

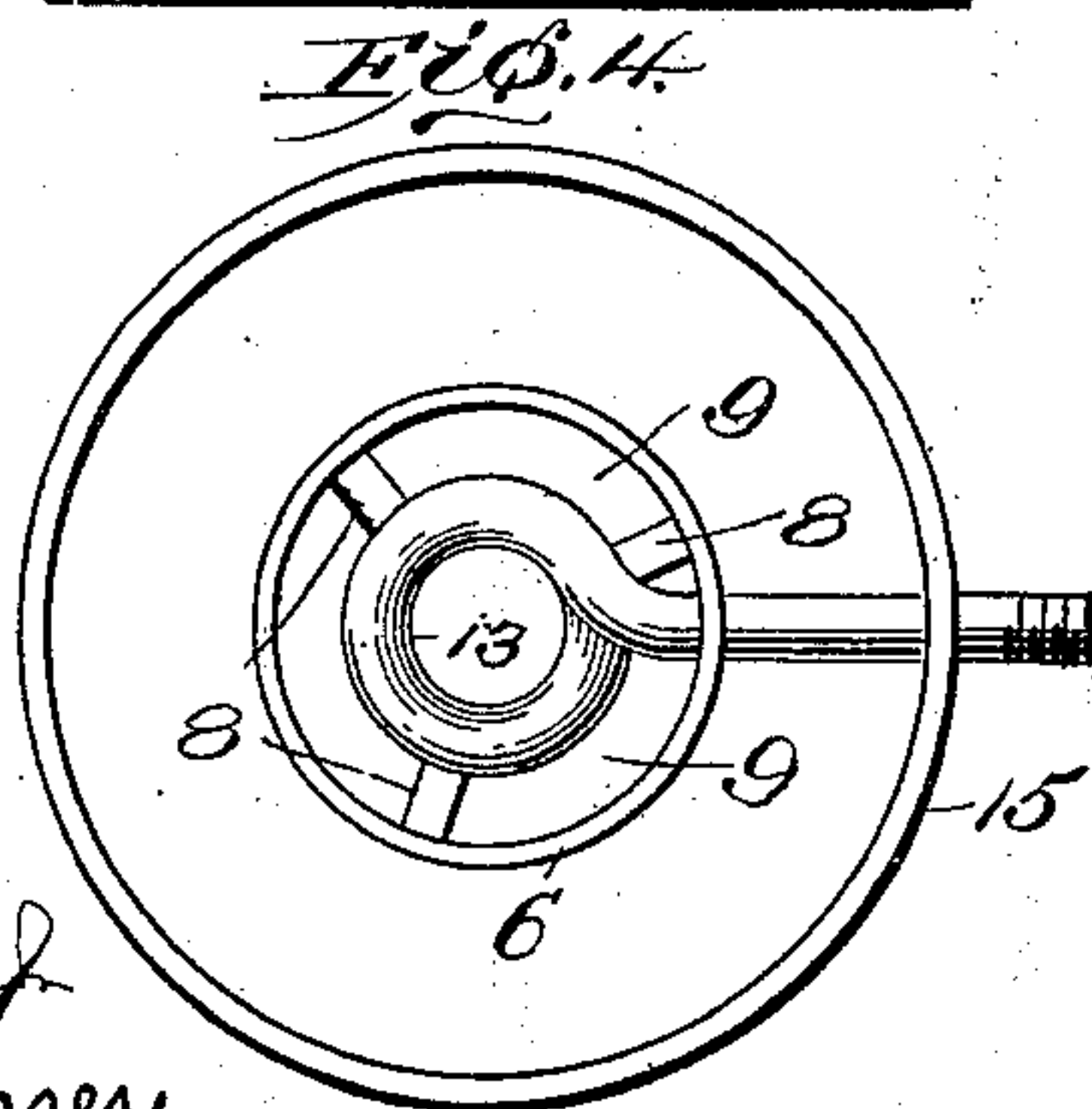
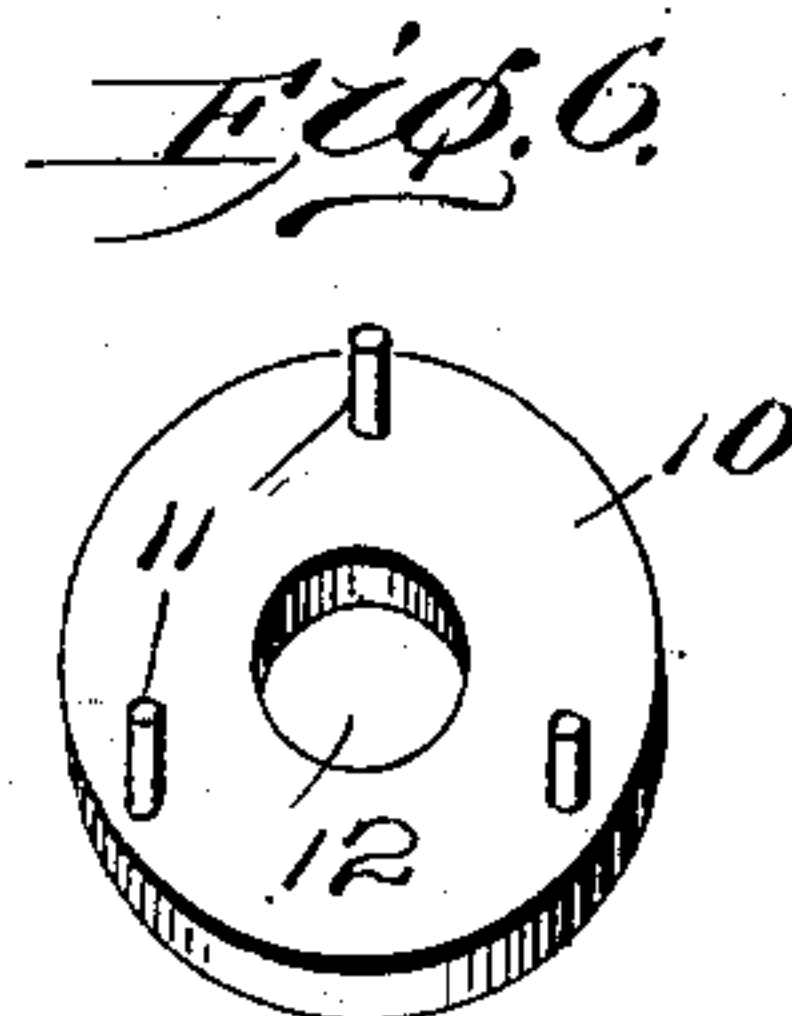
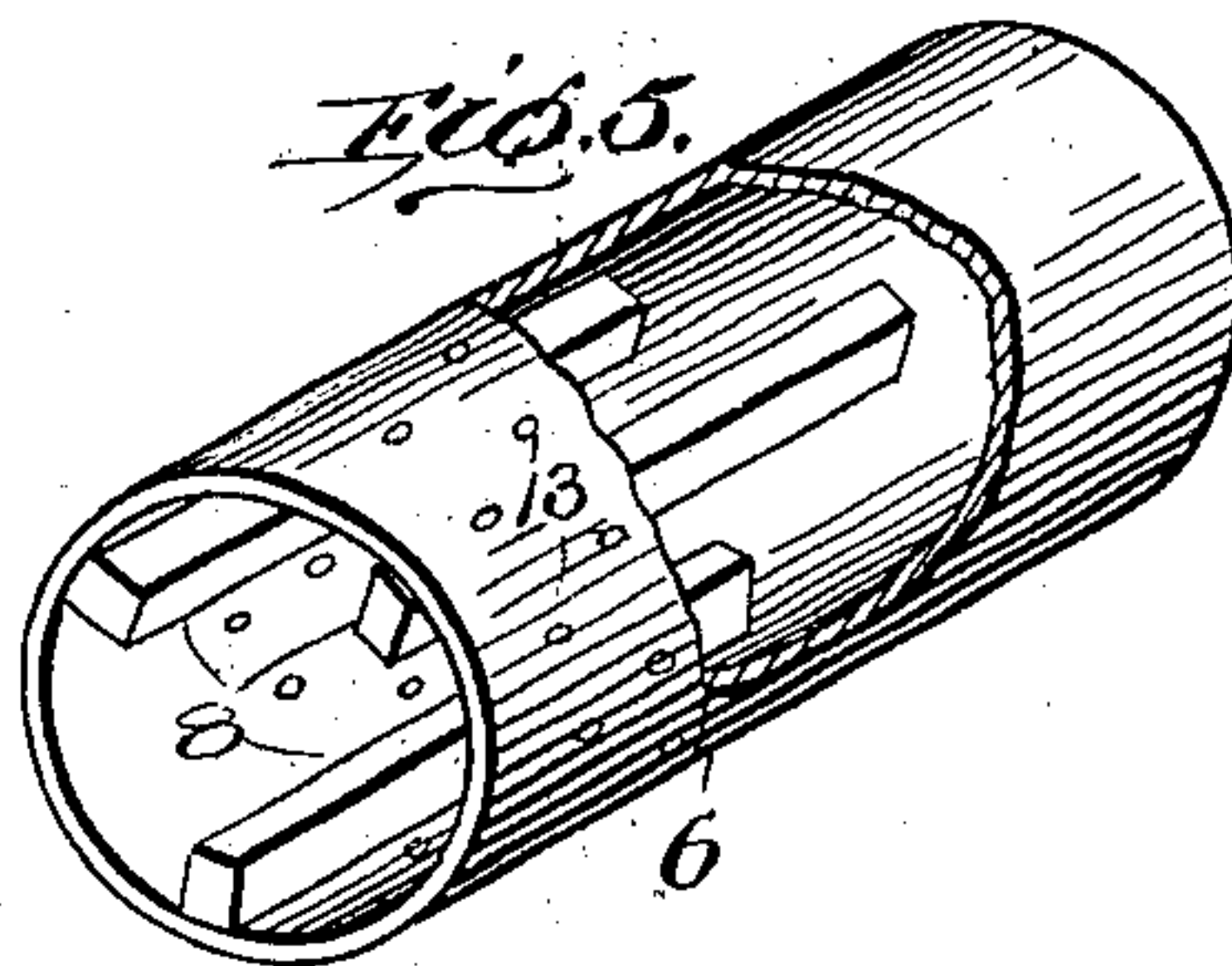
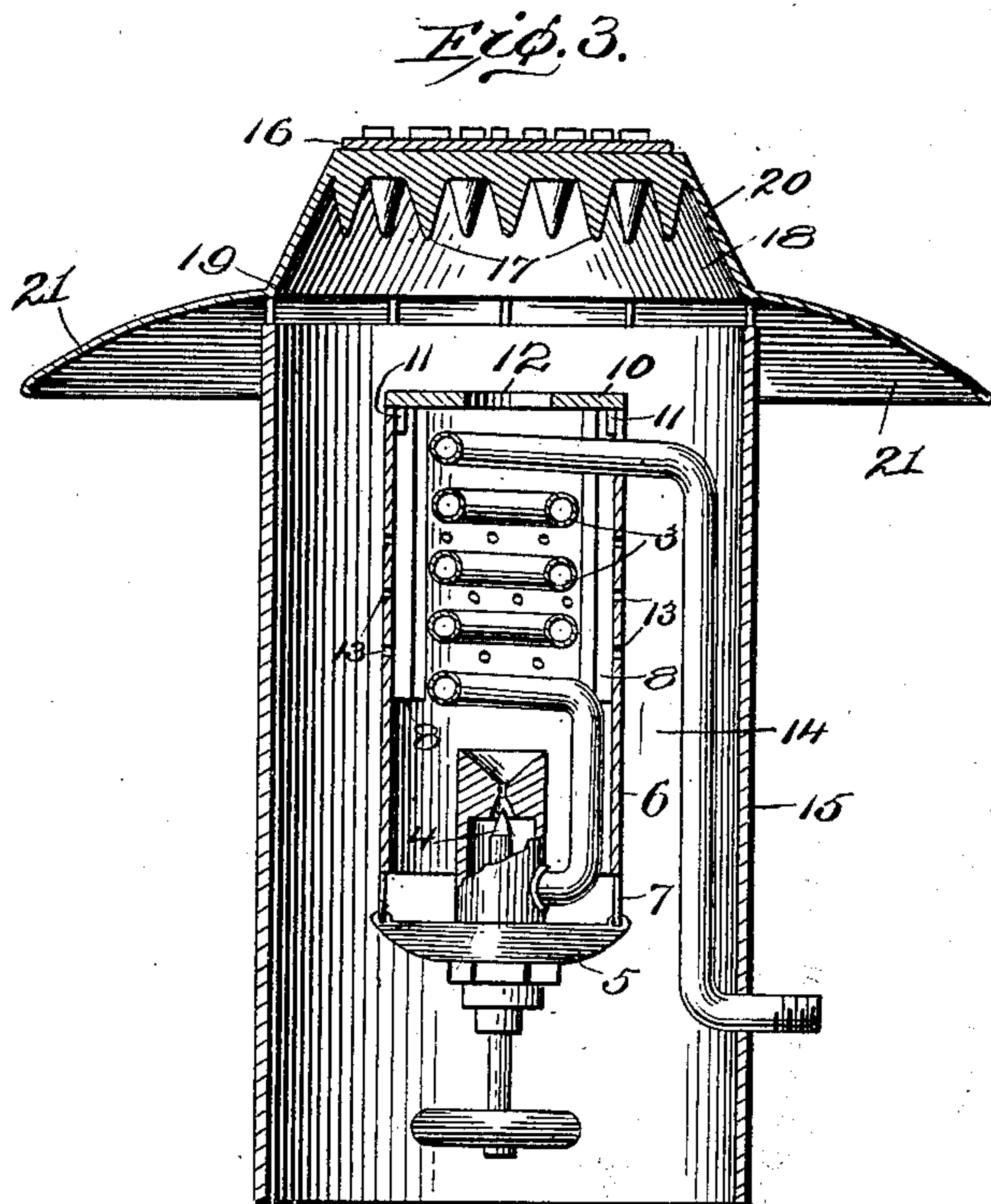
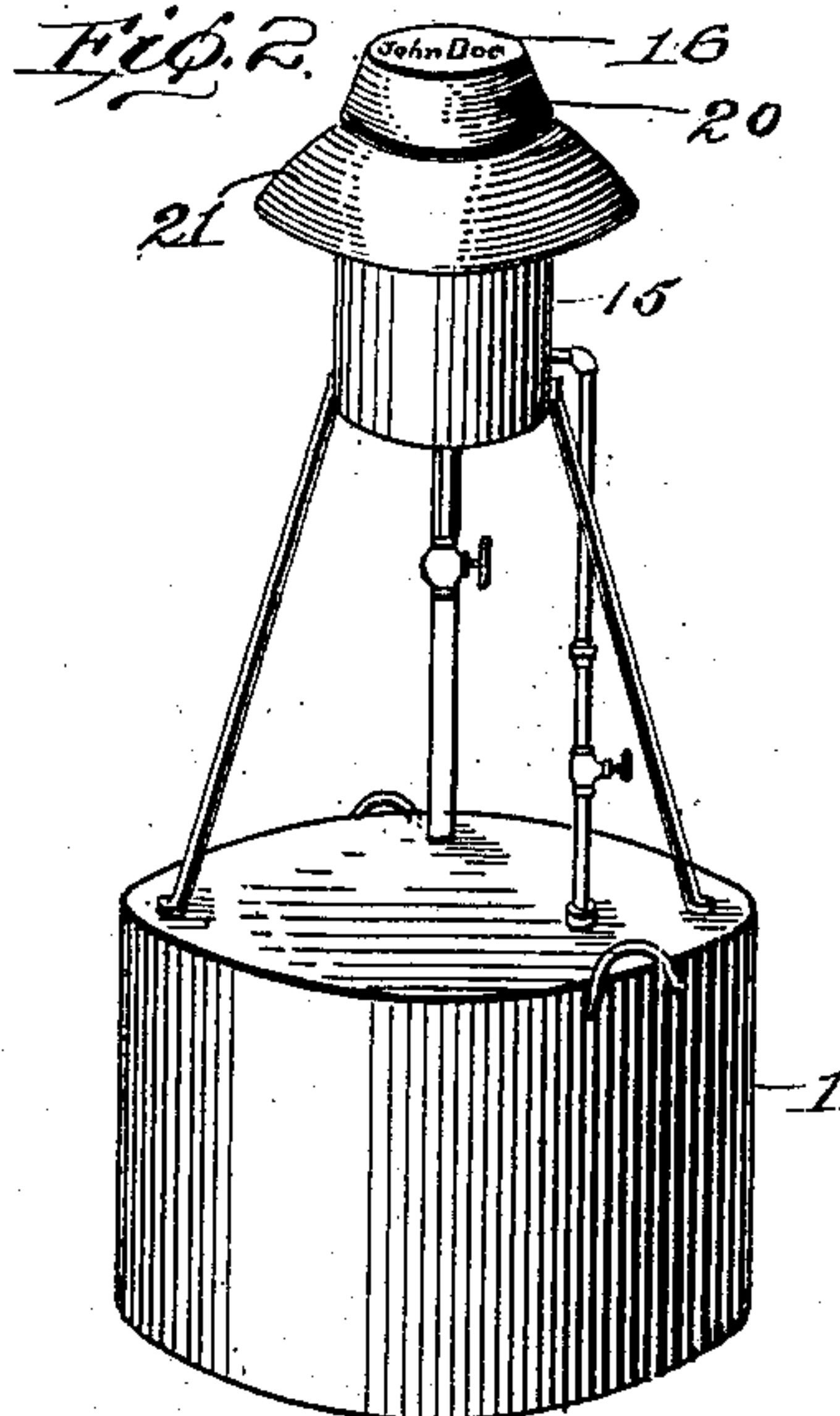
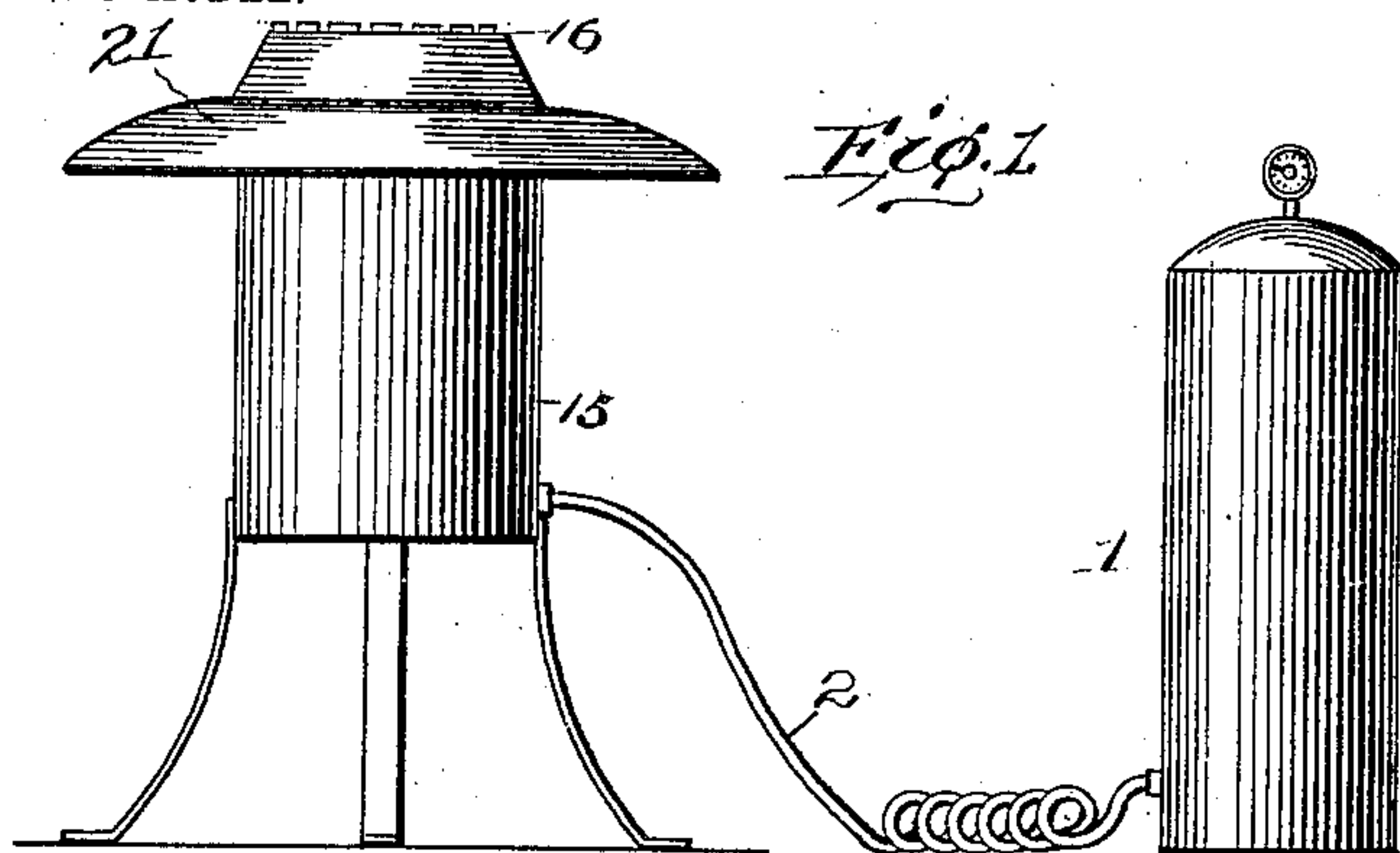
No. 754,862.

PATENTED MAR. 15, 1904.

G. FULLER.
OIL BURNING BRANDING IMPLEMENT.

APPLICATION FILED OCT. 26, 1903.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE FULLER, OF WASHINGTON, DISTRICT OF COLUMBIA.

OIL-BURNING BRANDING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 754,862, dated March 15, 1904.

Application filed October 26, 1903. Serial No. 178,580. (No model.)

To all whom it may concern:

Be it known that I, GEORGE FULLER, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Oil-Burning Branding Implements, of which the following is a specification.

This invention relates to branding implements, and pertains especially to a branding implement or stamp self-heated by combustion of coal-oil therein for branding or stamping various articles, such as cured or smoked meat, and particularly brined meat while yet wet.

The object of the invention is to provide a self-heating oil-burning brander of such novel and peculiar construction of parts that air flues or drafts are formed in a particular manner therein so as to make a continuous combustion of the oil and produce an intensely-rarefied heat directly under the branding-plate and maintain it there to the exclusion of smoke, soot, and odor and at a cost much less than that of any other burner of this character known to me.

A further object of the invention is to provide a branding implement or stamp of such improved character that the heating-blaze is perfectly clear, so that all particles of combustion are consumed in the blaze and the fire confined in such a manner that the heat therefrom is directed against the branding-plate in an intensified condition and more heat is produced from the same amount of oil than in any other oil-burner known to me.

A still further object of the invention is to provide an oil-burning branding implement having a branding-plate provided with heat-retaining lugs surrounded by a flanged hood and to arrange the several parts of the burner relative to the hood so that meat-brine will not interfere with the operation of the burner and so that the burner parts are prevented from the usual burning out thereof and the explosions or snuffing out of the blaze of ordinary occurrence is prevented.

With these objects in view the invention consists in so arranging an outer casing under a hooded branding-plate as to form a fire-box or heating-chamber under the said plate and directing an oil-burning jet through a spiral

coil and a breaker or baffle plate carried by a sleeve surrounding the coil and jet, with air-passages between the coil and sleeve and between the latter and the said casing, which surrounds the sleeve.

In the accompanying drawings, forming part of this application, Figure 1 is an elevation of the implement in condition for use. Fig. 2 is a perspective view showing a different application. Fig. 3 is a central vertical sectional view. Fig. 4 is a top view of the burner with the branding-plate, hood, and baffle-plate removed. Fig. 5 is a perspective view of the sleeve. Fig. 6 is a perspective view of the baffle-plate.

The same numeral references denote the same parts throughout the several views of the drawings.

The oil-reservoir 1 may be of any suitable form or desirable size and is provided with a small flexible hose or pipe 2 for supplying oil through a spiral coil 3 to a needle valve or jet 4, provided with a starting-cup 5. A sleeve 6 is supported from the said cup by legs 7 and is divided the length of the coil 3, which it surrounds, as well as the said valve-jet, by strips or bars 8, which engage the coil and form air-passages 9. The bottom of the sleeve is open, and the top thereof is partially closed by a baffle or breaker plate 10, having pins 11 which fit within the sleeve-top. The said plate has a central opening 12 substantially the same diameter as the circle described by the coil 3, so as to confine the blaze and direct it centrally in its passage from the coil without permitting it to spread at the top of the coil. A series of air-ducts 13 are formed in the sleeve to assist the draft of the air-passages 9, which, with said ducts and the said plate, form a central draft augmented by the air-passage 14 between the sleeve and an outer casing 15 open at the top and bottom.

The branding-plate 16 has a series of lugs or projections 17 depending therefrom and form a most capable and effective means of retaining the heat upon the branding-plate. A conical hood is formed on the said plate to inclose the said lugs and forms, with the top of the casing 15, a fire-box or heating-chamber 18, having an air-passage or ducts 19 at the

intersection or juncture of the hood and the casing to further augment or increase the draft above the sleeve and the coil. The hood has an apron or flange overhanging the top of the casing and which projects from the hood above the passage 19 to protect the operator.

It will be seen that the sleeve is divided into three separate air flues or channels, and the dividing bars or strips separate the current of air in said flues until it reaches the baffle-plate, and the latter causes the air and gas to mix centrally over the top of the coil, so that by the time the flame reaches the fire-box or heating-chamber it is practically a pure white heat scarcely visible, but of intense heating capacity.

It will be observed that the air-passage or ducts between the hood and the top of the casing being of such restricted size as not to emit the flame therethrough it is directed into the fire-box or heating-chamber and that the overhanging hood-apron fully protects the operator from the heat of the burner and also forms a drip for the brine or other liquid from the meat when applied to the branding-plate.

In practice the implement is placed conveniently as desired and at such distance from the reservoir as the supply-pipe will permit, and this may be varied, as desired or as occasion may demand, by lengthening or shortening said pipe. The oil is turned into the coil and ignited through the needle-valve by means of the starting-cup. Then the meat is applied to the branding-plate for branding.

It will be understood that various plates may be employed with the hood by simply replacing one for another, that the size of the parts and dimensions of the whole device may be varied as desired, that more or less of the parts may be made detachable, and that the details thereof may be changed in the practical application of the implement without departing from the spirit of my invention.

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

1. In a branding implement, the combination of a spiral pipe-coil, a tubular sleeve surrounding the coil with separated air-passages between the coil and the sleeve, and an open-end casing surrounding the sleeve, as set forth.

2. In a branding implement, the combination of a vaporizing-coil, a tubular sleeve surrounding the coil, strips or bars between the coil and the sleeve and separating the space between the coil and the sleeve into air-passages, and the casing surrounding the sleeve, as set forth.

3. In a branding implement, the combination of a vaporizing-coil, a tubular sleeve surrounding the coil with an air-space therebetween, a baffle-plate partly covering the sleeve to centralize the flame, and a casing surrounding the sleeve and plate, as set forth.

4. In a branding implement, the combina-

tion of a vaporizing-coil, a sleeve surrounding the coil with an air-space therebetween, strips or bars in the air-space to divide it, a baffle-plate having a central opening and partly covering the sleeve, and a casing having open ends and surrounding the sleeve and the plate, as set forth.

5. The combination, with a vaporizing-coil, and a tube surrounding it with an interval or space between the coil and the tube, of means carried by and within the tube for interrupting the passage of air through the space.

6. The combination, with a vaporizing-coil, and a tube surrounding it with an interval or space between the coil and the tube, of means within the tube to interrupt the passage of air through the space, and a plate to deflect the air and centralize the flame at the top of the tube.

7. In a branding implement, the combination with the casing having open ends, and an oil-burner inclosed by the casing, of a branding-plate, a hood depending from the plate and supported by one end of the casing with an interval therebetween, lugs projecting from the plate and surrounded by the hood, and an apron projecting from the hood and overhanging the casing, substantially as and for the purpose set forth.

8. In a branding implement, the combination with the casing having open ends, and the branding-plate having a hood supported by one end of the casing to form a fire-box or heating-chamber with an interval between the hood and the casing-top, of an igniter-cup, a vaporizing-coil, a sleeve having legs standing on the cup and surrounding the coil with an air-space therebetween, strips or bars extending the length of the coil and dividing said space, and a baffle-plate having pins fitting the sleeve and partly covering one end of the sleeve, substantially as shown and described and for a purpose set forth.

9. In a branding-stamp heater, the combination of a vaporizing-coil, a tube surrounding the coil with a space therebetween, strips or bars the length of the coil upon the inside of the tube, and a plate to cover said space and the coil and having an aperture central with the coil.

10. In a branding-stamp heater, the combination of a vaporizing-coil, a tubular sleeve surrounding the coil with a space therebetween and projecting above and below the coil, bars within the sleeve and extending part of its length, and a disk or plate to cover the top of the sleeve and having an aperture central with the coil.

In witness whereof I hereunto set my hand in the presence of two witnesses.

GEORGE FULLER.

Witnesses:

J. ROSS COLHOUN,

E. B. HOLMAN.