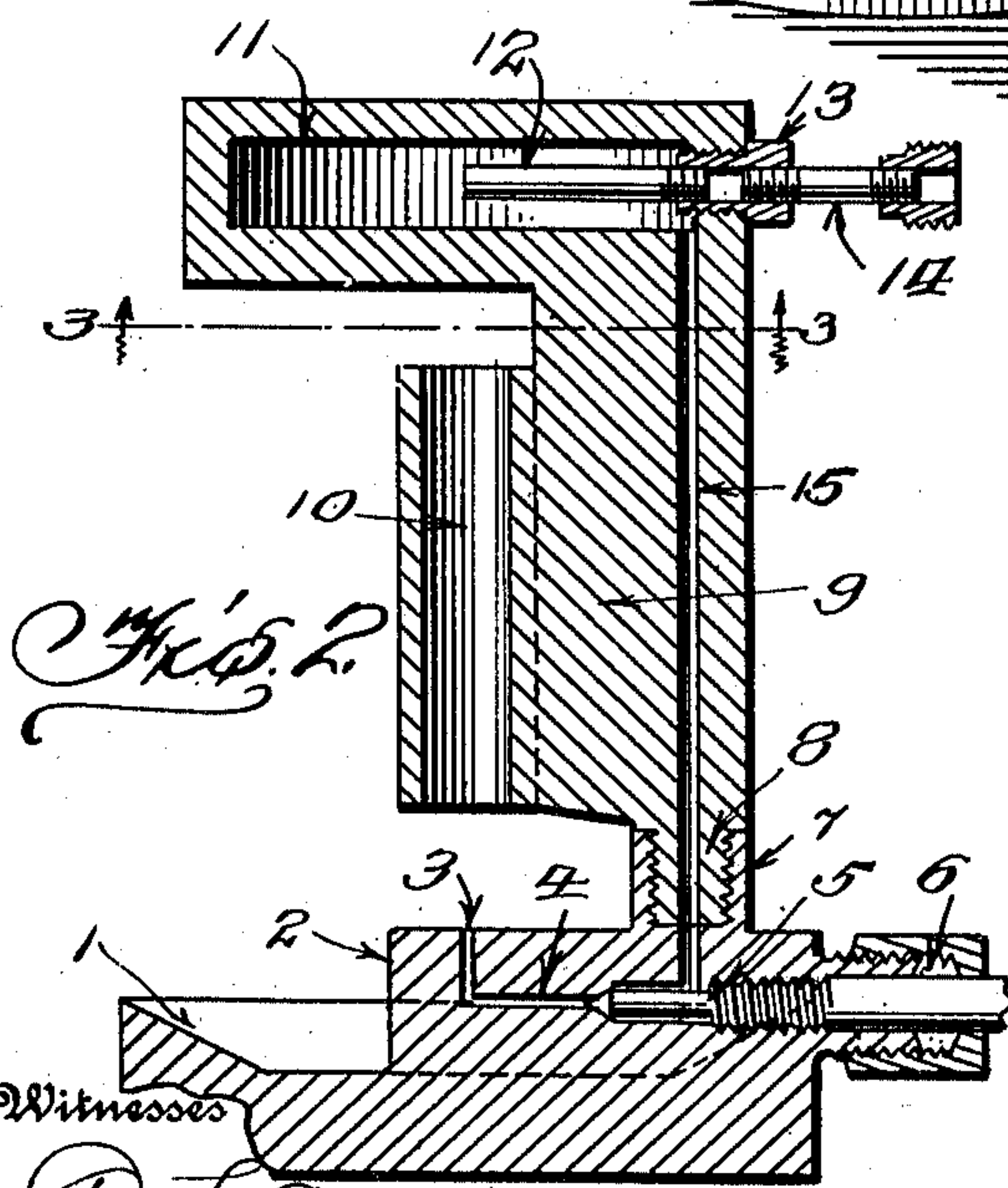
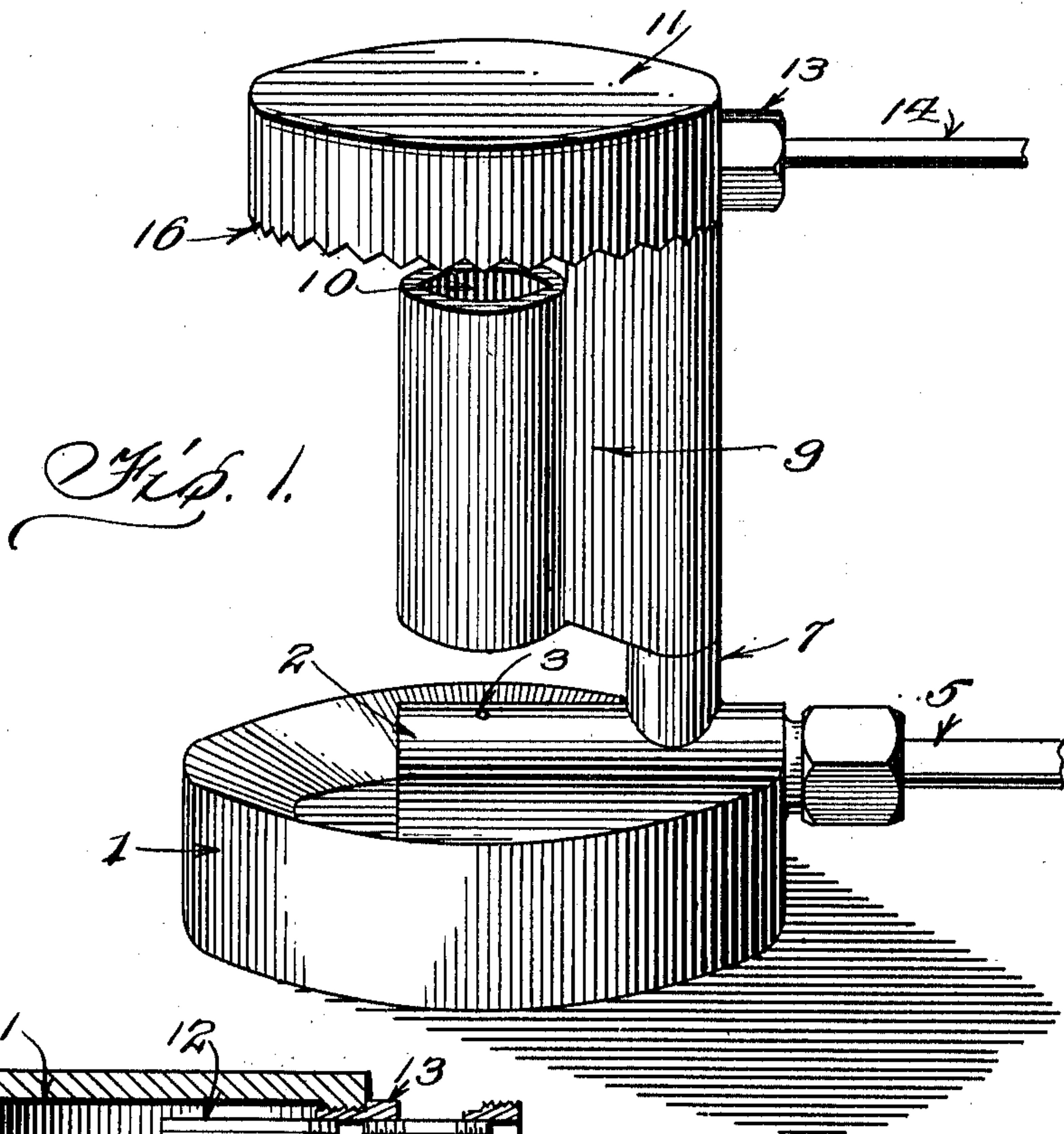


C. F. TWEEDY.
OIL BURNER.

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990,083.

Patented Apr. 18, 1911.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES F. TWEEDY, OF MINNEAPOLIS, MINNESOTA.

OIL-BURNER.

990,083.

Specification of Letters Patent.

Patented Apr. 18, 1911.

Application filed October 28, 1910. Serial No. 589,537.

To all whom it may concern:

Be it known that I, CHARLES F. TWEEDY, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Oil-Burners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to liquid fuel burners and it has for its object to provide means whereby the liquid fuel is vaporized by the same flame which is utilized for cooking or the like.

Other objects will be apparent from the following specification and appended claim.

I illustrate my invention in the accompanying drawings, in which:—

Figure 1 is a perspective view of the device. Fig. 2 is a vertical sectional view, and Fig. 3 is a cross sectional view on line 3—3 of Fig. 2.

Referring specifically to the drawing, there is shown a base 1 having recessed top presenting a dished surface to receive the liquid fuel for the starting of the burner. Rising from said upper face is an enlargement 2 having a vertical bore 3 and horizontal bore 4, said horizontal bore being adapted to receive a needle valve 5, of the usual type, having a packing 6 about the stem thereof to prevent waste. Rising from the enlargement 2 is a boss 7 which is internally threaded for the reception of the threaded projection 8 of the upper member of said burner. The upper member of the burner has a vertically flanged portion 9 to which is secured the mixing tube 10, said tube being spaced properly above the vertical bore 3 in the enlargement 2. To the upper end of the vertical flange is secured a retort 11 which receives the liquid fuel from the pipe or tube 12 through the coupling 13 and tube 14 to the union where connection is made to

the reservoir not shown. The tube 12 emptying its contents at about the middle of said retort, which communicates with the horizontal bore 4 through the passage 15. The under surface of the retort is fluted as at 16 to spread the flames. The upper end of the mixing tube terminates at a properly spaced position to permit combustion of the mixture arising in said tube.

The operation of the device will be obvious from the drawings. The liquid fuel is supplied through the tubes 12 and 14 into the retort 11, thence through the passage 15, the needle valve 5, horizontal passage 4 and emitting through the vertical bore 3 into the dished surface, where it is lighted whereby the retort 11 becomes sufficiently heated to generate gas of the liquid fuel. Then the device is used as the present burners, the heat serving both purposes, viz: to keep the retort heated and to supply the heat for any other purpose.

What I claim to be new is:—

A liquid burner having a dished base with a raised portion therein having a valve-regulated duct opening through its top and provided upon its upper surface with a hollow interiorly threaded boss, a retort with supply pipe leading thereto and having a vertically disposed shank with a cylindrical contracted threaded portion engaging said threaded boss and having a longitudinal duct leading from the chamber of the retort through into the duct in said raised portion of the base, said shank of the retort provided with a laterally extending, vertically disposed, open-ended cylindrical shell, spaced apart from the raised portion of the base and the under surface of the retort and axially in alinement with the exit end of the duct in the raised portion of the base, the under surface of the retort having radially disposed fluting formed therein.

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

CHARLES F. TWEEDY.

Witnesses:

FAITH DAILEY,
N. D. BESSESEY.