

No. 762,487.

PATENTED JUNE 14, 1904.

L. M. & I. E. McDERMOTT & C. C. ROGERS.

NON-REFILLABLE BOTTLE.

APPLICATION FILED FEB. 25, 1904.

NO MODEL.

Fig. 1

Fig. 2.

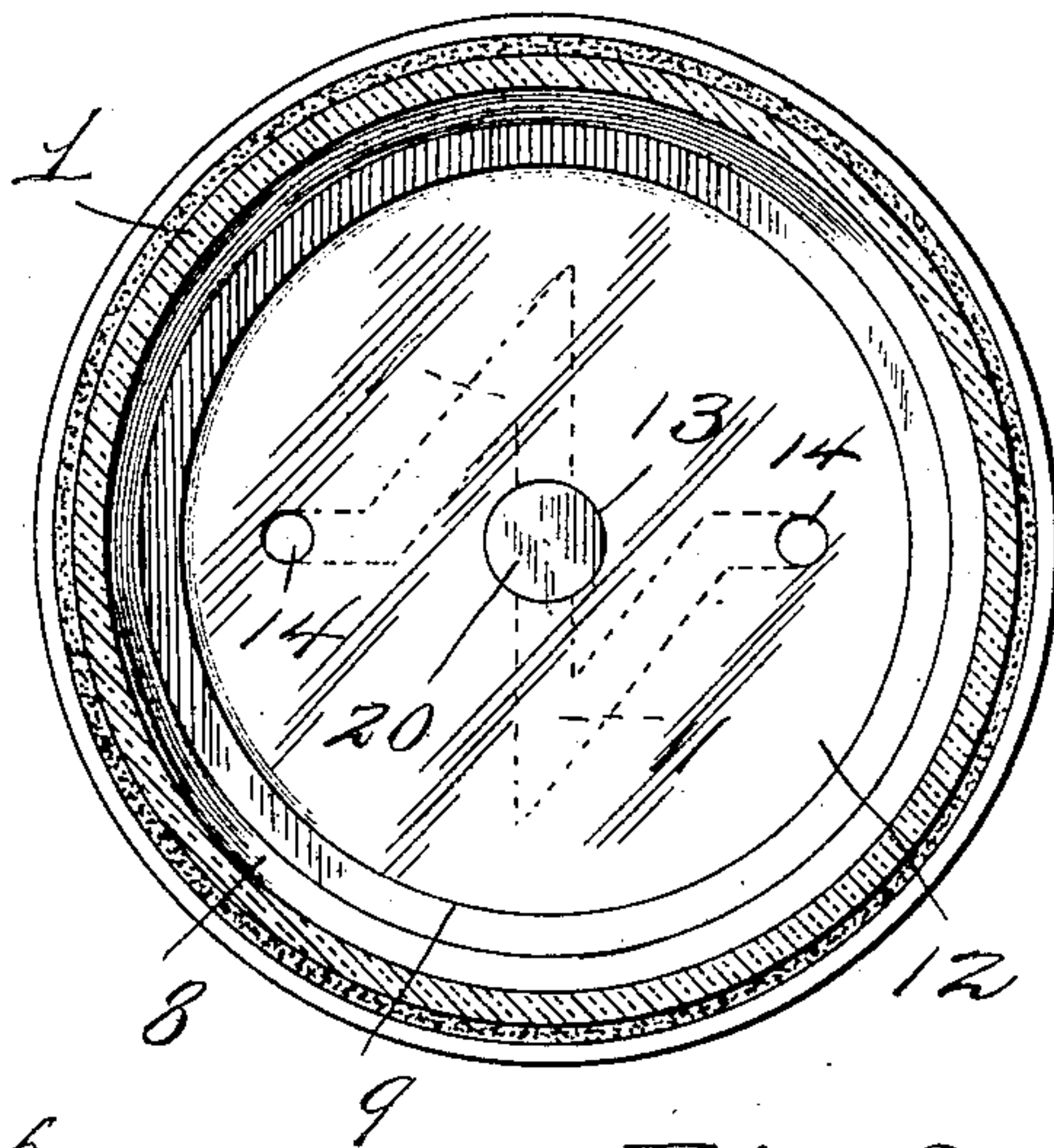
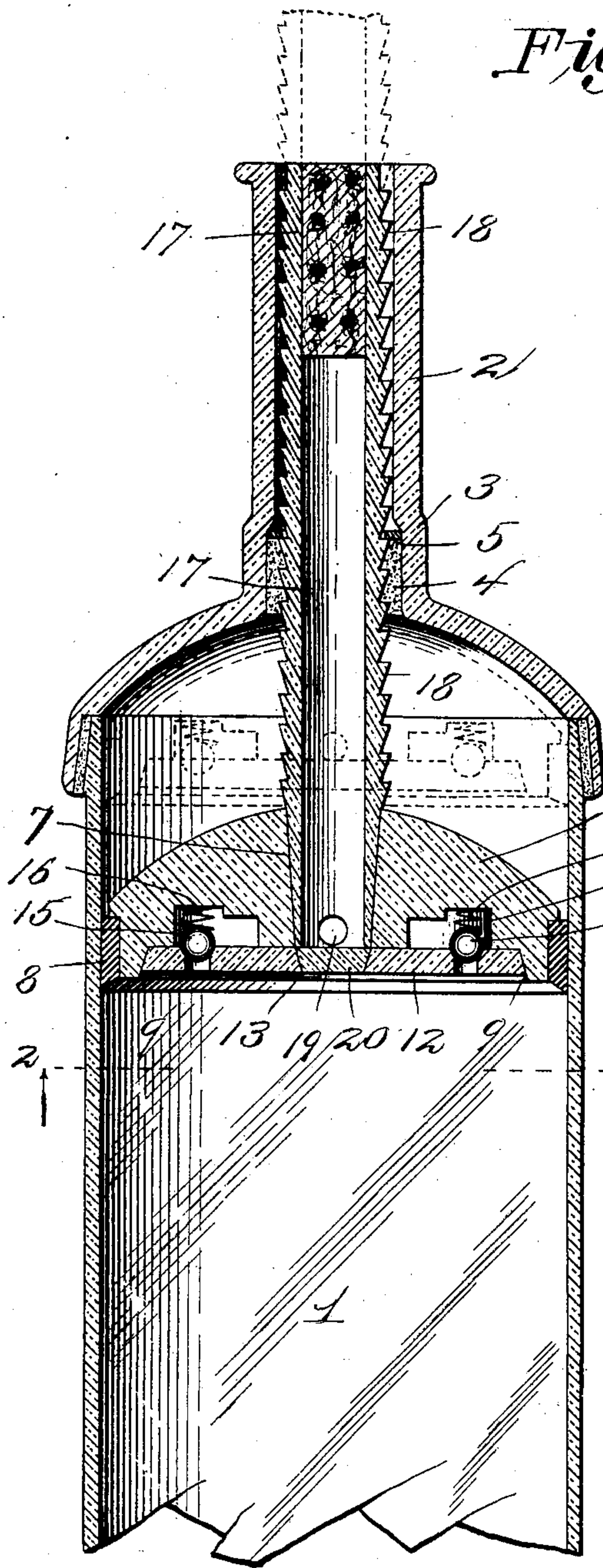


Fig. 3.

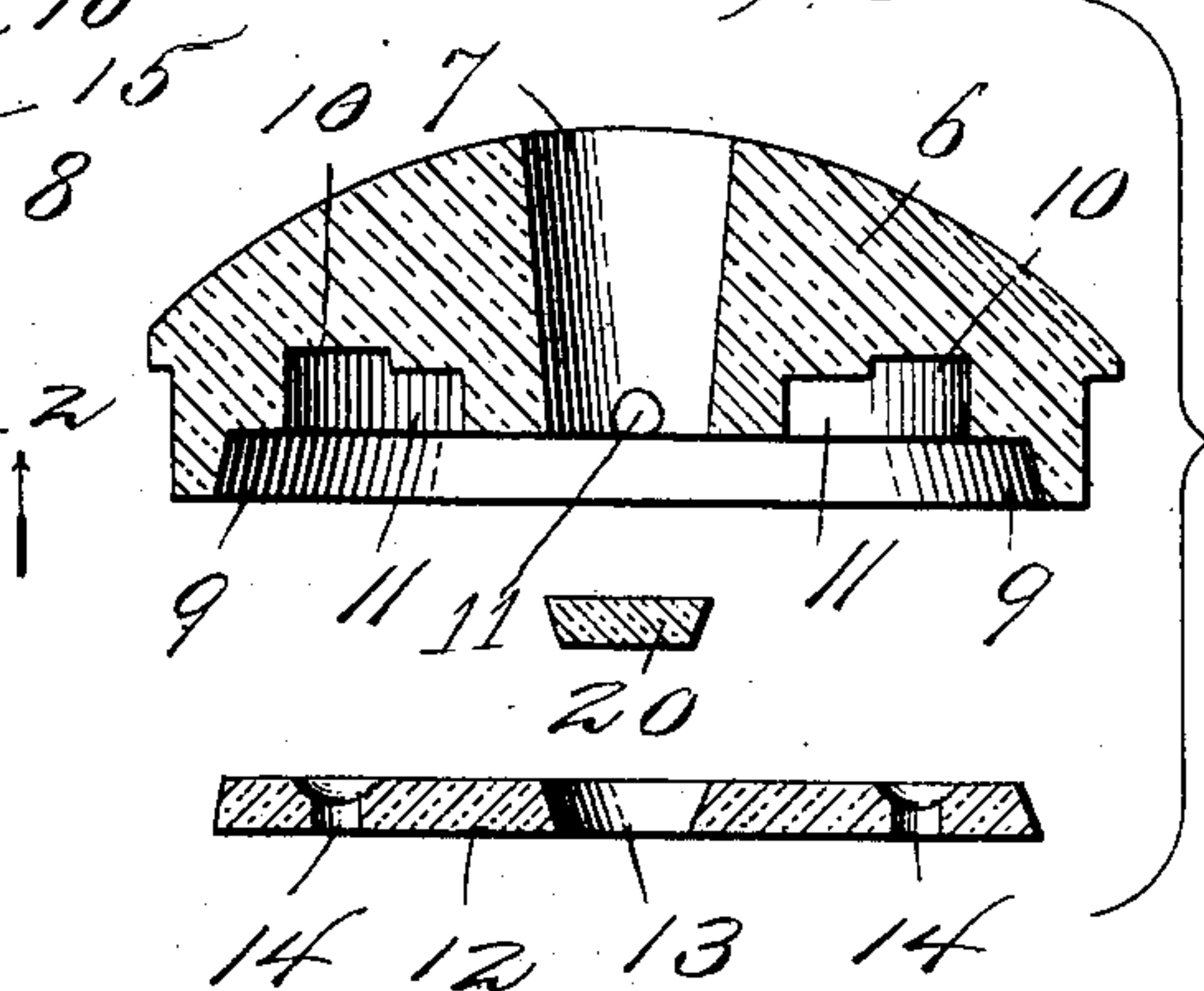
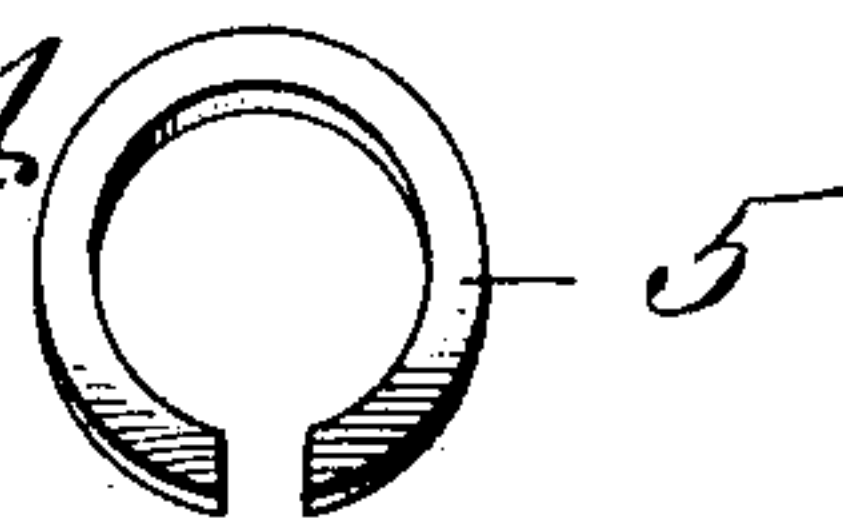


Fig. 4



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 762,487, dated June 14, 1904.

Application filed February 25, 1904. Serial No. 195,263. (No model.)

*To all whom it may concern:*

Be it known that we, LEWIS M. McDERMOTT, IRVIN ERRETT McDERMOTT, and CLARENCE C. ROGERS, citizens of the United States, residing at Wheeling, in the county of Ohio and State of West Virginia, have invented a new and useful Non-Refillable Bottle, of which the following is a specification.

This invention relates to non-refillable bottles, and has for its objects to produce a comparatively simple inexpensive device of this character which will after the original filling of the bottle prevent subsequent introduction of liquor thereto, thereby obviating fraudulent substitution of an inferior grade of goods for that originally contained in the bottle.

To these ends the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a vertical section of a bottle embodying the invention. Fig. 2 is a reverse plan view of the pressure-head. Fig. 3 is a detail section of the head and retaining member, the parts being disassembled. Fig. 4 is a detail view of the spring-ring.

Referring to the drawings, 1 designates the bottle formed in two sections, preferably as herein shown, of which the upper section carrying the neck 2 may in practice be locked to the lower section by a bayonet-joint, cement, or otherwise to prevent separation of the parts after being once united.

The neck 2 is provided adjacent to its lower end with an internal peripheral enlargement or recess 3, adapted in practice to receive a packing-gasket 4, preferably of rubber, which supports upon its upper face a split ring or annulus 5, formed from some suitable spring metal.

Within the bottle is fitted a head or member 6, provided at its center with a vertically-disposed orifice 7 and around its periphery with a packing-ring 8, designed to bear snugly and tightly against the inner wall of the bottle to prevent liquid passing from beneath the member to the upper side thereof, the lower face of said head being provided with an enlarged circular recess 9 and with a pair

of circular sockets or chambers 10, from which substantially V-shaped grooves or channels 11 lead to the central orifice 7, the axes of said channels being perpendicular to the axis of the orifice.

Seated and cemented or otherwise secured within the recess 9 is a retaining member or disk 12, having a central opening 13, adapted to register with the opening 7, and a pair of apertures or passages 14, arranged to register, respectively, with the chambers 10, which latter receive ball-valves 15, adapted to seat above and close the apertures 14, the valves being normally held to seated position by means of springs 16, as illustrated in Fig. 1.

Extending downward through the neck 2 is a tubular operating member 17, fitted at its lower end in the orifice 7 and provided upon its exterior with a vertically-arranged series of transversely-disposed steps, producing engaging teeth 18, the side walls of which taper or incline downwardly, attention being directed to the fact that this member extends downward through the gasket 4 and ring 5 and that the teeth engage successively with the latter to prevent upward movement of the member. The member 17 is provided at its lower end with suitable transverse openings 19, adapted in practice to register with the adjacent ends of the grooves or channels 11, while beneath the normally open lower end of the member 17 and within the orifice 13 there is seated a disk-like stopper or closure 20.

In practice the head 6, having the valve 15 and retaining member or disk 12 properly assembled therewith, is arranged in the upper end of the lower section of the bottle, after which the upper section of the latter is secured in place. The bottle may then be filled with liquor through the central orifice 7, and after being so filled the closure 20 is dropped into said orifice, through which it passes and seats within the orifice 13, the walls of the closure and orifice being properly beveled, as herein shown, to prevent the closure passing entirely through the orifice. The member 17, having its lower end properly coated with cement, is then passed downward through the neck and has its lower end seated in the ori-



fice 7 and with the openings 19 in register  
 with the channels or passages 11, the stopper  
 20 serving under these conditions to close the  
 lower end of the tube, to which the liquid may  
 5 flow from the bottle through the passages 14  
 and 11 and thence outward through the tube  
 for discharge from the bottle, the upper end  
 of the tube being initially closed by a cork or  
 otherwise. After arrangement of the parts  
 10 as above described if it is desired to discharge  
 liquor from the bottle the member 17, which  
 is suitably graduated for the purpose, is moved  
 downward through the neck, thereby press-  
 ing the head 7 downward upon the liquor and  
 15 causing the latter to pass the valves 14 and  
 enter the tube 17. The desired quantity of  
 liquor having entered the tube, downward  
 movement of the latter is arrested, and the liq-  
 uid is discharged, as usual. The teeth 18 by  
 20 engaging beneath the spring ring or member 5  
 serve to prevent upward movement of the op-  
 erating member 17, which obviously prevents  
 raising of the head 6 and the introduction of  
 liquid to the bottle.

25 From the foregoing it is apparent that a sim-  
 ple inexpensive device is produced which is  
 admirably adapted for the attainment of the  
 ends in view; but it is to be understood that  
 minor changes may be made without depart-  
 30 ing from the spirit or scope of the invention.  
 It will be understood that after the bottle has  
 been emptied it may be broken and the tube  
 pressure-head and attendant parts removed  
 for reuse in another bottle, thereby materially  
 35 reducing the expense in the use of the device.

Having thus described the invention, what is claimed is—

40 1. The combination with a bottle and its  
 neck, of a tubular operating member extend-  
 ed downward through the latter, a head car-  
 ried by the lower end of and provided with  
 passages leading to the member, the axes of  
 said passages being perpendicular to the axis  
 of the member, valves for normally closing  
 45 the passages, and means for locking the mem-  
 ber against upward movement.

2. The combination with a bottle and its  
 neck, of a tubular operating member extend-  
 ed downward through the latter, a head car-  
 ried by the lower end of and provided with 50  
 passages leading to the member, the axes of  
 said passages being substantially perpendicu-  
 lar to the axis of the member, valves disposed  
 adjacent to the outer ends of and adapted for  
 normally closing said passages, springs for 55  
 maintaining the valves in closed position, and  
 means for locking the operating member  
 against upward movement.

3. The combination with a bottle and its  
 neck, of a tubular operating member extend- 60  
 ed downward through the latter, a head car-  
 ried by the lower end of and provided with  
 passages leading to the member, the axes of  
 the passages being substantially perpendicu- 65  
 lar to the axis of the member, valves for nor-  
 mally closing said passages, engaging teeth  
 provided on the member, and a spring-ring  
 arranged within the bottle-neck for engage-  
 ment with the teeth to prevent upward move- 70  
 ment of the members.

4. The combination with a bottle and its  
 neck, of a tubular operating member extend-  
 ed downward through the latter, a head ar-  
 ranged within the bottle and having an orifice  
 for the reception of the lower end of and a 75  
 passage leading to the member, the axis of  
 the passage being substantially perpendicular  
 to that of the member, a valve disposed adja-  
 cent to the outer end of and designed for nor-  
 mally closing the passage, a closure seated in 80  
 the orifice beneath the lower end of the mem-  
 ber and means for preventing upward move-  
 ment of the latter.

In testimony that we claim the foregoing as  
 our own we have hereto affixed our signatures 85  
 in the presence of two witnesses.

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IRVIN ERRETT McDERMOTT.

CLARENCE C. ROGERS.

Witnesses:

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