

C. E. GORTON.  
DISPENSING APPARATUS.  
APPLICATION FILED FEB. 20, 1908.

929,127.

Patented July 27, 1909.

Fig. 1.

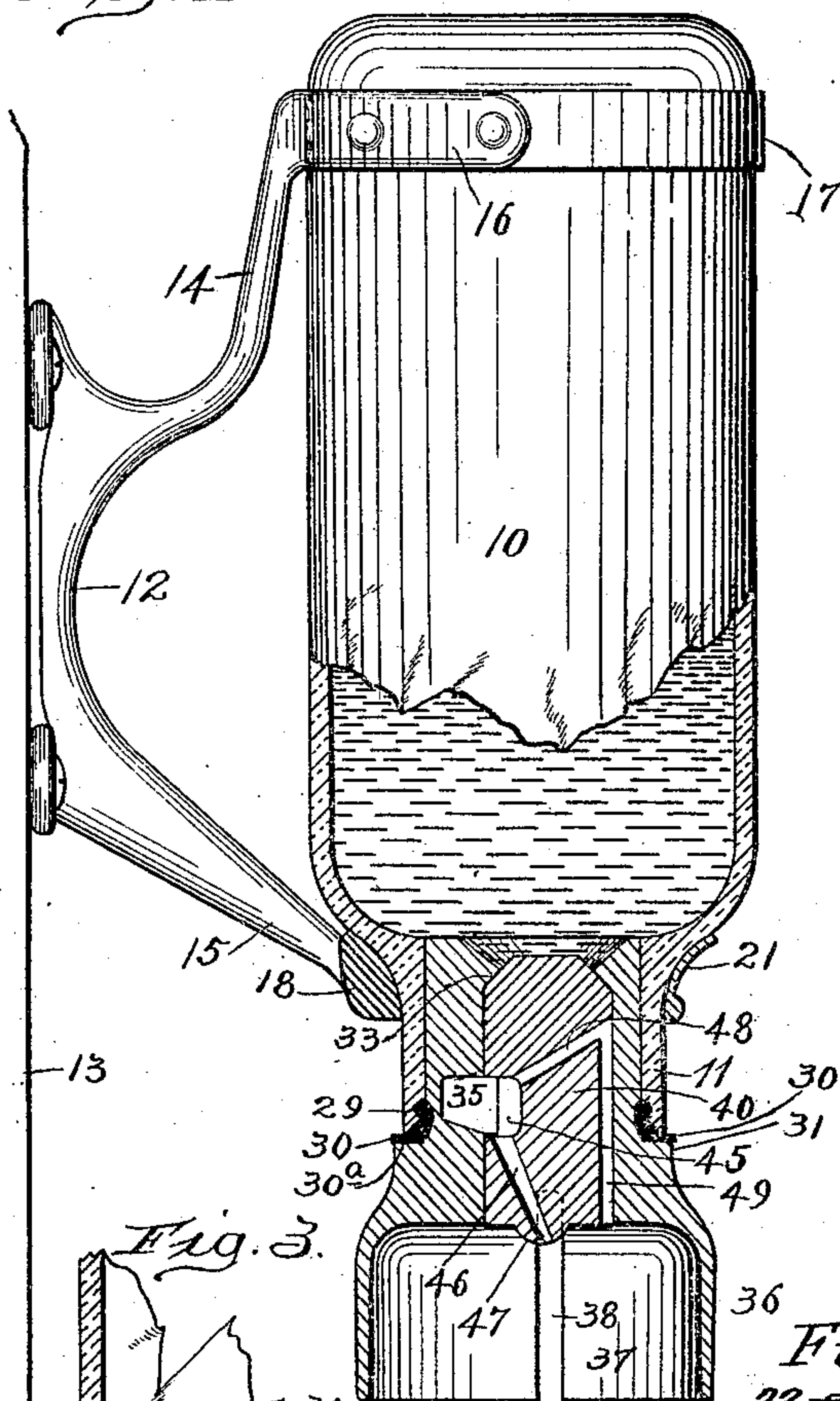


Fig. 2.

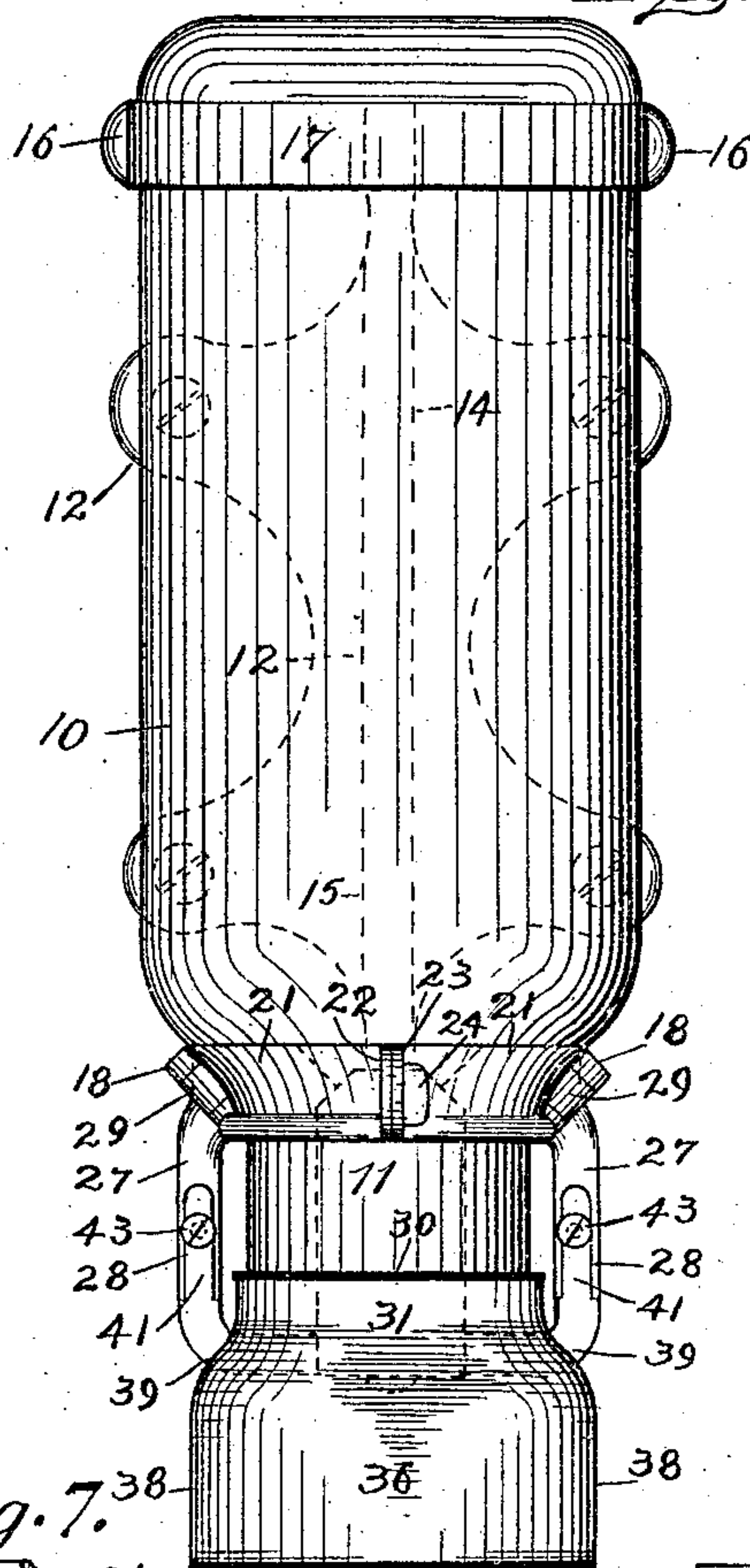


Fig. 3.

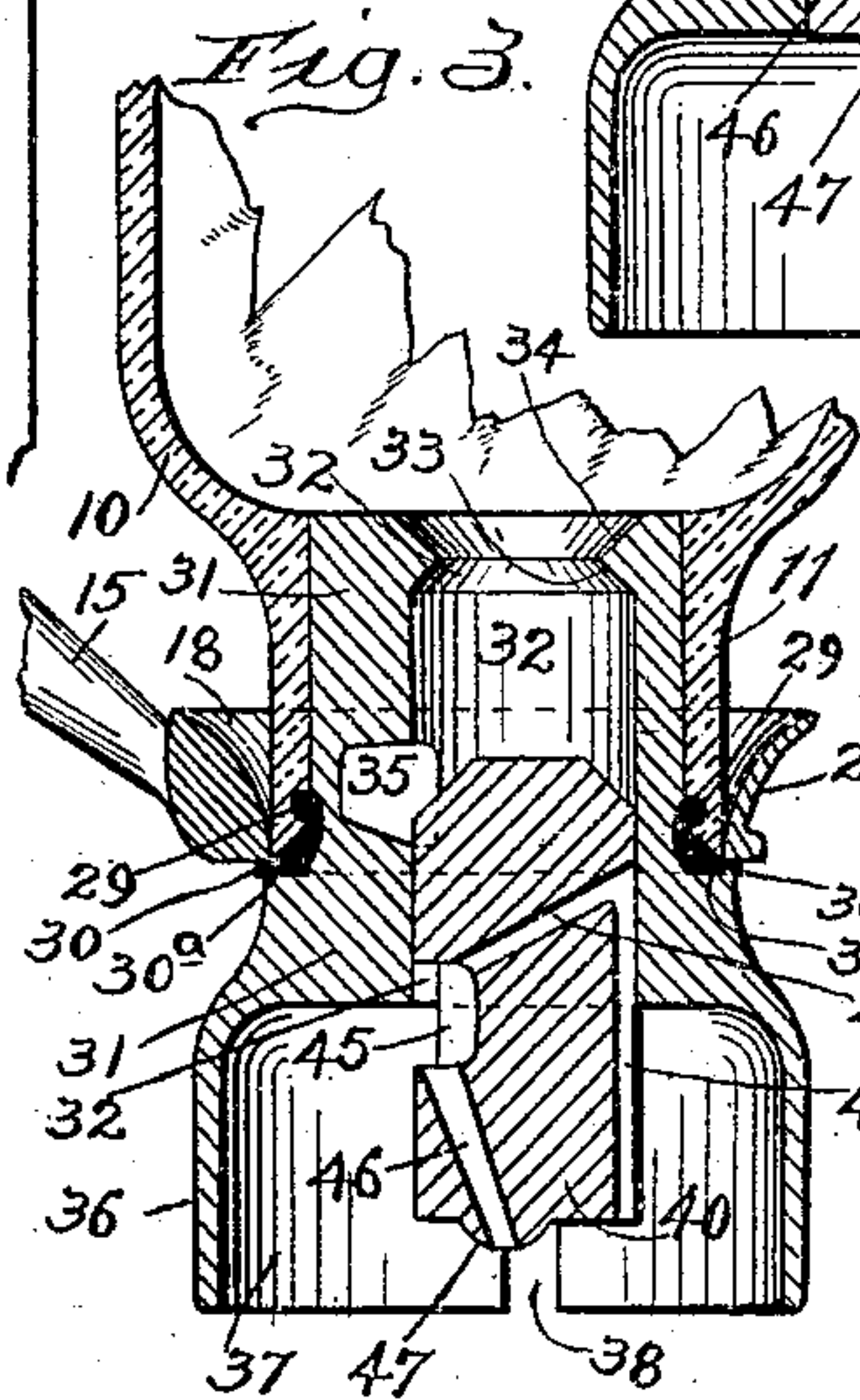


Fig. 7.

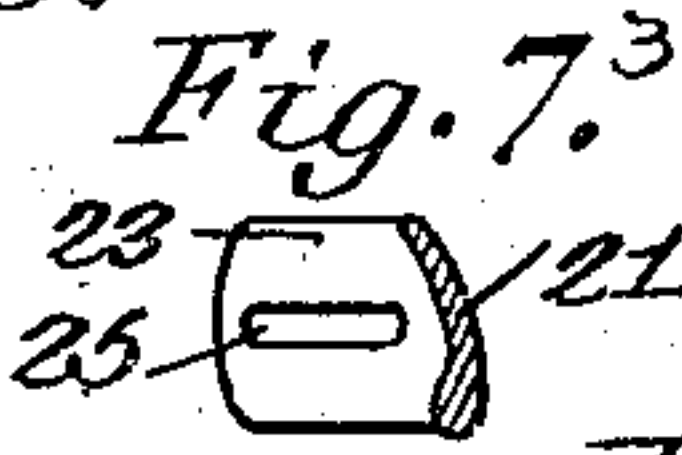


Fig. 8.

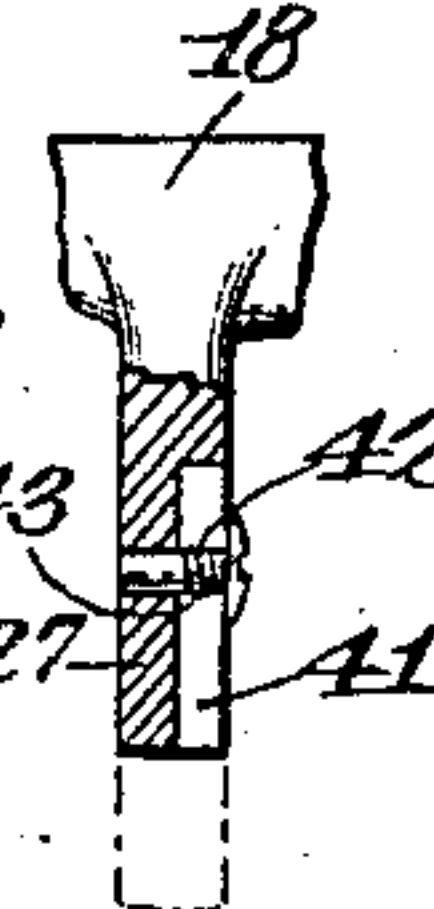


Fig. 5.

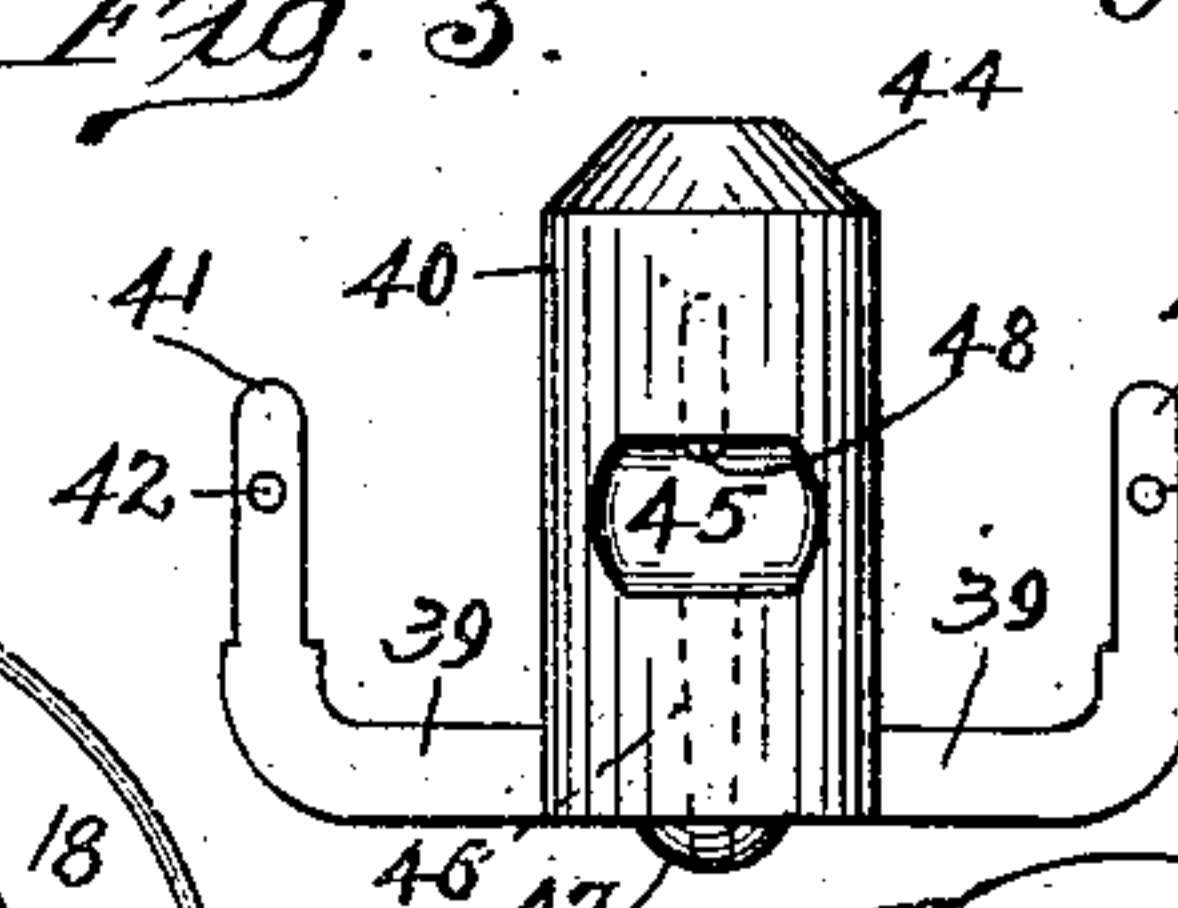


Fig. 4.

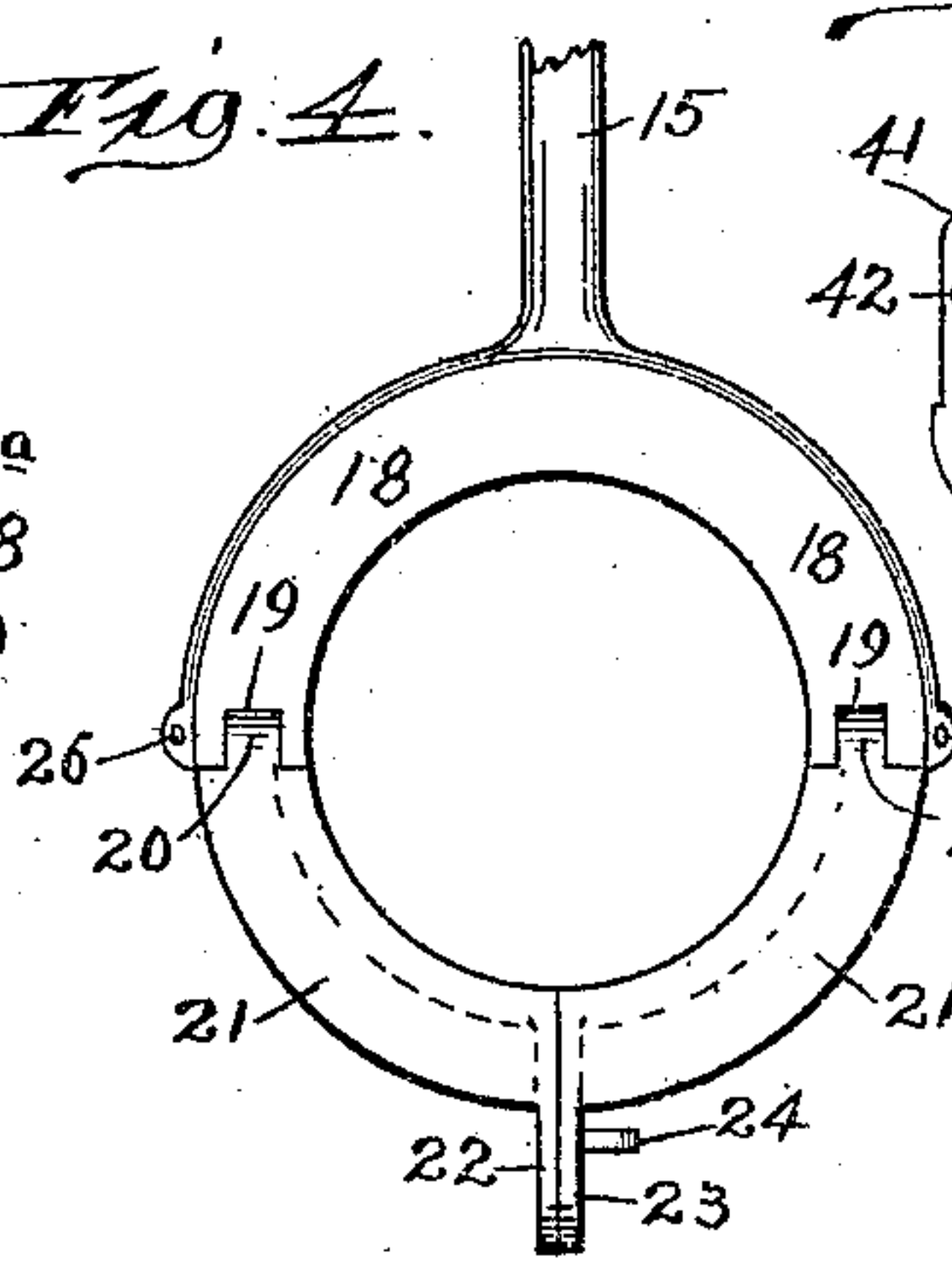
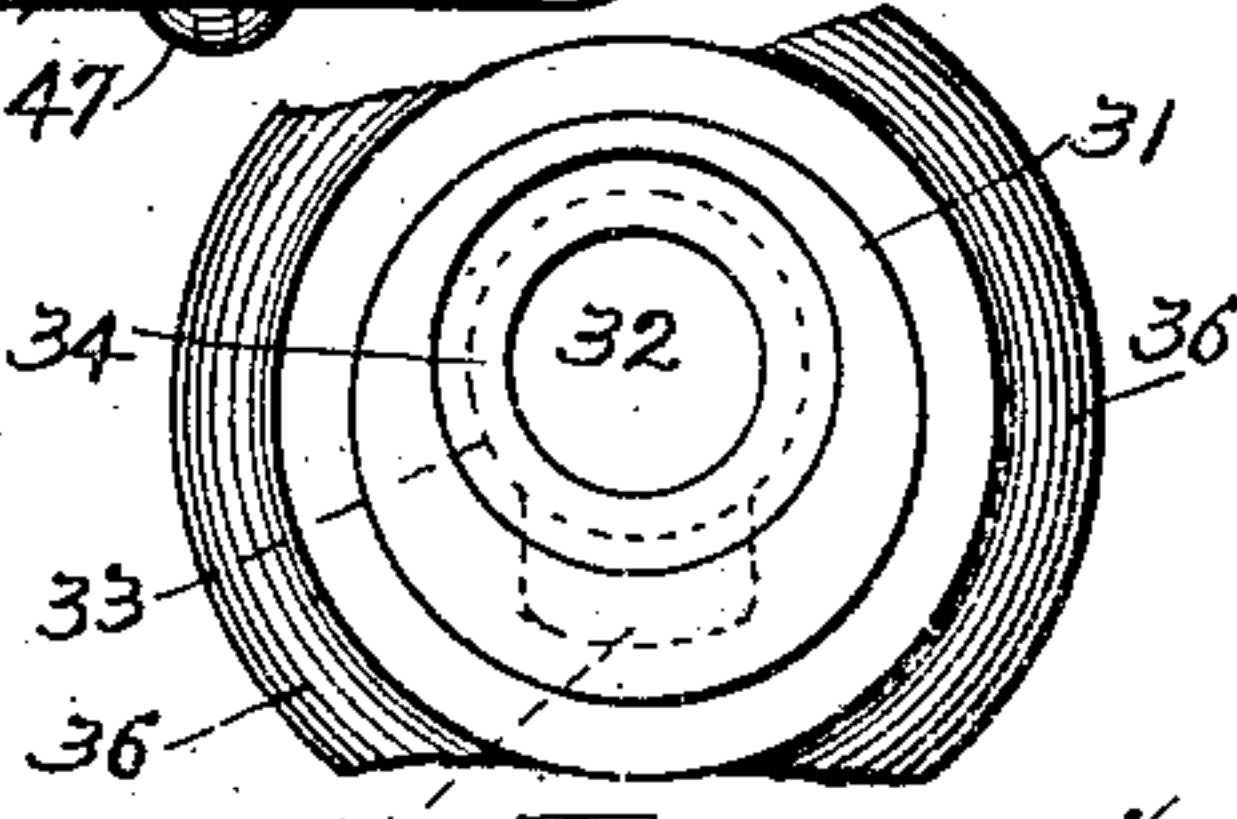


Fig. 6.



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# UNITED STATES PATENT OFFICE.

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## DISPENSING APPARATUS.

No. 929,127.

Specification of Letters Patent.

Patented July 27, 1909.

Application filed February 20, 1908. Serial No. 416,834.

*To all whom it may concern:*

Be it known that I, CHARLES E. GORTON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Dispensing Apparatus, of which the following is a specification.

This invention relates to improvements in a dispensing apparatus, and while it is more especially intended to be mounted near a wash-basin and to be employed for dispensing soap in a liquid form, yet it is applicable for other purposes and for dispensing or paying out various kinds of liquid, as well as powdered, granulated or other material; and it consists in certain peculiarities of the construction, novel arrangement, and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The principal object of the invention is to provide a dispensing apparatus of the above-described character, which shall be simple and inexpensive in construction, strong, durable and effective in operation, the parts of which shall be so constructed that the receptacle adapted to contain the substance to be dispensed may be easily removed from its support to permit it to be filled and readily replaced and secured in position for operation.

Numerous other objects and advantages of the invention will be disclosed in the subjoined description and explanation.

In order to enable others skilled in the art to which my invention pertains, to make and use the same, I will now proceed to describe it, referring to the accompanying drawing, in which—

Figure 1 is a view partly in elevation and partly in section of a dispensing apparatus embodying the invention, showing it mounted on a bracket and the parts in position ready for use; Fig. 2 is a front view in elevation of the device; Fig. 3 is a vertical sectional view through the lower portion of the material holder or receptacle, showing the positions the parts will occupy when a quantity of the material is being collected to be dispensed or discharged; Fig. 4 is a plan view of a portion of the lower part of the supporting-bracket; Fig. 5 is a detail view in elevation of the valve and its supporting arms; Fig. 6 is a fragmental plan view of the stopper or valve-casing. Fig. 7 is a frag-

mental view of one of the segmental pieces of the supporting-bracket showing the slotted lug thereon; and Fig. 8 is a fragmental side view partly in section of a portion of one of the curved members of the supporting-bracket and its downward extension, showing the means for securing the reduced portion of one of the valve supporting-members thereto.

Like numerals of reference, refer to corresponding parts throughout the different views of the drawing.

The reference numeral 10 designates a receptacle or holder for the material to be dispensed, and may be made of any suitable size, form and material, but in the present instance it is shown as being made of glass and in the form of a bottle having a large mouthed neck 11. This receptacle is mounted in an inverted position as shown in the drawing, and preferably by means of a bracket 12 which may be suitably supported, but which in the present instance is shown as being secured to an upright 13, which may be a portion of a wall or other support. The bracket 12 is provided with upper and lower arms 14 and 15, respectively. The upper arm 14 is provided at its free end with curved members or forks 16 which are adapted to partially surround the upper portion of the receptacle 10, and these members are united by a curved band 17 which may be riveted or otherwise secured to the prongs 16 and also encircles a portion of the upper part of the receptacle. The lower arm 15 of the bracket is provided at its free end with curved members or forks 18, each of which has its free end transversely apertured and is provided with a recess 19 to receive a tongue 20 on one of the two segmental pieces 21 both of which are provided at their ends opposite their tongued ends with lugs 22 and 23, the former of which preferably carries a swiveled and flat button 24 which is adapted to pass through a slot 25 in the lug 23 so that said button may be turned transversely to the slot after it has been passed through the same and thus lock the ends of the members 21 together. The tongues 20 on the members 21 are transversely apertured and are located in the recesses 19 and there secured by means of pintles 26. Each of the members 18 is provided near its free end with a downward extension 27, each of which is preferably provided with a



vertical channel 28 to receive portions of the valve-supporting-arms, as will be presently explained.

The free end of the neck 11 of the receptacle is preferably provided with an internal annular groove 29 to receive a portion of a gasket 30 which may overlap the free end of the neck, as is clearly shown in Figs. 1 and 3 of the drawing.

Movably but snugly fitted in the neck 11 is a stopper or valve-casing 31 which is provided with a longitudinally extending opening 32 having near one of its ends a valve-seat 33 from which point the opening 32 is preferably flared as at 34 to more readily guide the liquid or material to be dispensed into said opening. As shown, the opening 32 extends entirely through the stopper or valve-casing 31 and is preferably eccentrically located with respect thereto, thus providing a thickened portion on one side of the opening in the casing, in which thickened portion or wall is formed a pocket or recess 35 to receive the charge of liquid or other material to be dispensed.

The lower portion of the stopper or valve-casing 31 is provided with an annular flange 36 which produces a cavity 37 with which the lower end of the opening 32 communicates.

The flange 36 is provided at points diametrically opposite each other with slots 38 for the reception and operation of the valve-supporting-arms 39 with which the valve 40 is provided at its lower portion. By reference to Fig. 5 it will be seen that the arms 39 are oppositely and horizontally disposed on the lower portion of the valve 40, and that each of said arms has an upwardly extending reduced portion 41 to fit in the channels 28 (when the same are used) of the extensions 27 on the forks 18 of the lower arm of the supporting-bracket. Each of the reduced portions 41 of the arms 39 is provided with a transverse opening 42 for the reception of a screw 43 used for securing the portions 41 to the extensions 27, which screws will engage suitable openings in said extensions as will be readily understood by reference to Fig. 2 of the drawing.

The valve 40 has its upper end tapered as at 44 to fit in the correspondingly tapered valve-seat 33 of the valve-casing, and is provided at a suitable point between its ends with a pocket or recess 45 to normally register with the pocket or recess 35 in the valve-casing. Communicating at its upper end with the lower portion of the recess 45 in the valve is a duct 46, the lower end of which opens through the bottom of the valve at about the center thereof and is preferably surrounded with an enlargement or nipple 47 which will have a tendency to prevent the lower end of the channel or duct 46 becoming sealed by soap bubbles when liquid soap is used in the dispenser. Communicating with

the upper portion of the recess 45 is one end of a channel 48 which extends transversely through the valve 40 and communicates at its other end with a longitudinally extending groove 49 in the periphery of the valve. The groove 49 extends from the lower end of the valve 40 upwardly, and as before stated, communicates with the channel 48, thus affording passage for air to the recess 45 so that the charge in said recess may be freed therefrom when the parts are in about the positions shown in Fig. 1 of the drawing.

From the foregoing and by reference to the drawing it will be understood and clearly seen that by unlocking the lugs 22 and 23 on the members 21 the said members may be turned downwardly when the bottle or receptacle 10 may be placed at its upper end within the holder therefor comprising the prongs 16 and band 17, after which the members 21 may be raised and secured together around the neck or lower portion of the receptacle in which position it will be securely held, but will be permitted of a restricted vertical movement by reason of the gasket 30 and annular shoulder 30<sup>a</sup> on the valve-casing, for it is apparent that when the vessel has been raised sufficiently the said gasket will strike the lower portions of the members 18 and 21 on the lower arm of the supporting-bracket and thus prevent further upward movement of the receptacle. As the valve 40 is snugly fitted in the opening 32 of the stopper or valve-casing 31 and is rigidly held with respect to the supporting-bracket, it is apparent that by placing the hand under the lower end of the stopper or valve-casing, or otherwise raising the same, said casing, as well as the receptacle, may be raised to about the positions shown in Fig. 3, when the air contained in the recess 35 will ascend to the top of the receptacle and permit liquid to pass into the recess 35, when by removing the pressure from the valve-casing or receptacle and allowing the latter to assume its normal position the flow of liquid or material will be shut off from the recess 35 and the charge within said recess will be permitted to pass out through the duct 46 into the hand of the user or otherwise.

It will be evident from the above description that the device is susceptible of considerable modification without material departure from the principles and spirit of the invention, and for this reason I do not desire to be understood as limiting myself to the precise form and arrangement of the several parts of the device as herein set forth in carrying out my invention in practice.

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

1. A dispensing apparatus consisting of a movably supported receptacle having an opening, an apertured stopper located in the



opening and provided with an inwardly opening recess, a valve located in said stopper and provided with air passages adapted to communicate with the recess in the stopper, and means to support the valve.

2. A dispensing apparatus consisting of a movably supported receptacle provided with an opening, an apertured stopper located in said opening and provided with an inwardly opening recess, a valve located in said stopper and provided with a recess adapted to register with the recess in the stopper and having air passages communicating with its recess, and means to support the valve.

3. A dispensing apparatus consisting of a movably supported receptacle having an opening, an apertured stopper located in said opening and provided with an inwardly opening recess, a valve located in said stopper and provided with air passages adapted to communicate with the recess in the stopper, said valve also having a groove in its periphery communicating at one of its ends with one of said air passages, and means to support the valve.

4. A dispensing apparatus consisting of a movably supported receptacle having an opening, an apertured stopper located in said opening and provided with an inwardly opening recess, a valve located in said stopper and provided with a recess adapted to register with the recess in the stopper and a duct communicating at one end with the valve recess, the said valve also having a groove in its periphery and a channel communicating at one of its end with said groove and at its other end with the recess in the valve and means to support the valve.

5. A dispensing apparatus consisting of a movably supported receptacle having an opening, an apertured stopper movable with the receptacle located in said opening and provided with an inwardly opening recess, a rigidly supported valve located in the stopper and provided with a duct and an air passage adapted to communicate with the recess in the stopper.

6. A dispensing apparatus consisting of a movably supported receptacle having an opening, an apertured stopper movable with the receptacle located in said opening and provided with an inwardly opening recess, a rigidly supported valve located in said stop-

per and provided with a duct and an air passage adapted to communicate with the recess in the stopper, and means to restrict the movement of the vessel.

7. A dispensing apparatus consisting of a movably supported receptacle having an apertured neck, an apertured stopper movable with the receptacle located in the neck thereof and having an inwardly opening recess, a rigidly supported valve located in said stopper and having a recess adapted to register with the recess in the stopper and a duct communicating at one of its ends with the recess in the valve, the said valve also having an air passage communicating with the valve recess.

8. The combination with a suitably supported bracket having arms spaced apart at their free ends and provided with means to loosely surround a receptacle near each of its ends, of a receptacle movably mounted on said bracket and having an opening in its lower end, an apertured stopper located in the opening of the receptacle and provided with an inwardly opening recess, a valve located in said stopper and provided with a duct and an air passage adapted to communicate with the recess in the stopper, and means on the lower portion of the bracket to rigidly support the valve.

9. The combination with a suitably supported bracket having an upper and lower arm, of means on the upper arm to loosely embrace a receptacle, oppositely curved members on the lower arm, a segment hinged to each of said members and having means to detachably secure them together, a receptacle located at its upper portion in the means therefor on the upper arm and having an apertured reduced portion surrounded by the members and segments on the lower arm, an apertured stopper located in the opening of the receptacle and having an inwardly opening recess, a valve located in said stopper and provided with a duct adapted to communicate with the recess in the stopper, said valve also having an air passage adapted to communicate with said recess, and means to support the valve.

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