

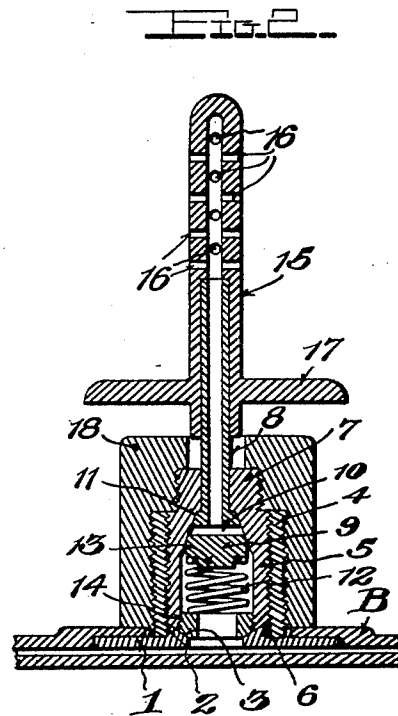
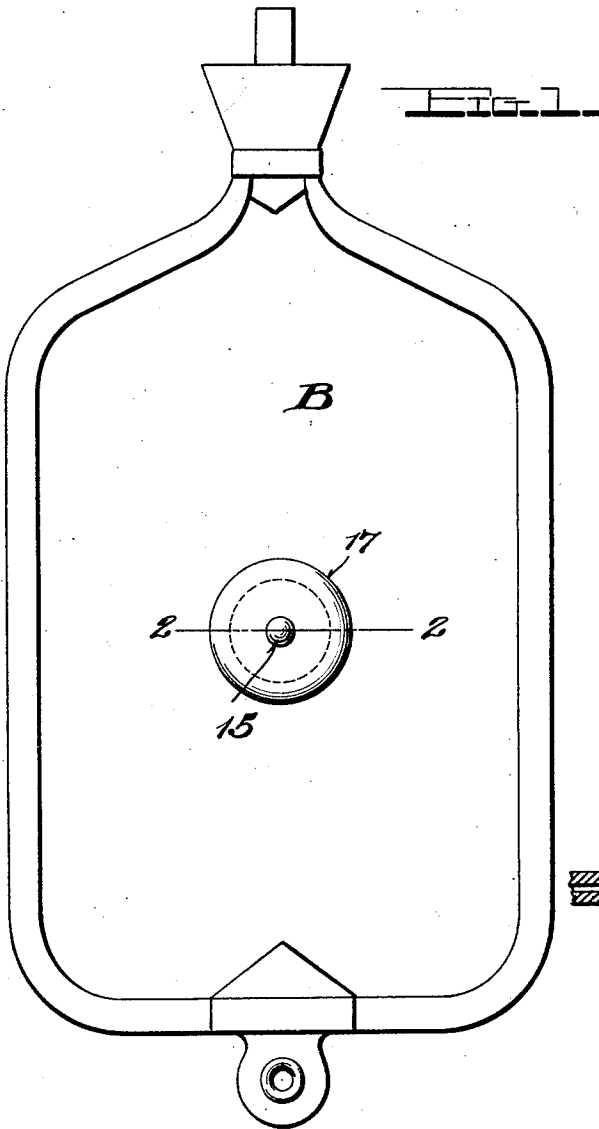
Dec. 22, 1925.

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R. E. STERRITT

RUBBER INTERNAL BATH BAG

Filed May 29, 1925



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UNITED STATES PATENT OFFICE.

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RUBBER INTERNAL-BATH BAG.

Application filed May 29, 1925. Serial No. 33,662.

To all whom it may concern:

Be it known that I, ROBERT E. STERRITT, a citizen of the United States, residing at Cranston, in the county of Providence and State of Rhode Island, have invented new and useful Improvements in Rubber Internal-Bath Bags, of which the following is a specification.

This invention relates to certain new and useful improvements in rubber internal bath bags and pertains more especially to the valve and operating mechanism thereof for controlling the water flow.

The primary object of the invention is to provide a valve mechanism which instantly responds to pressure exerted by the user, and which operates with ease and certainty so as to assure full and instant flow of the water or other liquid.

A further object of the invention is to provide improved means, for connecting the valve structure to the bag, which means is of simple and compact construction, and is reliable in preventing leakage.

In the drawings:—

Fig. 1 is a top plan view and

Fig. 2 is a vertical sectional view of the valve mechanism.

In proceeding in accordance with the present invention, a metal ring 1 is provided which is molded in a wall of the bag B, in embedded relation thereto. The open center of the ring is surrounded by an externally threaded collar 2, having an inwardly bevelled upper seat or face 3. A sleeve 4 having both internal and external threads, is threaded over the collar 2 and threadedly receives a hollow valve casing 5 on its interior. The lower or inner end of the casing 5 has a chamfered edge 6 which conformably engages the seat 3 of the collar 2 with a ground fit. The upper end of the casing 5 is formed with a contracted neck 7 through which a tubular valve stem 8 slidably extends.

The lower or inner end of the stem 8 carries a conical valve 9 having a transverse port 10 which communicates with the hollow interior of the stem. The casing 5 has an upwardly tapered seat 11 which conformably receives the valve 9, the latter being normally held against the seat by a coil spring 12. The lower end of the valve 9 is reduced to form a boss 13 which receives and centers the upper end of the spring, while the lower

end of the spring seats on a ring 14 threaded into the interior of casing 5. The ring 14 has a tapered bottom which fits against the seat 3 with a grinding fit so as to additionally seal the structure against leakage.

A rubber nozzle 15 fits over the upper end of the valve stem 8 and has lateral discharge orifices 16 and a flange 17 adjacent its base.

An outer casing 18 is threaded over the collar 2 and the neck 7 of the valve casing 5 and its base tightly engaging the wall B of the rubber bag to compress the wall and further render the structure leak-proof.

In operation, the nozzle is positioned as usual, and upon the user encountering and exerting downward pressure against the flange 17, the valve will be unseated, against the action of the spring, permitting flow of the liquid past the valve, then through the port 10, into the valve stem, and from the latter into the nozzle and out of the orifices thereof. The valve is afforded a firm and effective anchorage of relatively considerable area to the wall of the bag and due to the multiplicity of sealed joints between the ring base and the juxtaposed parts cooperating therewith, a water-tight connection is provided.

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

1. A valve structure for rubber internal bath bags, including a ring base engaged with a wall of the bag and having an externally threaded collar at its center provided with a downwardly tapered seat on its upper face, a sleeve threaded over the collar, a valve casing threadedly received in the sleeve and having a tapered lower end conformably engaged with the tapered seat, said casing having a conical valve seat and a neck at its upper end, a tubular valve stem slidable in the neck and having a conical valve on its lower end to engage the valve seat, said valve having a transverse port communicating with the interior of the valve stem, a nozzle on the valve stem, the lower end of the valve having a depending boss, a spring surrounding the boss at its upper end, a ring threaded within the casing and supporting the lower end of the spring, said ring having its lower end tapered to conformably engage on the seat of the collar, and an outer casing threaded

over the sleeve and engaged with the wall of the bag to clamp the latter against the ring base.

2. A valve structure for rubber internal bath bags, including a ring base engaged with a wall of the bag and having an externally threaded collar at its center provided with a downwardly tapered seat on its upper face, a sleeve threaded over the collar, a valve casing threadedly received in the sleeve and having a tapered lower end conformably engaged with the tapered seat, said casing having a conical valve seat, a tubular valve stem slidable in the casing and having a conical valve engageable with the valve seat, the valve having a port communicating with the stem interior, a nozzle on the stem, a ring threaded in the casing and having its lower end conformably engaging the collar seat, and an outer casing threaded over the sleeve and engaging said bag wall to clamp the latter against the ring base.

3. A valve structure for rubber bags, including a base engaged with a wall of the bag, a sleeve carried by the base, a valve casing carried by the sleeve and located therewithin and having an internal valve seat, a hollow valve stem slidable in the casing and having a valve engaged with the seat and formed with a port communicating with the valve stem interior, a spring seat within the casing a spring supported on the seat and engaged with the valve a nozzle on the valve stem, and an outer casing surrounding the sleeve and engaged with said bag wall to clamp same against the base.

4. A valve structure for rubber bags, including a base engaged with a wall of the bag, a sleeve carried by the base, a valve casing carried by the sleeve, and located

therewithin and having an internal valve seat, a hollow valve stem slidable in the casing and having a valve engaged with the seat and formed with a port communicating with the valve stem interior, a spring seat within the casing, a spring supported on the seat and engaged with the valve, a nozzle on the valve stem, and an outer casing surrounding the sleeve and engaged with said bag wall to clamp same against the base, said base having a tapered seat and the lower end of the sleeve and spring seat being each tapered to conformably engage the base seat.

5. In a valve structure for rubber bags, a base engaged with a wall of the bag, a sleeve carried by the base, a valve casing carried by the sleeve and located therewithin, a spring pressed valve in the casing having a tubular stem, and an outer casing threaded over the sleeve and engaged with said wall of the bag to clamp the latter against the base.

6. In a valve structure for rubber bags, a base engaged with a wall of the bag, a sleeve carried by the base, a valve casing carried by the sleeve and located therewithin, a spring pressed valve in the casing having a tubular stem, and an outer casing threaded over the sleeve and engaged with said wall of the bag to clamp the latter against the base, the base having a tapered seat and the casing having a seat for the spring at its lower end, which spring seat and the lower end of the casing are each tapered to conformably engage with the base seat.

In testimony whereof I have signed my name to this specification.

ROBERT E. STERRITT.