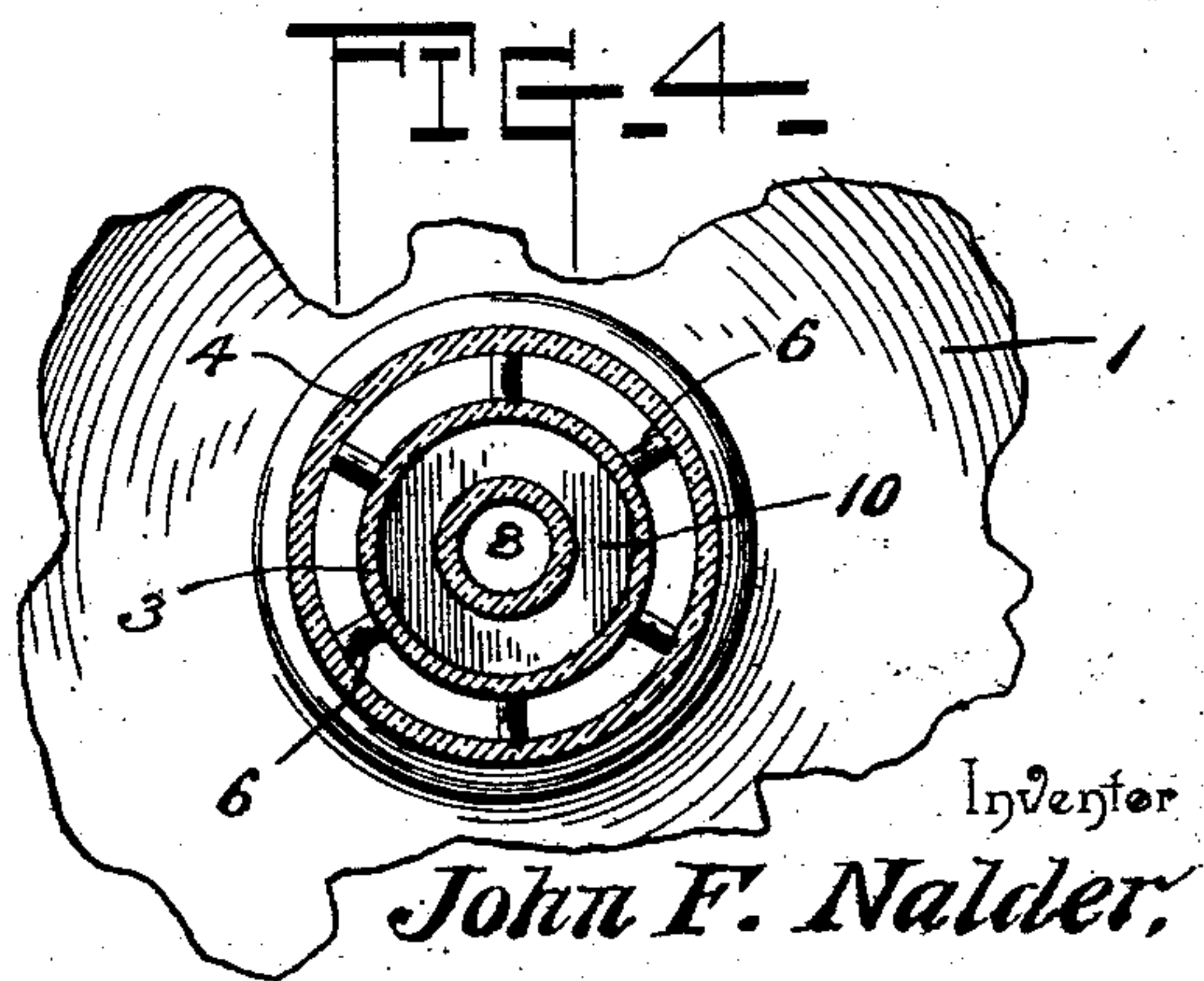
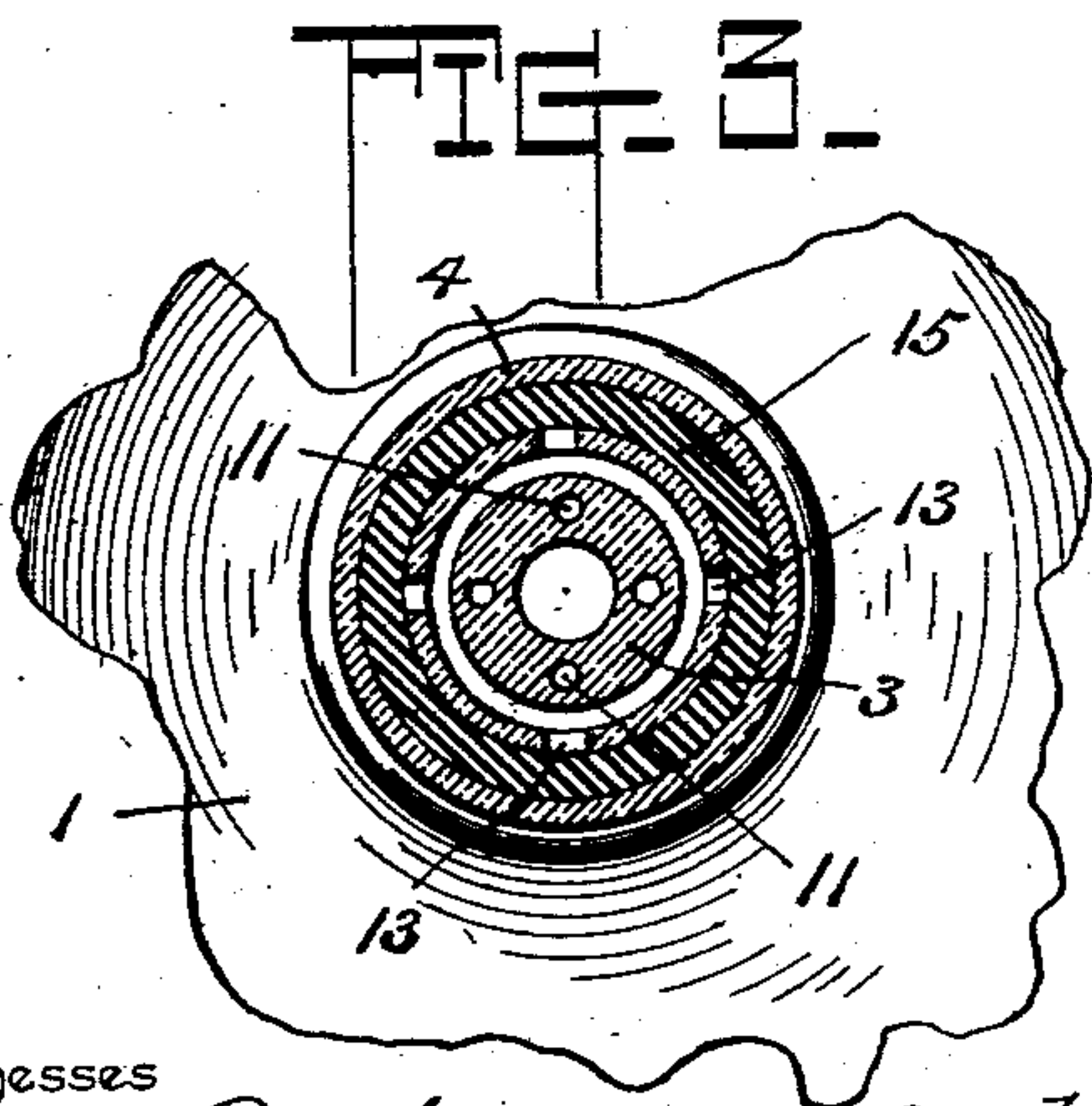
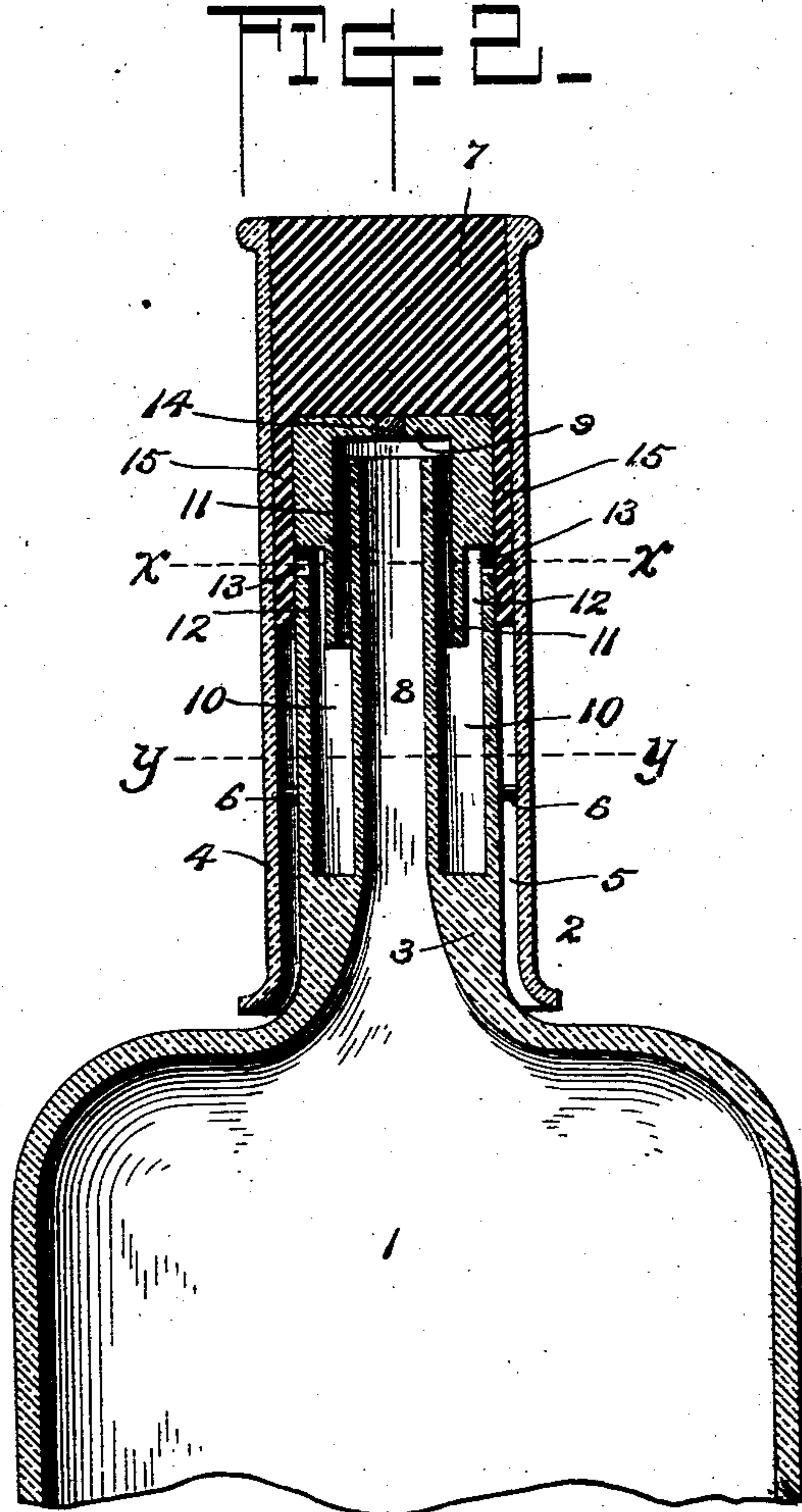
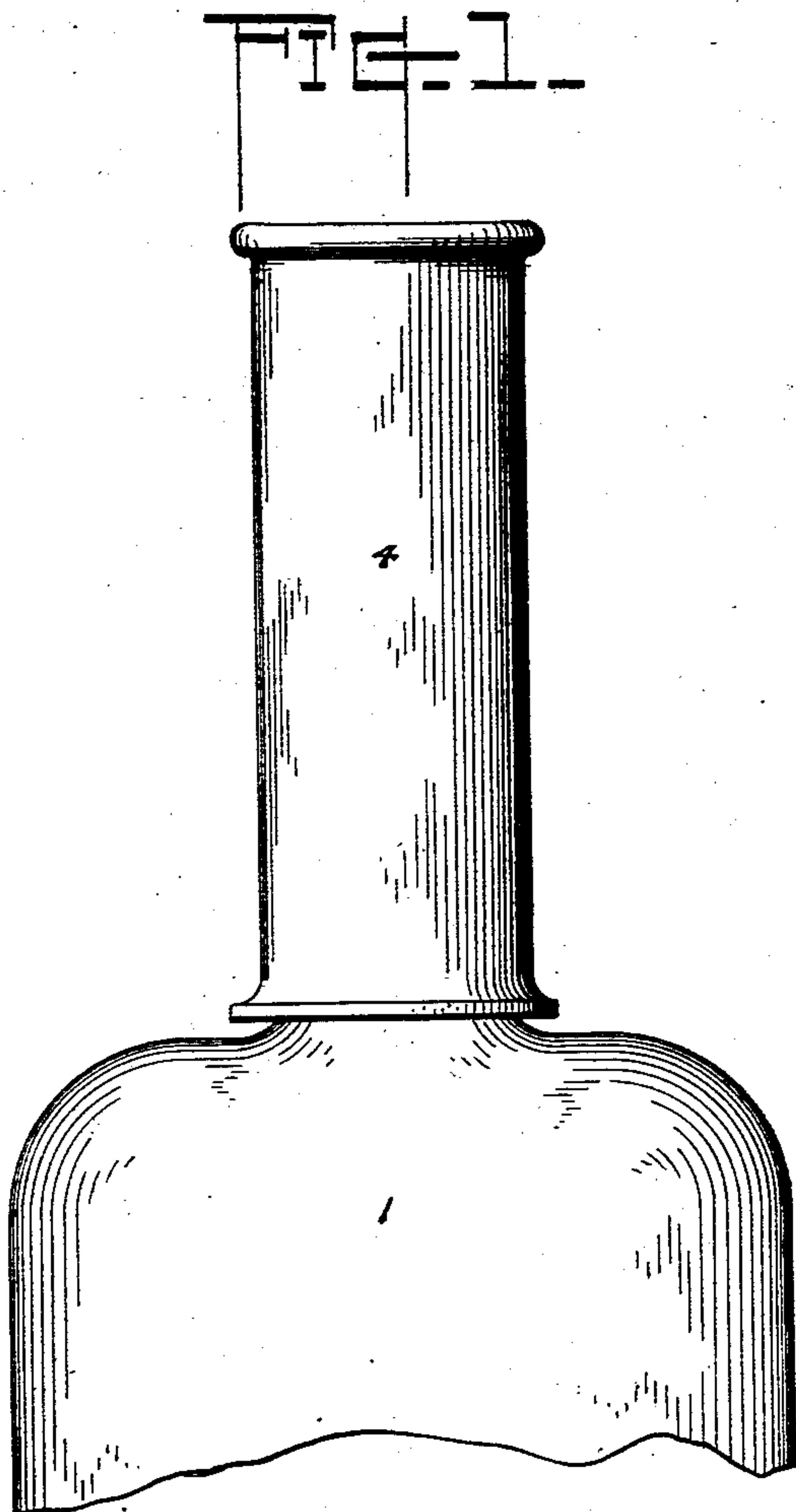


(No Model.)

J. F. NALDER.
NON-REFILLABLE BOTTLE.

No. 572,060.

Patented Nov. 24, 1896.



Witnesses

A. M. Poynter.

By *his* Attorneys,

H. F. Riley

Inventor
John F. Nalder.
C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

JOHN FIELDING NALDER, OF FLUSHING, NEW YORK.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 572,060, dated November 24, 1896.

Application filed August 12, 1896. Serial No. 602,538. (No model.)

To all whom it may concern:

Be it known that I, JOHN FIELDING NALDER, a subject of the Queen of Great Britain, residing at Flushing, in the county of Queens and State of New York, have invented a new and useful Non-Refillable Bottle, of which the following is a specification.

The invention relates to improvements in non-refillable bottles.

10 The object of the present invention is to improve the construction of non-refillable bottles and to provide a simple, inexpensive, and efficient one which will enable its contents to be readily decanted, but which will
15 effectually prevent the introduction of a liquid into it after it has received its original contents and has been sold.

20 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

25 In the drawings, Figure 1 is a side elevation of a portion of a bottle constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a horizontal sectional view on line *xx* of Fig. 2. Fig. 4 is a similar view on line *yy* of Fig. 2.

30 Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a bottle provided with a neck 2, consisting of an inner cylindrical section 3 and an outer cylindrical section 4, arranged
35 concentric with each other and forming an intervening space 5, which is open at its lower end, for the purpose hereinafter described. The outer section 4 is connected by a radial ridge 6 at a point intermediate of
40 its ends with the inner section 3, and it extends above the latter, forming a cork-receiving portion in which is arranged a cork or stopper 7.

45 The inner section 3 of the neck, which is provided with a central longitudinal opening 8, has its upper end 9 closed, and the upper end of the opening is enlarged and communicates with the outer concentric cavity or chamber 10 by means of vertical perforations 11, arranged parallel with the upper
50 portion of the opening 8 and extending down-

ward from the enlarged top portion thereof to the annular cavity or chamber 10.

The annular cavity or chamber 10, which is closed at its bottom, is provided outside 55 the perforations 11 with a narrow annular extension 12, communicating at its upper end, by means of perforations 13, with the space 5 between the inner and outer sections of the bottle. 60

When the bottle is inverted, its contents flow downward through the central longitudinal opening 8 of the neck and rise through the perforations into the annular chamber or cavity 10 and pass out through the perfora- 65 tions 13 into the annular space 5, as will be readily understood. When the bottle is returned to its upright position, the outward flow is shut off and the cavity or chamber 10 receives that portion of the liquid remaining in 70 the perforations 11.

Should an attempt be made to fill the bottle, any liquid poured down its mouth would run out of the open lower end of the intervening annular space. By this construction 75 an effective non-refillable bottle is provided.

When the bottle is manufactured, a perforation is made at the top or closed end of the inner section 3 of the neck of the bottle, and after the bottle is filled the perforation is 80 hermetically sealed by a plug 14, which is secured in the perforation by a suitable cement.

The cork or stopper 7 consists of a solid upper portion fitting in the extension of the outer section 4 of the neck and a depending 85 tubular portion 15, arranged in the intervening space between the inner and outer sections of the neck of the bottle and extending below the perforations 13, thereby sealing the bottle and preventing the escape of any of 90 its contents.

It will be seen that the non-refillable bottle is exceedingly simple and inexpensive in construction, that the improvements are applicable to all kinds of receptacles that are pro- 95 vided with necks, and that as the intervening space between the inner and outer sections of the neck is open at its lower end any liquid poured into the top of the neck will flow out at the base thereof without entering the bottle. 100

What I claim is—

1. A non-refillable receptacle provided with

a neck comprising inner and outer sections forming an intervening space between them, said space being open at its top and bottom, the outer section being extended above the inner section to provide a cork-receiving portion, and the inner section being provided with passages communicating with the interior of the bottle and with the intervening space between the said sections at a point intermediate of the ends thereof, substantially as described.

2. A non-refillable receptacle provided with a neck comprising inner and outer sections forming an intervening space between them, said space being open at its top and bottom, the outer section being extended above the inner section to provide a cork-receiving portion, and the inner section being provided with passages communicating with the interior of the bottle and with the intervening space between the said sections at a point intermediate of the ends thereof, combined with a cork or stopper composed of a solid upper portion fitting in the extension of the outer section of the neck, and a depending tubular portion extending downward into the intervening space between the sections of the neck and covering the outer ends of the said passages, substantially as described.

3. A non-refillable receptacle provided with a neck comprising an inner section having a central longitudinal opening, and provided at its lower portion with an annular chamber concentric with the central opening, said inner section being provided with bores extending from the top of the central opening

to said chamber and the latter being provided above the lower ends of the bores with openings or perforations, and the outer section of the neck surrounding the inner section and forming an intervening space open at its top and bottom, substantially as described.

4. A non-refillable receptacle provided with a neck comprising an inner section provided with a central longitudinal opening, and having bores parallel with the upper portion of the opening, and provided with an annular chamber concentric with the lower portion of the central opening and provided with a narrow annular extension, arranged outside of the lower portions of the bores, said inner section being provided at the upper end of the said extension of the annular chamber with perforations and having a plug at its top, the outer section surrounding the inner section of the neck, connected with the same by radial arms and extending above the inner section, combined with a cork composed of a solid upper portion, and a depending tubular portion extending downward in the intervening space between the sections of the neck and covering the adjacent perforations of the inner section, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN FIELDING NALDER.

Witnesses:

JAS. H. CLARKE.

LOUIS C. MASTER.