

(No Model.)

J. HARDMAN, Jr.
WATER BAG OR BOTTLE.

No. 596,502.

Patented Jan. 4, 1898.

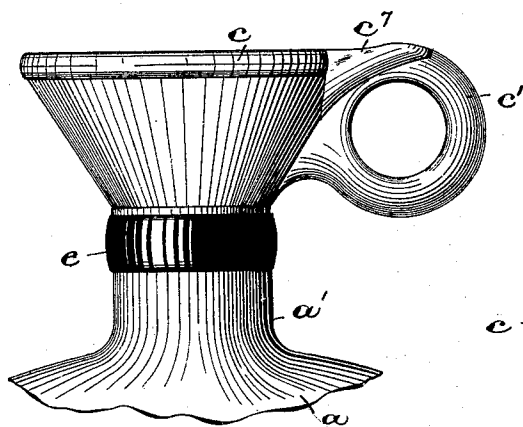


FIG. 1

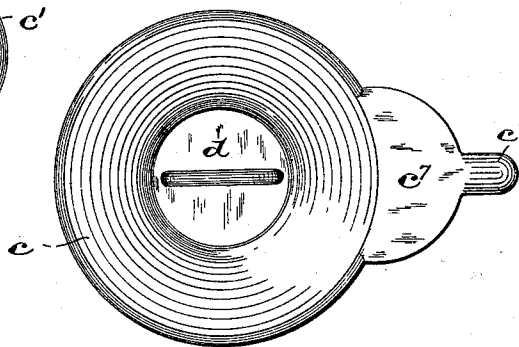


FIG. 2

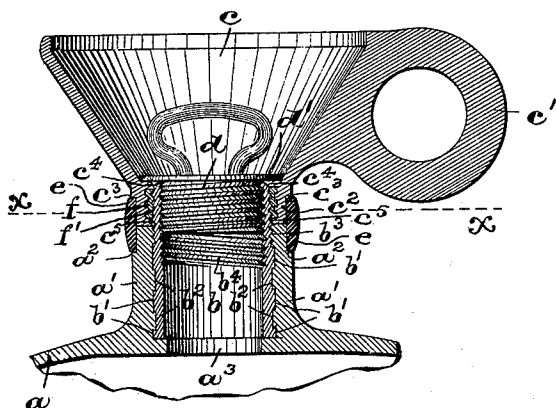


FIG. 3

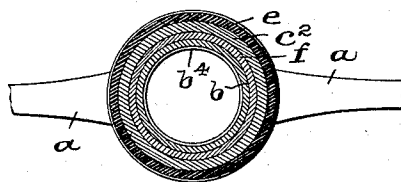


FIG. 4

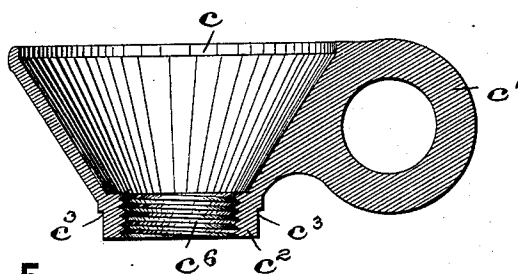


FIG. 5

WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES HARDMAN, JR., OF BELLEVILLE, NEW JERSEY.

WATER BAG OR BOTTLE.

SPECIFICATION forming part of Letters Patent No. 596,502, dated January 4, 1898.

Application filed August 2, 1897. Serial No. 646,797. (No model.)

To all whom it may concern:

Be it known that I, JAMES HARDMAN, JR., a citizen of the United States, residing at Belleville, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Water Bags or Bottles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention is in the nature of an improvement in water bags or bottles; and the invention has for its primary object to provide a water bag or bottle made of a flexible plastic material, as rubber or the like, with a flexible funnel of a similar material and a novel means for detachably or removably securing said funnel-piece upon the neck of the bag or bottle portion, whereby should the funnel-piece with constant use become useless it can be quickly detached and replaced by a new funnel.

The invention consists in the novel construction of water bag or bottle, as well as in the several novel arrangements and combinations of the parts, such as will be more fully described in the accompanying specification and finally embodied in the clauses of the claim.

The invention is fully illustrated in the accompanying sheets of drawings, in which—

Figure 1 is a side view of the neck or mouth portion of a flexible water bag or bottle provided with my novel construction of detachable funnel. Fig. 2 is a top view of the parts illustrated in said Fig. 1, and Fig. 3 is a vertical section through the several parts. Fig. 4 is a horizontal section taken on line x in Fig. 3, and Fig. 5 is a vertical section of a detachable flexible funnel of a slightly-modified form of construction.

Similar letters of reference are employed in all of the above-described views to indicate corresponding parts.

In said drawings, a indicates the body of the water bag or bottle, and a' is the neck or mouth of the same, said neck being preferably provided at its upper and outer cylindrical surface with an annular offset a^2 .

Secured in the opening a^3 of said neck a' , with its upper portion projecting therefrom, is a metallic or hard-rubber or other tubular fitting b , provided with annular projections b' and grooves or depressions b^2 , around which the rubber neck of the bottle or bag a is molded or vulcanized; but said fitting b may be otherwise secured in the mouth of said neck, as will be clearly understood. On the upper and outer cylindrical surface of said fitting b is a suitable screw-thread b^3 , and adapted to be fitted on an inner screw-thread b^4 is a cap or stopper d , whereby the mouth of the neck of the bottle can be closed. Detachably arranged upon said screw-threaded portion b^3 of the fitting b is a flexible funnel c , provided with a suitable lift c' . The lower and outer cylindrical portion c^2 of said funnel is preferably provided with an annular offset c^3 . As will be seen from an inspection of Fig. 3, the cylindrical portion c^2 of said funnel is molded or vulcanized around a metallic or hard-rubber fitting or collar f , provided with an internal screw-thread f' , in such a manner that the soft-rubber portions c^4 and c^5 are formed directly above and below the respective ends of said collar, and the latter is thereby thoroughly embedded in and forms a part of the tubular portion c^2 of the funnel. It will thus be seen that when an ornamental metal or hard-rubber or other suitable ring e is placed in position in the annular offset a^2 of the neck of the bag or bottle a the said collar f , and with it the flexible funnel c , can be screwed down upon the threaded part b^3 of the fitting b until the contiguous rubber portions of the neck of the bag or bottle a and the funnel c are caused to bear firmly against each other, with the ring securely held in position in the respective offsets in said parts, substantially as illustrated in said Fig. 3, and a water-tight joint of all the parts is thereby produced. At the same time the soft-rubber portion c^4 above the collar f forms a suitable washer for the annular flange d' of the stopper d , and hence no leakage can take place when the latter is screwed into place in said fitting b . If desired, the said metallic or other suitable ring f can be entirely dispensed with and the inner tubular part of the portion c^2 of the fun-

nel c provided with screw-threads c^6 , which are directly molded therein, as clearly illustrated in Fig. 5. At the junction of the upper edge of the funnel c and the lift c' the said parts may be provided with a suitably-formed enlargement, as c^7 , upon which the thumb can be placed for more readily carrying the bag or bottle and properly holding the funnel under a faucet while filling the bag or bottle, said enlargement being of greater rigidity than the other parts of the funnel, which will thus prevent the collapsing of the funnel portion, as will be clearly evident.

From the above description it will be seen that by the arrangement and construction of the several parts a cheaply-constructed, neat, and very effective water bag or bottle is the result, from which the funnel can be quickly removed and replaced by a new funnel, for it often happens that the same is rendered useless by becoming too soft when in constant use and will not serve the purposes for which it is intended, or it will crack while the main body of the bag is still in a perfect condition.

I am fully aware that changes may be made in the details of construction and in the several arrangements and combinations of parts without departing from the scope of my invention. Hence I do not limit myself to the exact arrangements and combinations of the parts as herein set forth, and illustrated in the accompanying drawings.

Having thus described my invention, what I claim is—

1. A water bag or bottle, consisting, essentially, of a main body having a neck, all formed of plastic material, a screw-threaded fitting in said neck adapted to receive a stopper, and having an external screw-thread, and a funnel portion, also of a plastic material detachably arranged on said fitting, substantially as and for the purposes set forth.

2. A water bag or bottle, consisting, essentially, of a main body having a neck, all formed of plastic material, a screw-threaded fitting in said neck adapted to receive a stopper, and having an external screw-thread, a

funnel portion c and a screw-threaded ring or collar in said funnel portion for detachably connecting the same with said fitting in the neck of the bag or bottle, substantially as and for the purposes set forth.

3. A water bag or bottle, consisting, essentially, of a main body a , a neck a' having an annular offset a^2 , all formed of plastic material, a funnel portion c , having a tubular part c^2 provided with an annular offset c^3 , a ring e fitting in said offsets, and means connected with the neck of the body a for detachably connecting said funnel portion with said body, substantially as and for the purposes set forth.

4. A water bag or bottle, consisting, essentially, of a main body a , a neck a' having an annular offset a^2 , all formed of plastic material, a funnel portion c , having a tubular part c^2 provided with an annular offset c^3 , a ring e fitting in said offsets, and means connected with the neck of the body a for detachably connecting said funnel portion with said body, consisting of a screw-threaded fitting b having an external screw-thread upon which said funnel portion is adapted to be fitted, substantially as and for the purposes set forth.

5. A water bag or bottle, consisting, essentially, of a main body a , a neck a' having an annular offset a^2 all formed of plastic material, a funnel portion c , having a tubular part c^2 provided with an annular offset c^3 , a ring e fitting in said offsets, and means connected with the neck of the body a for detachably connecting said funnel portion with said body, consisting of a screw-threaded fitting b having an external screw-thread b^3 , and a screw-threaded ring or collar in said tubular portion c^2 adapted to be screwed down upon said thread b^3 of the fitting b , substantially as and for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this 29th day of July, 1897.

JAMES HARDMAN, JR.

Witnesses:

FREDK. C. FRAENTZEL,
GEORGE L. CONOVER.