

No. 877,396.

PATENTED JAN. 21, 1908.

R. S. BLAIR.
WATER BOTTLE.

APPLICATION FILED JULY 13, 1907.

FIG. 1.

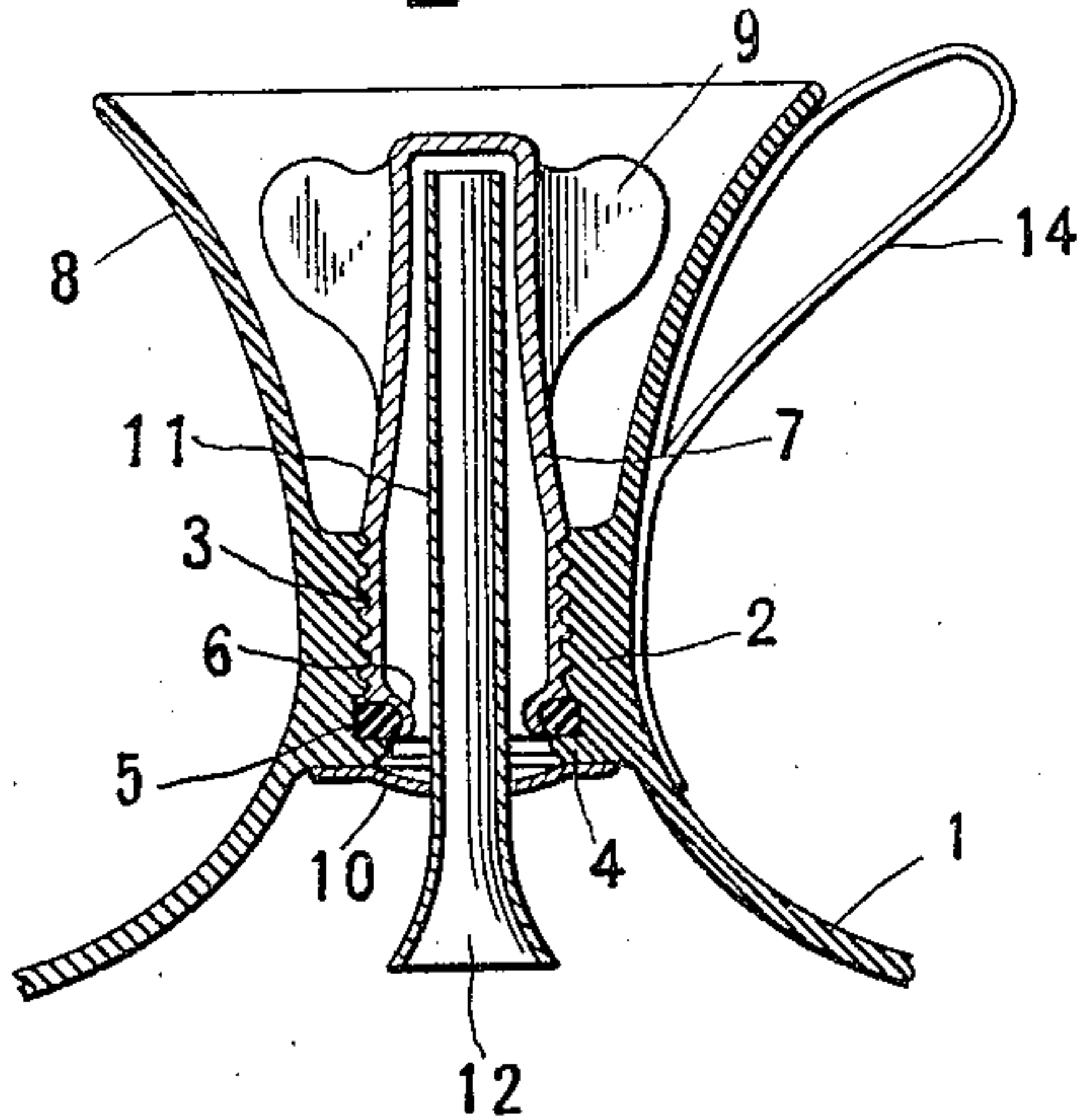


FIG. 2.

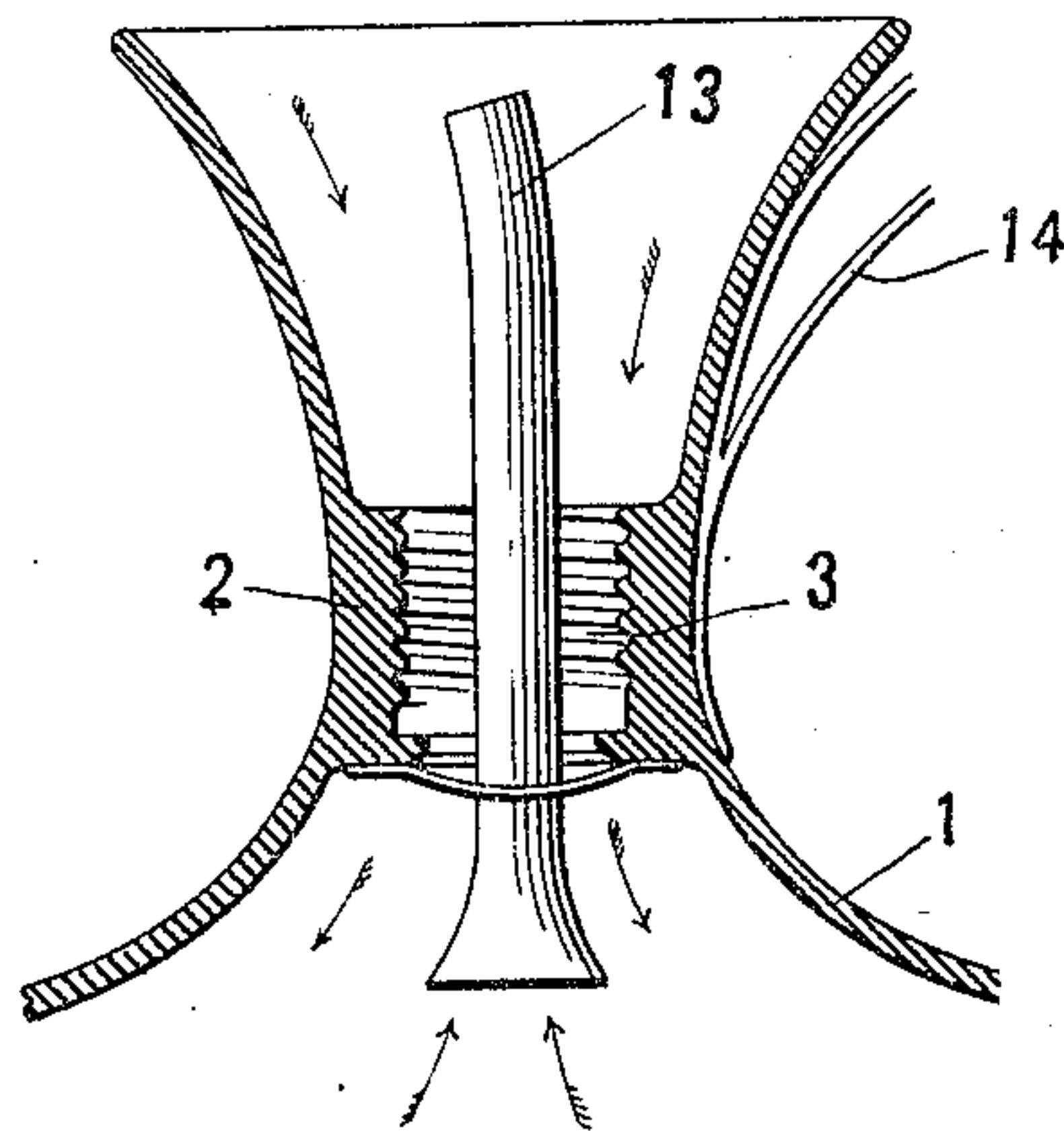


FIG. 3.

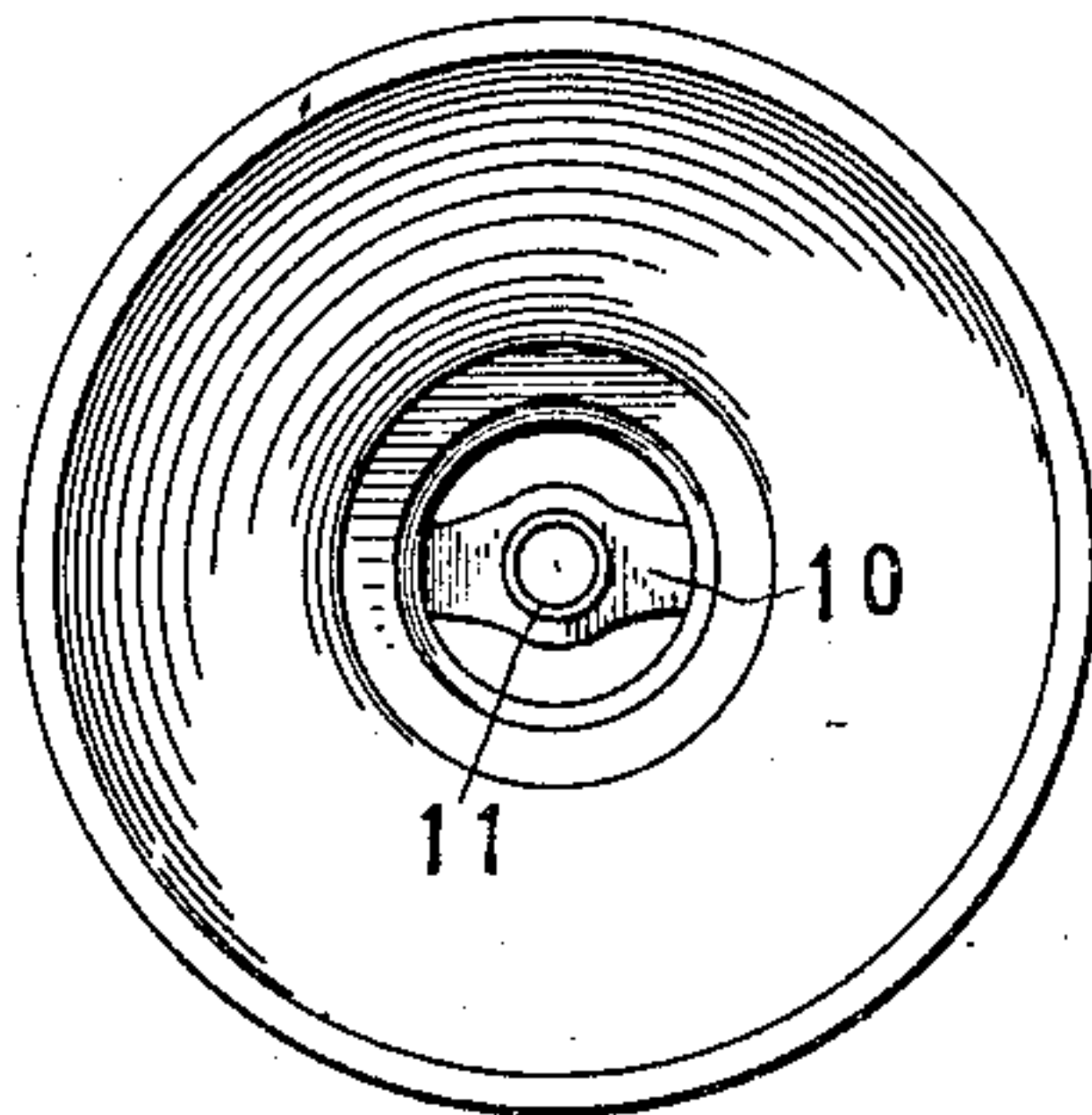


FIG. 4.

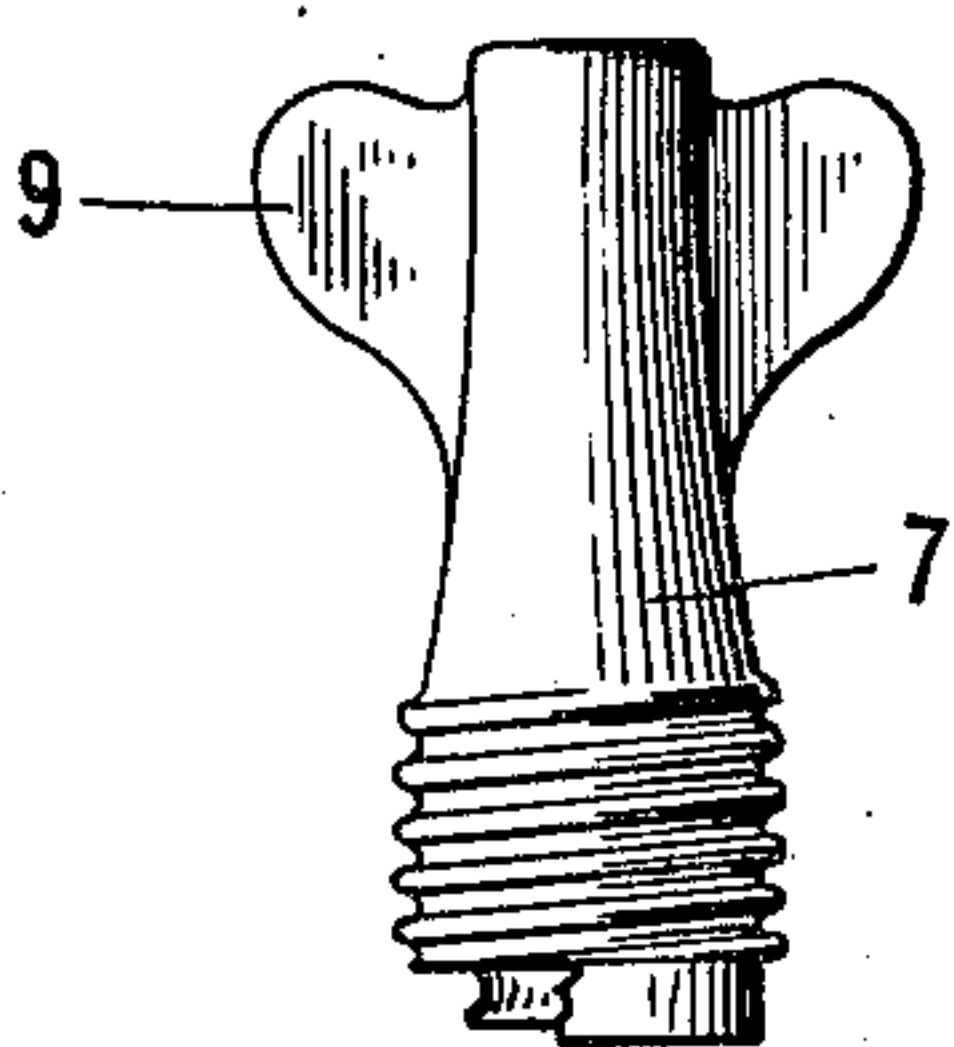
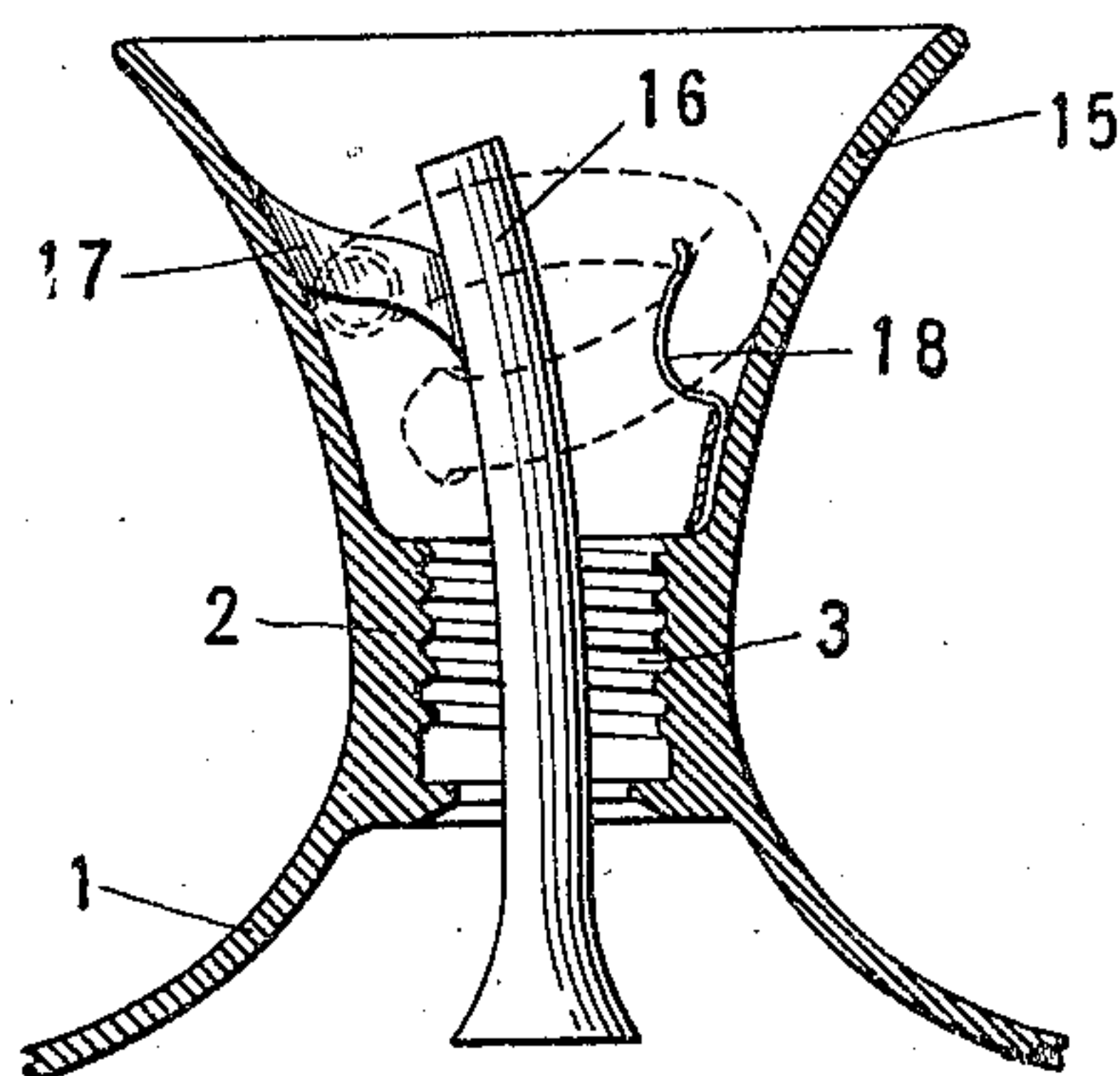


FIG. 5.



WITNESSES:

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INVENTOR:

R. S. Blair

UNITED STATES PATENT OFFICE.

ROBERT S. BLAIR, OF NEW ROCHELLE, NEW YORK.

WATER-BOTTLE.

No. 877,326.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed July 13, 1907. Serial No. 383,691.

To all whom it may concern:

Be it known that I, ROBERT S. BLAIR, a citizen of the United States, residing at New Rochelle, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Water-Bottles, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to receptacles for liquids and more specifically to water bags and the like.

One of the objects thereof is to provide a practical device of the above nature of efficient action and convenient use.

Another object is to provide a reliable hot water bag in which certain disagreeable incidents to filling are done away with

Other objects will be in part obvious and in part pointed out hereinafter.

The invention accordingly consists in the features of construction, combinations of elements and arrangement of parts which will be exemplified in the construction hereinafter set forth, and the scope of the application of which will be indicated in the following claims.

In the accompanying drawings wherein are shown one or more of various possible embodiments of the several features of this invention; Figure 1 is a sectional view showing one of the same with a cap in position, Fig. 2 is a similar view with the cap removed, Fig. 3 is a plan of parts shown in Fig. 1, Fig. 4 is a detail view of a cap with gasket, the gasket being partially broken away in order to show the construction more clearly, Fig. 5 is a sectional view of a construction in which certain features of this invention are embodied.

Similar reference characters refer to similar parts throughout the several views of the drawings.

In order that certain features of this invention may be the more readily and fully understood, it may here be noted that in the use of hot water bags and the like there is a tendency of the displaced air and more particularly steam to interfere with the ingoing water during filling, and blow particles of the same upon the hands of the person filling the bag. If it be attempted to remedy this defect by the use of a separate air escape valve I find that the time required to close the separate valve is an annoying feature of the use

of the bag and there is a likelihood of the closing of this valve being forgotten. There are, moreover, a larger number of joints to seal with a greater probability of leakage, the latter being more particularly true if it be attempted to use an automatically closing separate air escape valve. The above and other defects are obviated and many advantages attained in constructions of the nature of those hereinafter described.

Referring now to Fig. 1 of the accompanying drawings there is shown a receptacle 1, which may be an ordinary hot water bag of imperforate construction, and which is provided at its neck 2 with a threaded part 3 in any desired and well known manner. There is also formed or mounted adjacent the neck 2 a shoulder 4 adapted to co-act with a gasket 5 mounted within an annular lip 6 in a hollow cap 7. The latter member preferably extends substantially to the top of the funnel 8 of the bag and is provided with wings 9 to aid in turning the same. Mounted within the neck of the bottle, as by a cross member 10, is a tube 11 which is preferably removable as for purposes of repair or renewal. This tube is flared at the bottom as shown at 12 and extends substantially to the top of the funnel 8 resting within the cap 7. Tube 11 is preferably formed as by providing a permanent bend or inclination of the same, if it be of rubber, as to tend to incline it in use as shown at 13 away from the handle 14 of the bag. The method of use of this construction is as follows. Assuming that it be desired to fill the bag, the cap 7 is removed and water poured into the funnel 8 in the well known manner, entering the bag as indicated in Fig. 2 of the drawings. This water does not interfere, however, with the outward passage of the displaced air and more particularly the steam from the water, as the same readily passes through the tube 11, the flaring mouth of which aids in permitting the steam to enter and deflects the water therefrom. This steam, as will be seen from the drawings, is conducted entirely without the bag by a passage which is separate from that of the ingoing water even though the same accumulate to a considerable depth in the funnel, in fact, if desired the tube may be extended so as to project slightly above the funnel. The bend to the tube, moreover, tends to deflect the steam from the handle 14 and thus aids further in protection of the hand. Any particles of water which might

be carried out by the steam or air, moreover, are discharged into the funnel and returned to the bag. Especial attention is drawn to the fact that the outgoing steam is isolated from the water throughout this entire passage, as I have found that otherwise there is a tendency to blow the hot water upon the hand of the person filling the bag or wet the outer surface of the bag.

10 In the construction shown in Fig. 5 of the drawings there is mounted within the funnel 15 a tube 16, preferably by the semi-flexible strip 17, which permits the ready insertion of the tube and allows it to be withdrawn and 15 coiled about the plug or cap upon the bag being filled, as shown in dotted lines. A clip 18, moreover, is preferably provided in order to hold the tube in its inoperative position. In this construction the type of cap is 20 unimportant and a solid plug may be used if desired. If desired, moreover, a permanent curve may be imparted to the tube 16 in order to aid in coiling the same into its inoperative position.

25 The construction last mentioned is used as follows. The plug or cap having been removed the tube is inserted within the neck as shown in full lines and the bag filled, permitting the escape of the steam in a manner substantially identical with that above described. Upon the bag being filled, however, the tube is withdrawn and the plug inserted in place and the tube coiled about and held within the clip 18.

35 It is to be noted that certain of the broadest features of the invention are embodied in the structure last described, but certain features of the invention are, of course, specific to that construction first set forth.

40 It will thus be seen that I have provided a construction in which the several objects of this invention are achieved and in which the above enumerated advantages are present. This construction, moreover, is simple and 45 inexpensive and its action is efficient and reliable. The number of joints to be sealed is not increased and the time required for filling the bag is no longer than in the case of one of the ordinary construction. The entire device, moreover is of a durable nature 50 and well adapted to stand the severe treatment of hard practical use.

As many changes could be made in the above construction and many apparently 55 widely different embodiments of this invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawings shall 60 be interpreted as illustrative and not in a limiting sense.

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

65 1. In a device of the class described, in

combination, a water bag comprising a body portion with funnel formed thereon, said body portion and funnel converging to a common mouth, means adapted to seal said mouth with said funnel in operative condition, and means secured to said bag and separating a portion of the passage through said mouth from the remaining portion thereof. 70

2. In a device of the class described, in combination, a receptacle provided with a mouth and otherwise imperforate, means dividing the mouth into a plurality of passages leading separately to the outer air whereby a fluid may enter said receptacle through one of said passages and another fluid simultaneously pass out through another passage and entirely isolated from said first fluid throughout its entire course and common means adapted to seal said several 85 passages. 85

3. In a device of the class described, in combination, a receptacle provided with a mouth and having a funnel leading to said mouth, means adapted to seal said entire mouth with said funnel in operative relation to the body of the receptacle, and means providing a separate passage from the interior of said receptacle into said funnel whereby water may pass into said receptacle and another fluid simultaneously pass out from the same and isolated from said incoming water throughout its entire course. 90

4. In a device of the class described, in combination, a water bag provided with a mouth, means adapted to seal said mouth, a funnel leading to said mouth, and a tube extending from the interior of said bag above the lower portion of said funnel whereby water may enter said bag and another fluid be simultaneously discharged above the lower portion of said funnel. 100

5. In a device of the class described, in combination, a water bag provided with a mouth, means adapted to seal said mouth, a funnel formed on the body of said bag and leading to said mouth, a tube extending from the interior of said bag above the lower portion of said funnel, whereby water may enter said bag and another fluid be simultaneously discharged above the lower portion of said funnel and means adapted to seal said mouth with said funnel in operative relation to the body of the bag. 110

6. In a device of the class described, in combination, a water bag provided with a mouth and a funnel, means adapted to seal said mouth with said funnel in operative position, and a tube mounted adjacent said mouth so as to be adapted to be positioned therein and removable therefrom, said tube terminating at its upper end above said mouth and adapted to conduct the fluid from the interior of said bag and discharge the same at a point remote from said mouth. 120 130

7. In a device of the class described, in combination, a water bag provided with a mouth and a funnel leading to said mouth, a tube mounted adjacent said mouth and removable therefrom, said tube normally extending into the upper portion of said funnel, and means adapted to seal said mouth.

8. In a device of the class described, in combination, a water bag provided with a mouth and a funnel leading to said mouth, and a tube mounted to project above the lower portion of said funnel and provided with a flared end extending into said receptacle.

9. In a device of the class described, in combination, a water bag provided with a mouth, a funnel leading to said mouth, means adapted to seal said mouth, a handle adapted to support said water bag, and a tube adapted in normal operative condition to conduct the fluid from the interior of said bag above the lower portion of said funnel and discharge the same in a direction away from said handle.

10. In a device of the class described, in combination, a water bag provided with a mouth, means separating a portion of the passage through said mouth from the remainder thereof whereby water may enter said bag, and steam simultaneously pass therefrom isolated from said water, and a cap adapted to seal said mouth and extend over said separating means.

11. In a device of the class described, in combination, a water bag provided with a mouth, a tube mounted within said mouth and leading from the interior of the bag to a point above the same, and a hollow cap adapted to fit over said tube and seal said mouth.

12. In a device of the class described, in combination, a water bag provided with a mouth and a funnel leading to said mouth, a tube mounted adjacent said mouth and extending above the lower portion of said funnel and adapted to discharge fluid from the bag during the passage of water thereinto above the lower portion of the funnel, and a hollow cap adapted to extend over said tube and seal said mouth.

13. In a device of the class described, in combination, a water bag provided with a mouth and a funnel leading to said mouth, a tube mounted adjacent said mouth and extending substantially to the top of said funnel and adapted to discharge fluid from the bag during the passage of water thereinto above the lower portion of the funnel, and a hollow cap adapted to extend over said tube and seal said mouth.

14. In a device of the class described, in combination, a water bag provided with a mouth and having a funnel formed thereon and converging at its lower end directly into said mouth, a tube mounted in said bag and

adapted in operative condition to extend into the upper portion of said funnel and discharge in an upward direction fluid from the bag during the passage of water thereinto, and sealing means adapted to extend over said tube and seal said bag at a point outside of the mounting of said tube.

15. In a device of the class described, in combination, a water bag provided with a mouth, means adapted to seal said mouth, a funnel leading to said mouth, and a tube mounted in said bag at a point inside of said seal whereby water may enter said bag from said funnel and another fluid be simultaneously discharged therefrom to the outer air and isolated throughout its course from said water.

16. In a device of the class described, in combination, a water bag provided with a mouth and having formed thereon a funnel converging to said mouth, a tube mounted adjacent said mouth and removable therefrom with said funnel in operative relation to said bag, said tube in normal operative condition extending above the lower portion of said funnel, and means adapted to seal said mouth.

17. In a device of the class described, in combination, a water bag provided with a mouth and having a funnel formed thereon and converging to said mouth, a tube mounted adjacent said mouth and in normal operative condition passing vertically from the interior of the bag to a point above the lower end of said funnel and adapted to discharge upwardly the fluid from said bag during the entry of water thereinto, and means adapted to seal said mouth.

18. In a device of the class described, in combination, a water bag provided with a mouth and having a funnel formed thereon and leading to said mouth, a tube mounted adjacent said mouth and adapted in normal operative condition to discharge a fluid from the interior of the bag during the filling thereof at a point above the level of the incoming water, and means adapted to seal said mouth.

19. In a device of the class described, in combination, a water bag provided with a mouth and having a funnel formed thereon and leading to said mouth, a tube mounted adjacent said mouth and adapted in normal operative condition to discharge a fluid from the interior of the bag during the filling thereof at a point above the level of the incoming water, and means adapted to seal said mouth, said tube being mounted upon said bag at a point inside of said sealing means.

20. In a device of the class described, in combination, a water bag provided with a mouth, a funnel converging directly into said mouth and secured to said bag whereby water is permitted to run directly from the bottom of said funnel into said bag, a tube

mounted to provide a passage from the interior of said bag to a point above said mouth and adapted to convey a fluid outwardly from the interior of said bag during the filling thereof, and means adapted to seal said bag with said funnel in operative relation thereto.

21. In a device of the class described, in combination, a water bag provided with a mouth, a funnel formed upon said bag and converging directly into said mouth at its lower end, a tube secured within said bag and held in a position extending above the

lower portion of said funnel, and a hollow cap provided with a gasket and adapted to make connection with said bag and seal the mouth thereof adjacent the lowermost portion of said funnel and adapted to extend over said tube in said position.

In testimony whereof I affix my signature, 20
in the presence of two witnesses.

ROBERT S. BLAIR.

Witnesses:

C. H. WILSON,
H. M. SEAMANS.