

No. 708,652.

Patented Sept. 9, 1902.

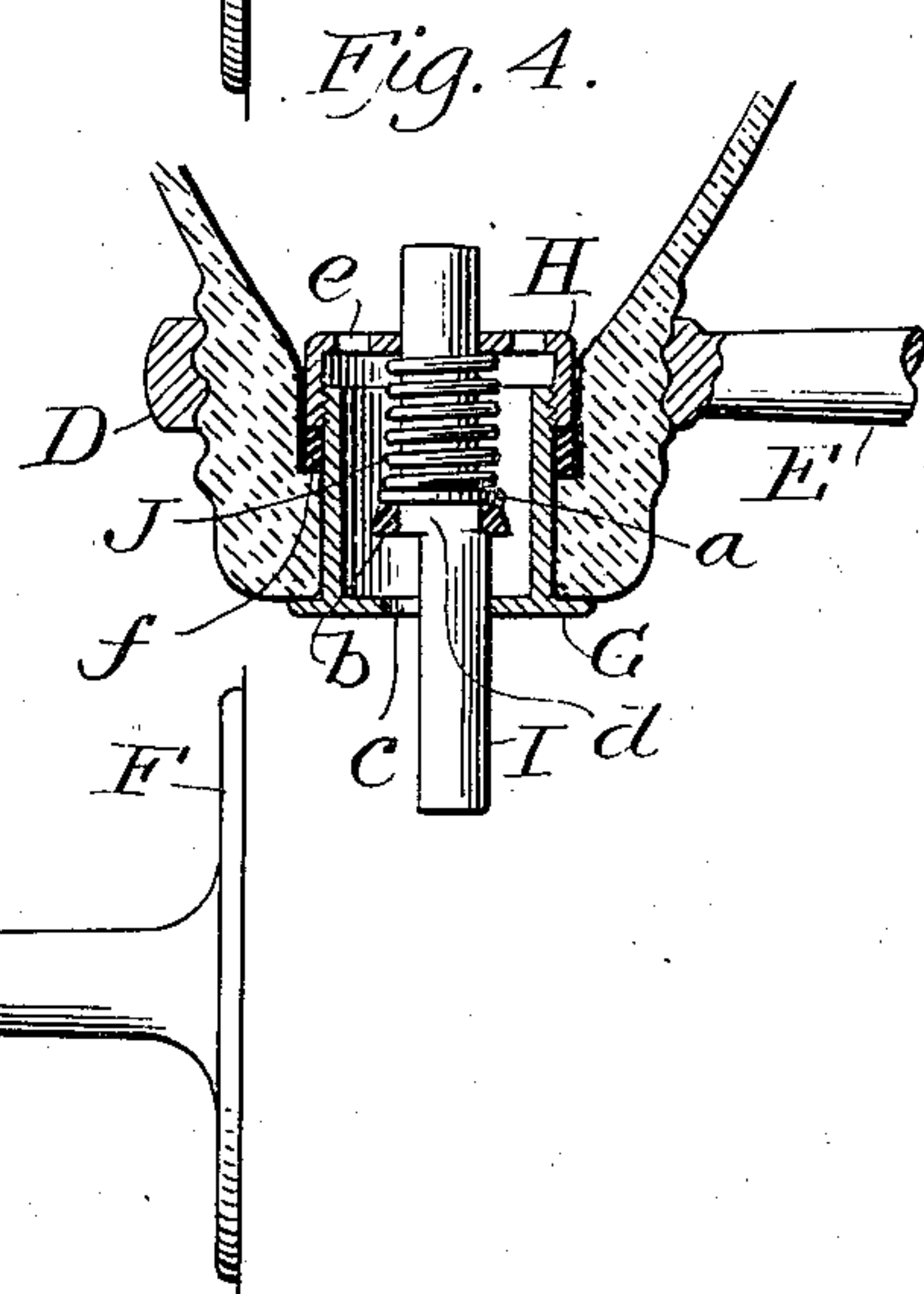
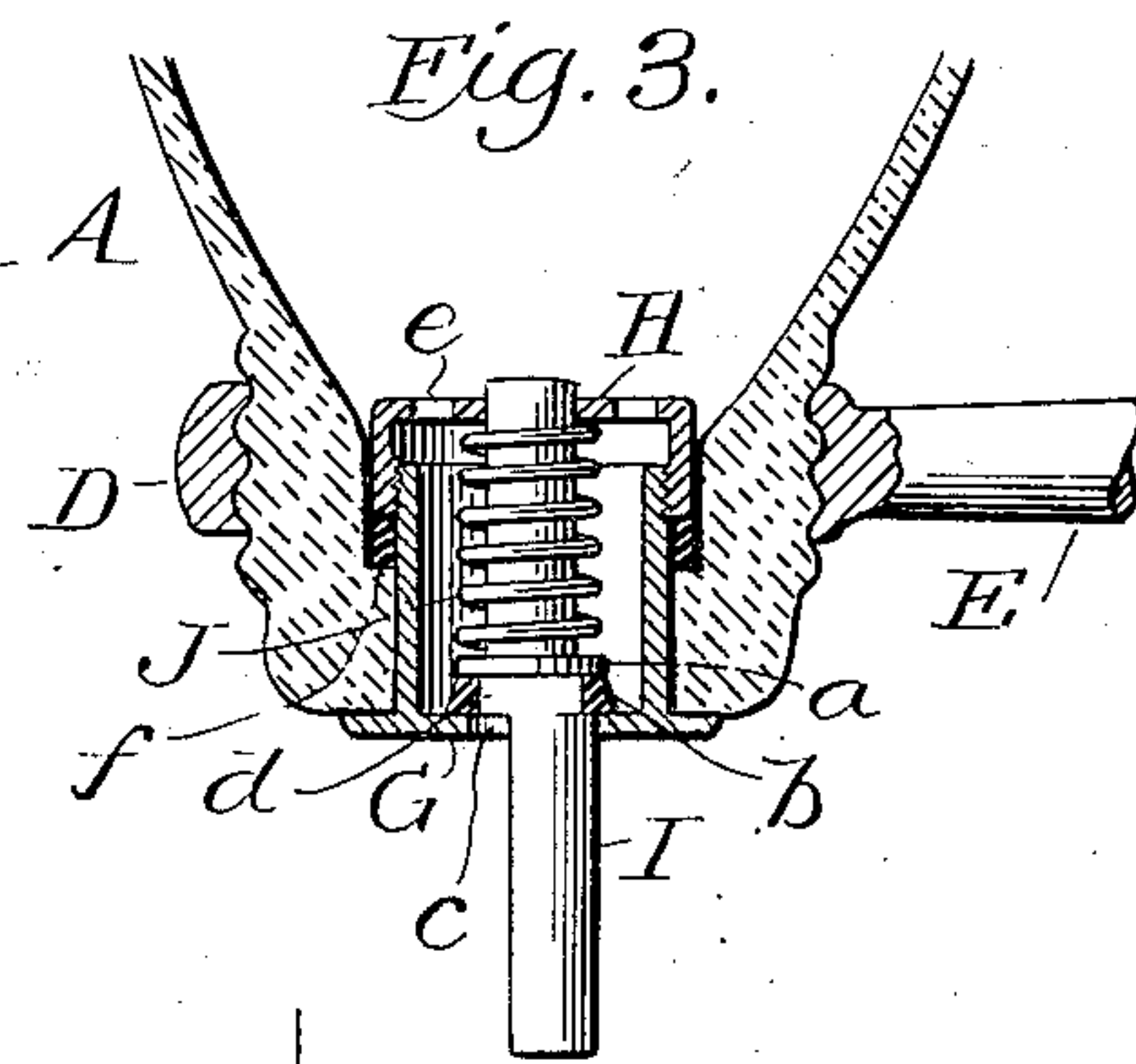
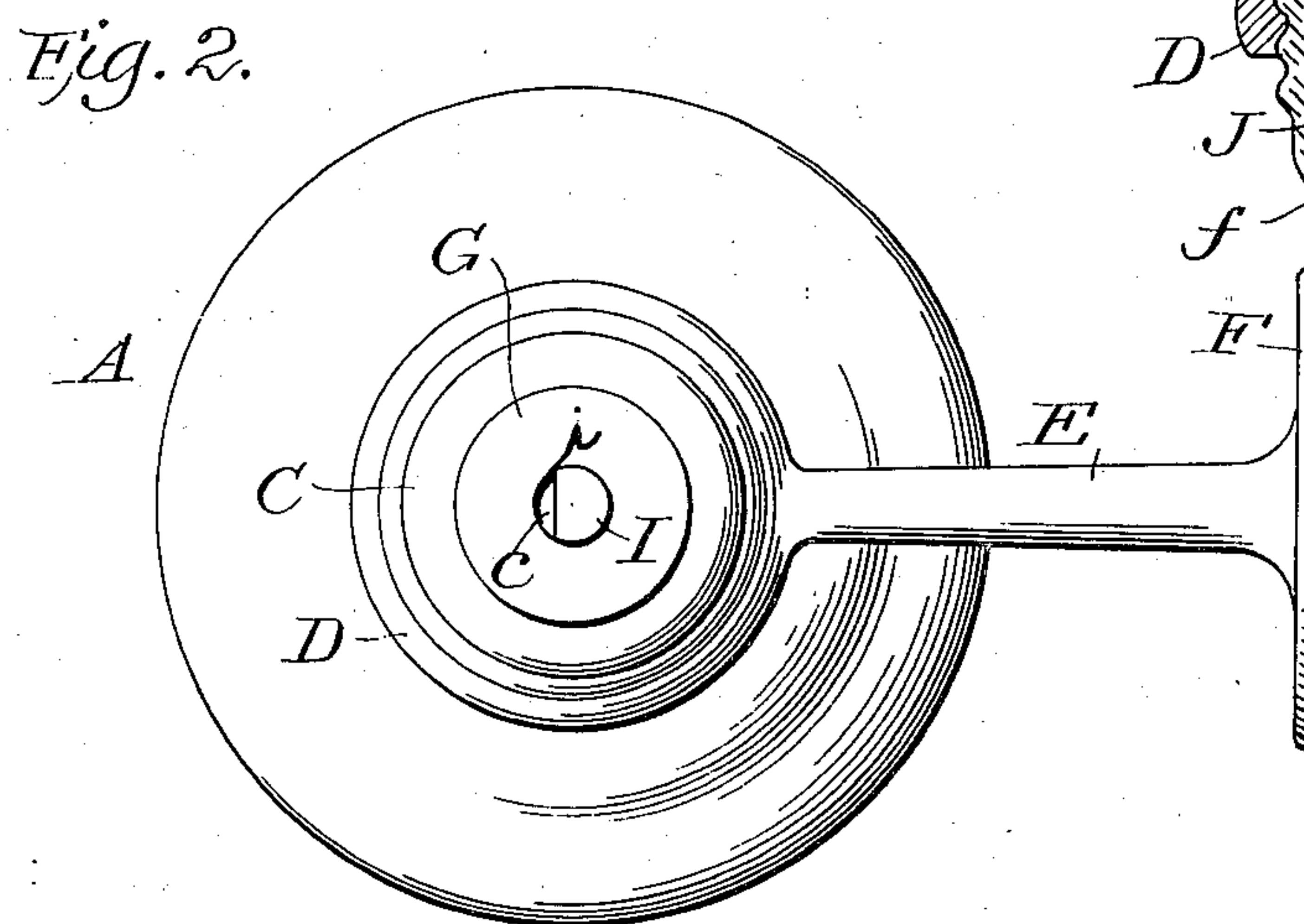
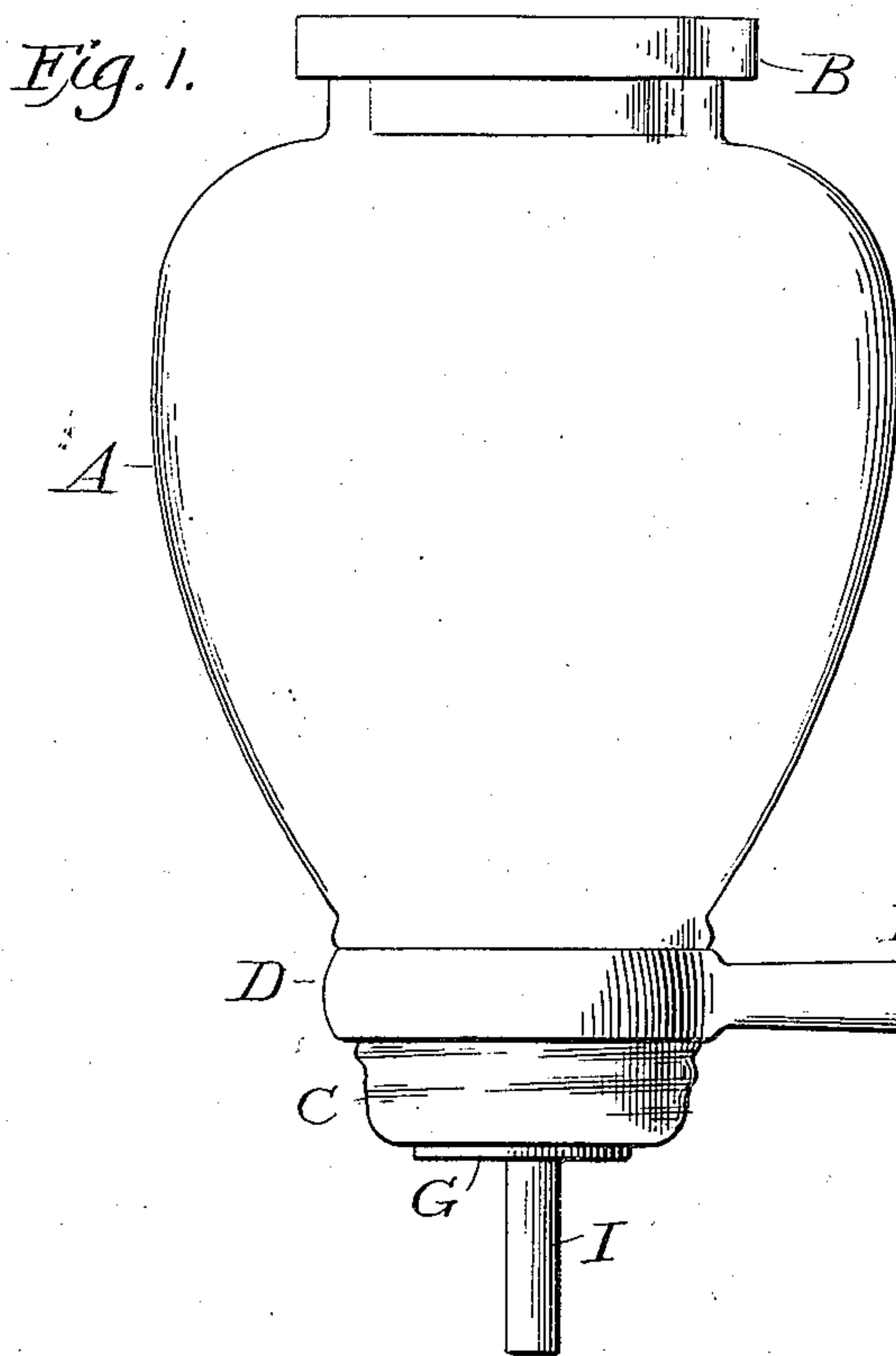
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RESERVOIR FOR DISPENSING LIQUID SOAP.

(Application filed May 17, 1901.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:

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2 Sheets—Sheet 2.

Fig. 5.

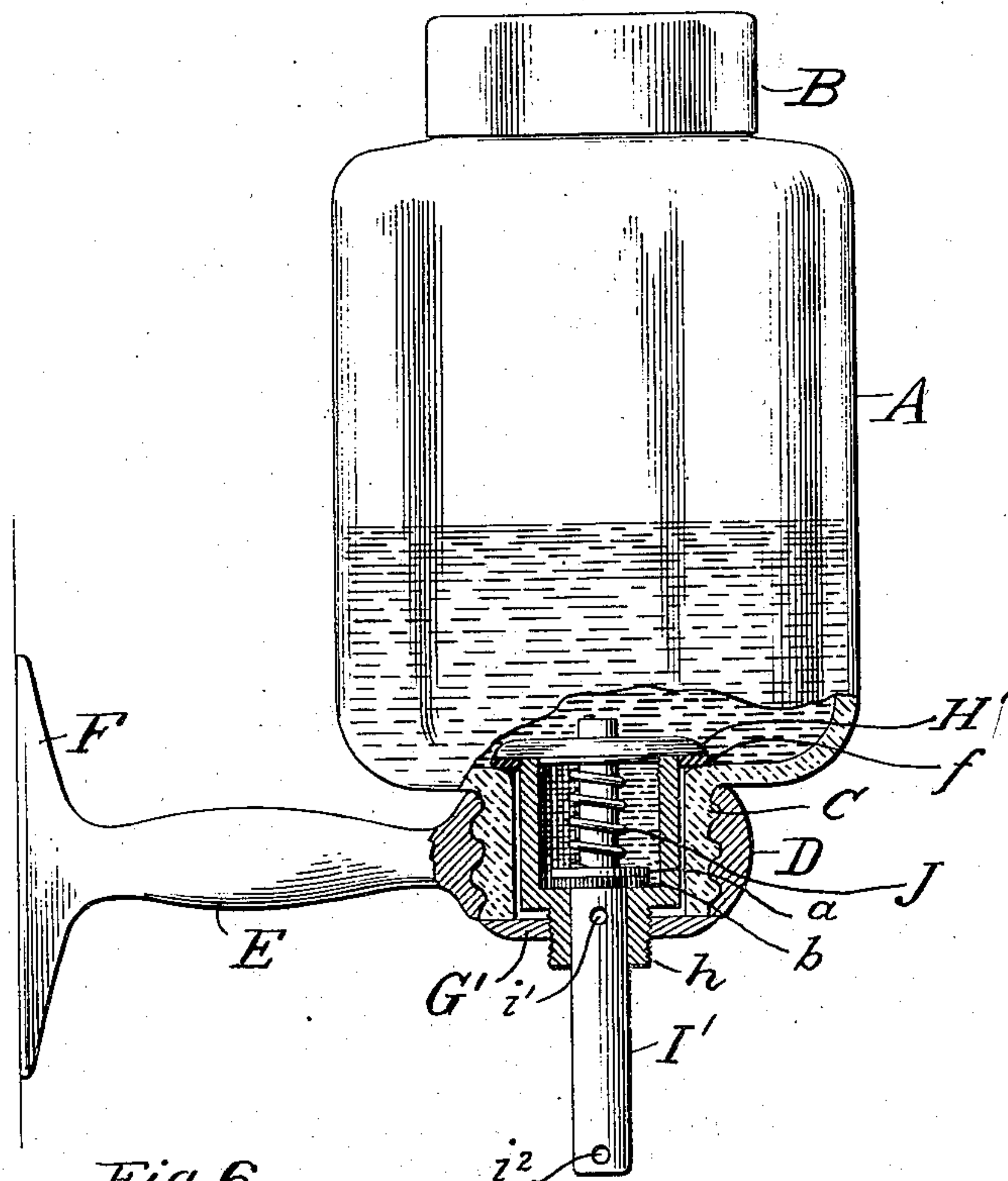


Fig. 6.

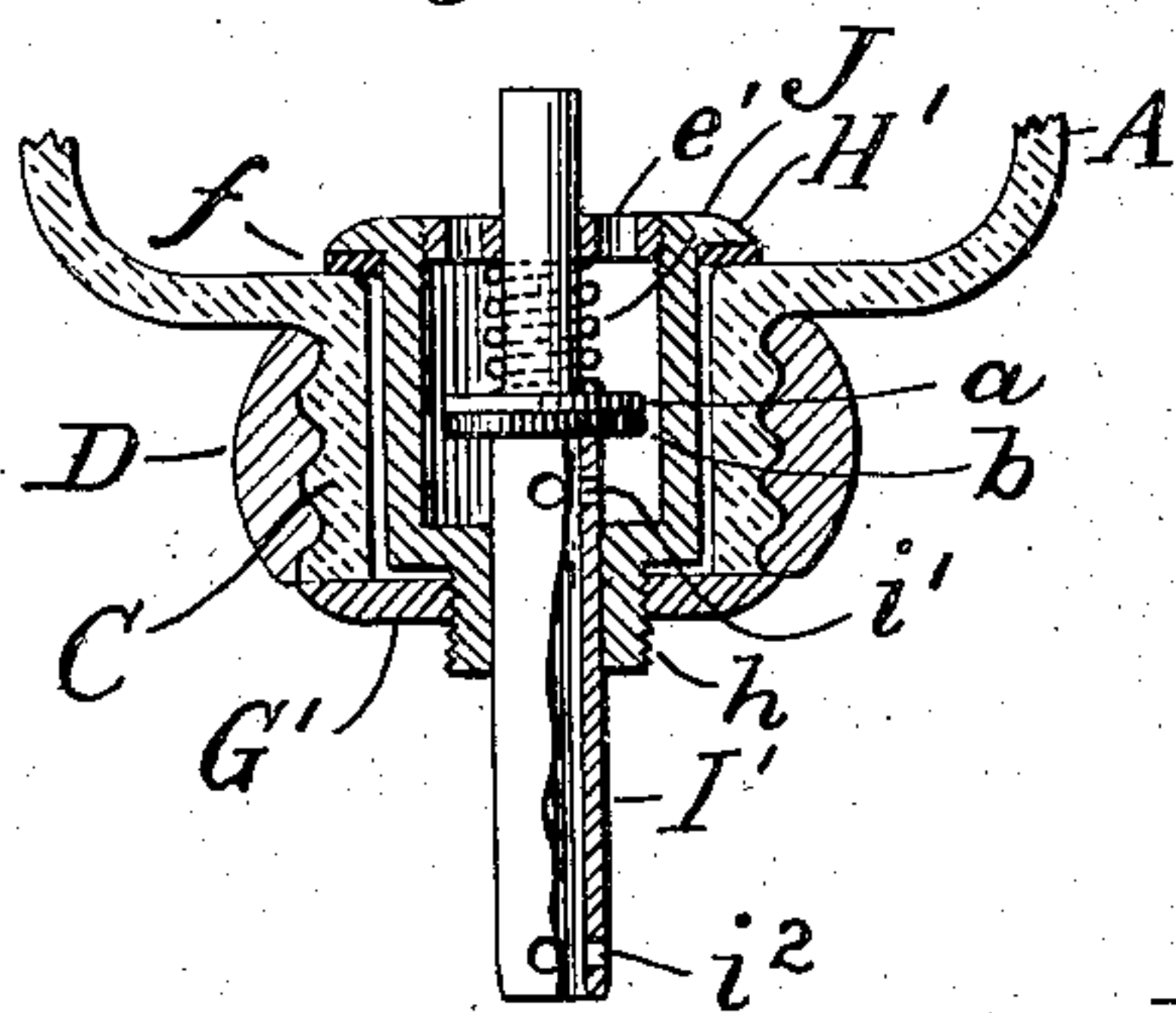


Fig. 7.

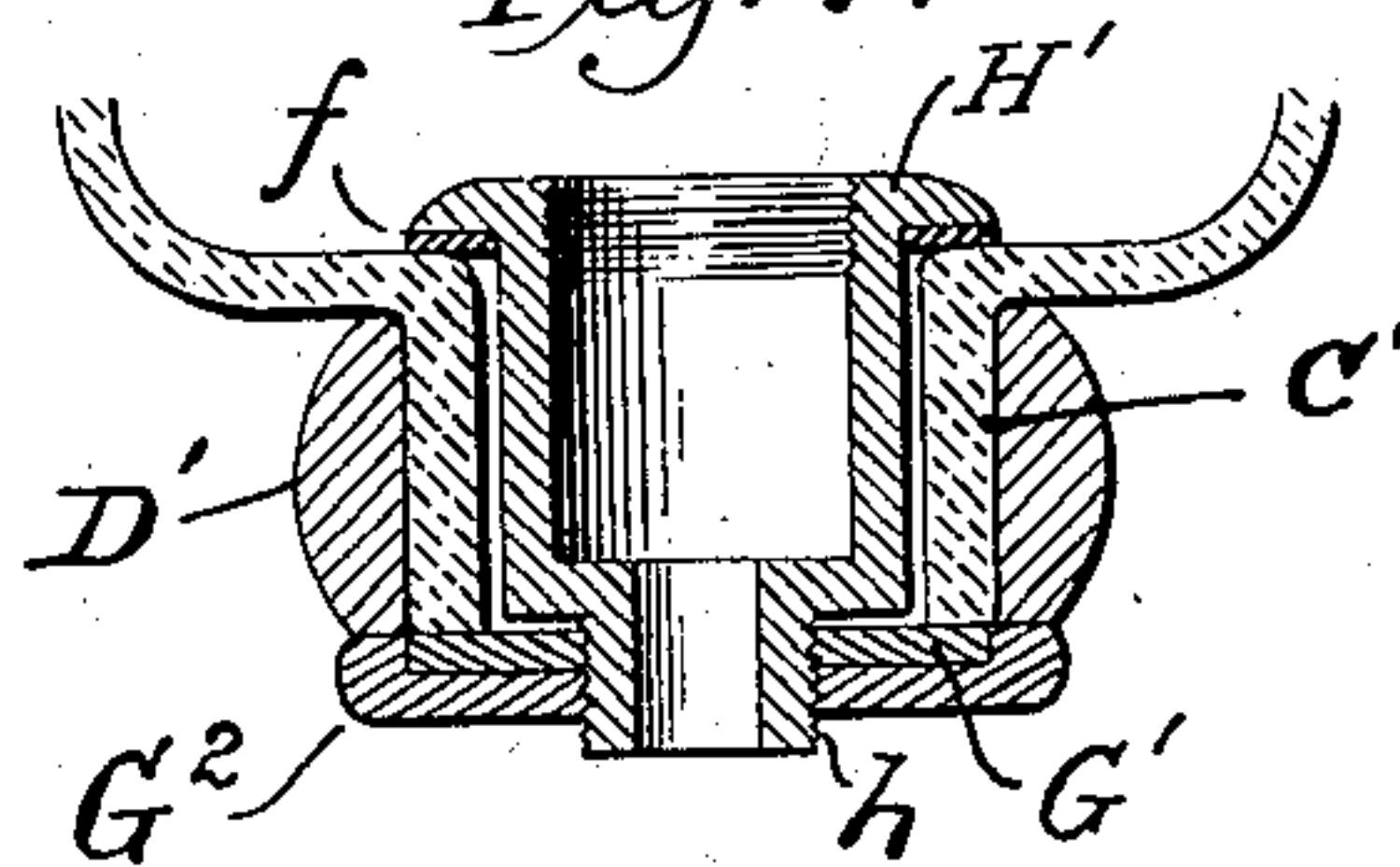
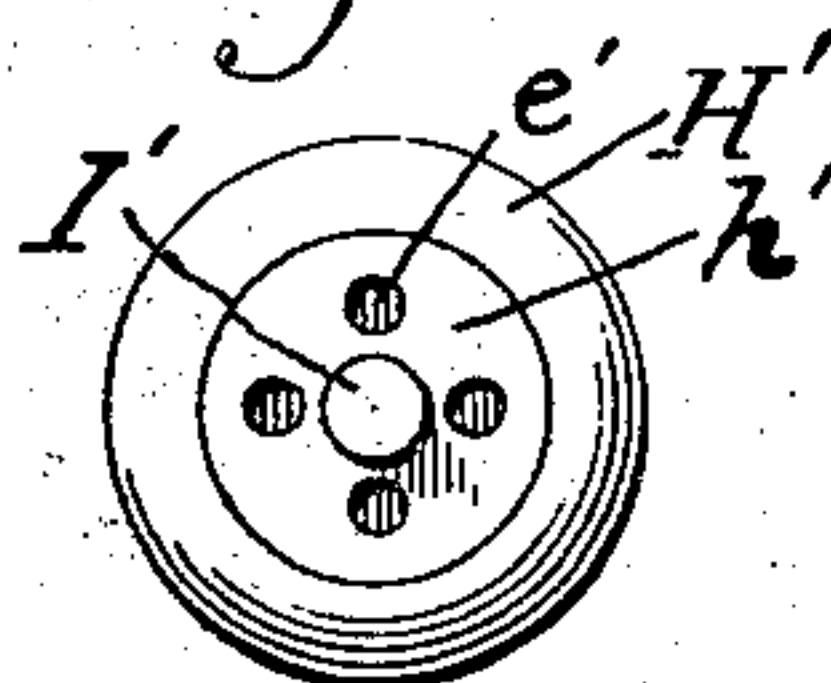


Fig. 8.



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# UNITED STATES PATENT OFFICE.

ELMER LEE, OF NEW YORK, N. Y.

## RESERVOIR FOR DISPENSING LIQUID SOAP.

SPECIFICATION forming part of Letters Patent No. 708,652, dated September 9, 1902.

Application filed May 17, 1901. Serial No. 60,785. (No model.)

*To all whom it may concern:*

Be it known that I, ELMER LEE, a citizen of the United States, residing at New York city, county and State of New York, have invented  
5 a new and useful Improvement in Reservoirs for Dispensing Liquid Soap, of which the following is a specification.

My invention relates to certain improvements in reservoirs for dispensing liquid soap  
10 of the character described in Letters Patent issued to me April 10, 1894, No. 517,978, and November 10, 1896, No. 570,935, the objects of the present invention being to provide a reservoir and bracket which can be detach-  
15 ably secured to each other without the requirement of tools or danger of separating and to produce a valve which can be easily attached to or removed from a reservoir when required.

20 Another object is the simplification of the valve whereby cost of manufacture is reduced to a minimum.

In the accompanying drawings, which form part of this specification, Figure 1 shows a  
25 side elevation of my complete improvement. Fig. 2 is an inverted plan view. Fig. 3 is a side view of the lower part of the reservoir, partly in section, the valve being shown closed. Fig. 4 is similar to Fig. 3, except  
30 that the valve is shown open. Fig. 5 shows a modification of Fig. 1, the lower part of reservoir being shown in section to expose a modified valve, which is closed. Fig. 6 shows  
35 lower part of Fig. 5, with modified valve open. Fig. 7 shows a modified manner of fastening the reservoir on the bracket, and Fig. 8 is a top view of the valve-fitting.

Similar letters of reference refer to similar parts.

o I find in practice that when the reservoirs are placed within the smooth rings shown in my former Letters Patents to which I refer, if the valve-stems are rudely pushed upward or the reservoirs receive a side push or are not  
45 fastened down properly by the clamping device shown the reservoirs are liable to be pushed upward out of their position, and when made of glass or a vitreous material they are easily broken.

50 In the present improvement I provide the reservoir A with a screw-threaded shank C,

which corresponds with an internal thread in the ring D of bracket E.

F is a flange by which the bracket may be fastened to the wall by means of screws. (Not  
55 shown.)

B is a cover to exclude dust, &c.

The valve is composed of several parts, the two parts of the casing clamping the reser-  
60 voir, as shown, and to distinguish the preferred valve mechanism I will describe it first.

G is a hollow flanged cap having a central round perforation *c*. The valve-stem I passes through the opening *c*, extending some distance below it. The valve-stem is flattened  
65 on one side *i*, so as to afford a passage-way for the soap when the valve is raised.

*b* is an annular washer composing the valve proper, placed under the shoulder *a*, the stem I being slightly recessed at *d* to retain  
70 it in position.

J is a spiral spring operatively placed between upper cap H and shoulder *a*, as shown. The cap H is pierced with holes *e* for the double purpose of permitting soap to pass  
75 through and for affording a means whereby the two caps or casing H and G may be screwed together.

*f* is a washer for making a tight joint between the cap H and reservoir A.  
80

The modified valve shown in Figs. 5, 6, 7, and 8 is substantially similar to one shown in Figs. 1, 2, 3, and 4, except that the casing is inverted and has a round hollow stem for the passage of soap instead of a solid D-  
85 shaped one. I will describe the modification.

The valve-casing H' is provided with a threaded shank *h*, upon which a nut G' is screwed. Washer *f* makes a tight joint between the reservoir A and valve-casing. *h'*  
90 is an externally-threaded disk which screws into the upper part of casing H, as shown.

*e'* represents holes to permit passage of soap and afford a means for fastening into the casing. The valve-stem I' is hollow below  
95 the shoulder *a*. *b* is the valve proper. J is a spiral spring operatively placed between the disk *h'* and shoulder *a*. The valve-stem has perforations *i'* and *i''*, respectively, near the top and bottom of the hollow part for the  
100 passage of the liquid soap.

Fig. 7 shows a bracket-ring D' without



threads, the shank C' being plain, also without threads. To keep the reservoir in place, a nut G<sup>2</sup> is screwed on the shank h in such a manner that the shank of the reservoir is securely fastened in place, so that an upward pressure on the valve-stem for the purpose of drawing liquid soap will not displace it.

The reservoir A can be made of glass or any suitable material, the valve and its parts being made of metal, celluloid, or any material which is unaffected by the ingredients contained in the soap.

The operation is as follows: The liquid soap is charged into the reservoir by removing the cap or cover. A person desiring to withdraw a quantity of the liquid soap for toilet use places the palm of the hand beneath the reservoir and by a slight upward pressure or blow upon the protruding end of the valve-stem the valve is raised and the liquid soap flows down into the palm of the hand. The amount withdrawn at a single actuation will be determined by the extent to which the valve is raised above and the length of time it is held off its seat. The soap will flow through the valve as long as it remains raised from its seat. When the hand is withdrawn, the spring pressing down on the valve closes it.

Such being a full description of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A reservoir for liquid soap—said reservoir being provided with a constricted base and constructed substantially as hereinbefore described, in combination with a divided valve-casing adapted to engage the inner and outer surface of said constricted base, means for making a tight joint between the said valve-casing and the said base, and a valve operatively mounted within the divided valve-casing, all constructed and arranged substantially as shown and described.

2. A reservoir for liquid soap provided with an annular neck for filling, a constricted base adapted to be detachably secured in the ring of a supporting-bracket, in combination with a divided valve-casing adapted to engage the inner and outer surface of said constricted

base, means for making a tight joint between the said valve-casing and the said base, and a valve operatively mounted within the divided valve-casing, all constructed and arranged substantially as shown and described.

3. A reservoir for liquid soap provided with an annular neck for filling, a constricted base provided with external screw-threads, in combination with a divided valve-casing adapted to engage the inner and outer surface of said constricted base, means for making a tight joint between the said valve-casing and said base, and a valve operatively mounted within the divided valve-casing, all constructed and arranged substantially as shown and described.

4. As an article of manufacture, a reservoir for liquid soap comprising a glass body constricted at its upper end to provide an annular plain neck and constricted at its lower end to provide an open base having external threads thereon, in combination with a divided valve-casing adapted to engage the inner and outer surface of said constricted base, means for making a tight joint between the said valve-casing and the said base, and a valve operatively mounted within the divided valve-casing, all constructed and arranged substantially as shown and described.

5. A reservoir for liquid soap provided with an annular neck for filling, a cover, a constricted base adapted for detachably securing in the ring of a supporting-bracket, in combination with a divided valve-casing adapted to engage the inner and outer surface of said constricted base, means for making a tight joint between the said valve-casing and the said base, and a valve operatively mounted within the divided valve-casing, all constructed and arranged substantially as shown and described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses.

ELMER LEE.

Witnesses:

E. WHITNEY,  
E. F. GENNERT.