No. 642,807. Patented Feb. 6, 1900.

E. C. SMITH.

SHOWER BATH RING.

(Application filed Jan. 9, 1899.)

(No Model.)

Fig. 1.

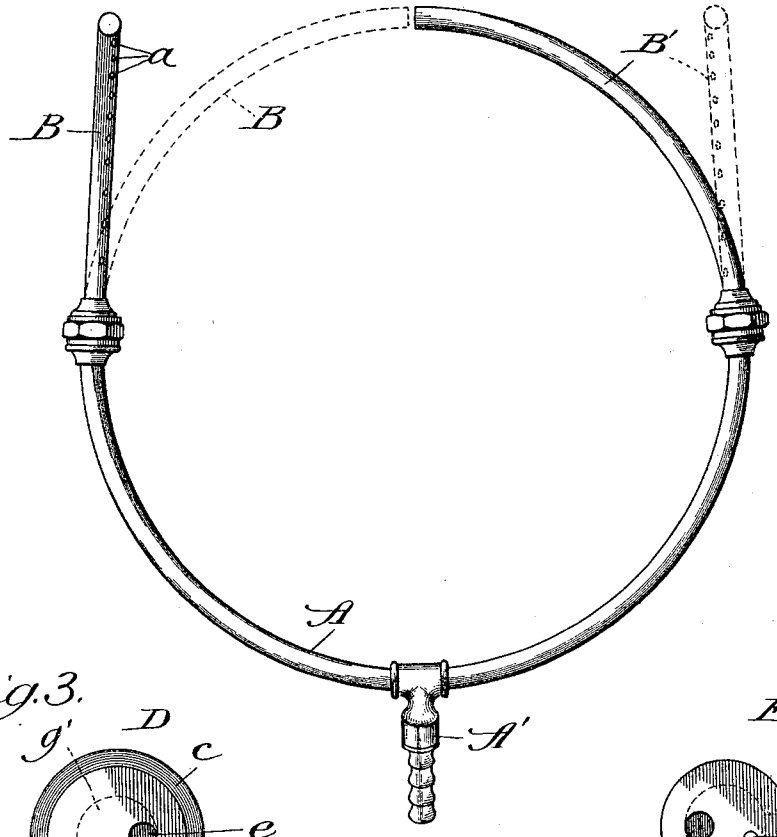


Fig. 3.

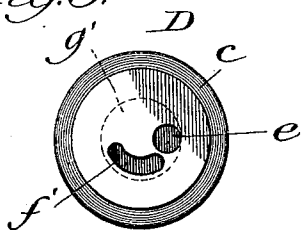


Fig. 4.

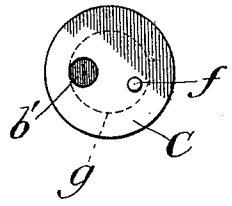
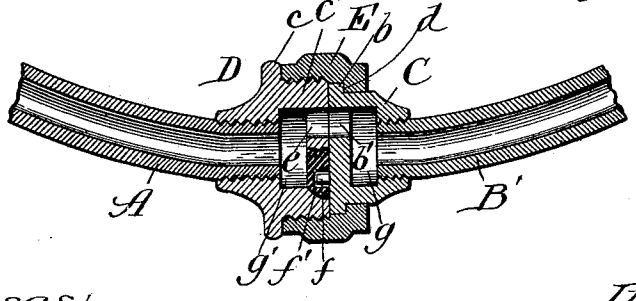


Fig. 2.



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SHOWER-BATH RING.

SPECIFICATION forming part of Letters Patent No. 642,807, dated February 6, 1900.

Application filed January 9, 1899. Serial No. 701,636. (No model.)

To all whom it may concern:

Be it known that I, EDWARD C. SMITH, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Shower-Bath Rings, of which the following is a specification.

My invention relates particularly to an improvement in shower-bath rings intended as an adjunct to a bath-tub to be attached to the hydrant by a flexible tube.

My primary object is to provide a ring having improved means for permitting it to be opened in order that it may be applied to the person of the user—as, for instance, to be placed about the neck without the necessity of slipping it on over the head.

Generally stated, my invention comprises a curved tubular part A, provided on its interior portion with perforations (not shown) and supplied with a shank A′ for attachment of the hose, and curved tubular sections B B′, provided on their inner portions with perforations *a* and closed at their free ends and connected at their opposite ends to the ends of the curved tubular part A, with which they are in communication by joints permitting said sections to be moved to break the contour of the ring.

In the accompanying drawings, Figure 1 is a plan view of my improved shower-bath ring, one of the movable sections being shown in its raised or inoperative position; Fig. 2, a section through one of the joints, the section being taken in the plane of the paper of Fig. 1; Fig. 3, an end view of one of the extremities of that portion of the ring which is provided with the hose-attaching stem, and Fig. 4 an end view of the adjacent extremity of the coöperating movable section of the ring.

The preferred manner of joining the sections B B′ to the part A is that shown. The parts B B′ are provided with rigidly-secured hollow cap-pieces C, each provided with an annular shoulder *b* and with an eccentrically-placed perforation *b′*. The part A is provided at each end with a rigidly-secured cap-piece D, provided with an annular shoulder *c* and with an externally-threaded portion *c′*. Fitting loosely upon the part C is an internally-threaded nut or union E, provided with an internal annular shoulder *d*, which engages the shoulder *b* on the part C. The part D is provided with an eccentrically-placed perforation *e*, which registers with the perforation *b′* of the part C when the ring is closed. The part C is provided with a pin *f*, which projects into a crescent-like slot *f′* in the adjacent end surface of the part D. As thus described, the parts C and D contain chambers *g g′*, respectively, the former of which communicates with the perforation *b′* of the pipe B′ and the latter of which communicates with the perforation *e* and the interior of the pipe A. The coupling-ring E serves to bind the parts C and D close together at their end surfaces.

As shown in Fig. 2, the perforations *e* and *b′* are in registration, in which position water would be admitted to the section B′. In this position the pin *f* engages one end of the slot *f′* and prevents the section B′ from falling below the plane of the tubular part A. When the section B′ is rocked upward from the position shown in full lines in Fig. 1 to the position shown in dotted lines, the eccentrically-placed perforation *b′* is moved out of registration with the perforation *e*, thereby cutting off the supply of water to the section B′. The same is true of the section B. When the part B′ is moved to the position shown in dotted lines, the pin *f* traverses the slot *f′* and engages the opposite end of the slot, thereby limiting the upward movement of the section.

In the preferred construction the sections B B′ when the ring is closed lie in the same plane as the section A and form a complete ring.

The device may be used, as shown in Fig. 1, with one of the movable sections in the operative position and in communication with the section A and the other one out of operative position with its water-supply cut off, or the device may be used with both movable sections in communication with the part A or both cut off therefrom, in the latter of which instances the device may be applied to any portion of the body.

An important feature of my invention lies in forming the joints of the movable sections away from the place where the hose-attaching stem A′ joins the annulus, and it is believed that the best construction is that in which the movable sections are caused to ro-

tate about axes parallel to tangents to the curve of the annulus at the points where the joints occur. The form of the curvature of the parts A B B′ may be changed without departure from my invention. It is also within the spirit of my invention to make one of the sections B B′ rigid with the section A, leaving the annulus provided with but one movable section.

The device is not limited to its use in connection with a flexible hose.

What I claim as new, and desire to secure by Letters Patent, is—

1. In an apparatus of the character described, the combination of a curved tubular perforated part provided with hose-attaching means, a curved perforated section closed at its free end and attached at its opposite end to an extremity of the first-named tubular part by a joint at a point removed from and independent of said hose-attaching means and permitting said section to be moved to break the contour of the annulus, and means at the joint for closing the admission to the last-named tubular section when the latter is moved a certain distance out of its normal operative position in use, whereby a portion of the annulus only may be used at will for spraying, substantially as and for the purpose set forth.

2. In an apparatus of the character described, the combination of a curved tubular part provided with a hose-attaching stem, and a perforated curved tubular section closed at its free end and attached at its opposite end to an extremity of said first-named tubular part by a joint permitting rotation about an axis parallel to a tangent to the curve at the point where the joint occurs, substantially as and for the purpose set forth.

3. In an apparatus of the character described, the combination of a tubular perforated section provided with a hose-attaching stem, a curved tubular perforated part closed at its free end and attached to an extremity of said first-named tubular part by a joint permitting rotation about an axis parallel to the curve at the point where the joint occurs, and means for closing communication between said tubular parts when the movable section is rotated a given distance out of the plane of the other section, substantially as and for the purpose set forth.

4. In an apparatus of the character described, the combination of a tubular part provided with a hose-attaching stem and at one extremity with a cap-piece provided at its end with an eccentrically-placed perforation, a curved tubular perforated section closed at its free extremity and provided at its opposite extremity with a cap-piece provided with an eccentrically-placed perforation registering with said first-named perforation when the movable section is in the operative position, and means for rotatably connecting said cap-pieces, substantially as and for the purpose set forth.

5. In an apparatus of the character described, the combination of a curved tubular part provided with hose-attaching means, a curved tubular part connected with an extremity of said first-named part by means of a joint permitting rotation about an axis parallel to a tangent to the curve at the joint, and means for limiting the rotation of the movable part when it reaches the plane of the other part in one direction or is rotated a predetermined distance out of the plane of the other part in the opposite direction, substantially as and for the purpose set forth.

6. In a shower-bath ring, the combination of a curved tubular perforated part A provided near its center with a hose-attaching stem A′, curved tubular perforated sections B, B′, cap-pieces C and D provided with eccentrically-placed perforations *b′* and *e*, respectively, pins *f* and curved slots *f′* for limiting the relative movement of the parts, and threaded coupling-rings E for joining said cap-pieces rotatably together, substantially as and for the purpose set forth.

7. In a shower-bath ring, the combination of a half-circular tubular perforated part A provided with a rigid hose-attaching stem A′, curved tubular perforated sections B, B′, each forming a quadrant of a circle and closed at its free end and attached at its opposite end to an extremity of the section A by a joint permitting rotation about an axis substantially parallel to a diameter of the annulus passing through the point where the stem A′ is attached, substantially as and for the purpose set forth.

8. In an apparatus of the character described, the combination of a curved tubular perforated part A provided between its extremities with a hose-attaching stem A′, curved tubular perforated sections closed at their free ends and attached at their opposite ends to the extremities of said part A by joints permitting either one of them to be moved at will to break the annulus, and means at said joints for closing the admission to said sections when they are moved a given distance and the annulus thereby broken, substantially as and for the purpose set forth.

EDWARD C. SMITH.

In presence of—
D. W. LEE,
R. T. SPENCER.