(No Model.)

A. McTERNEN.

HOT WATER BOTTLE.

No. 428,692. Patented May 27, 1890.

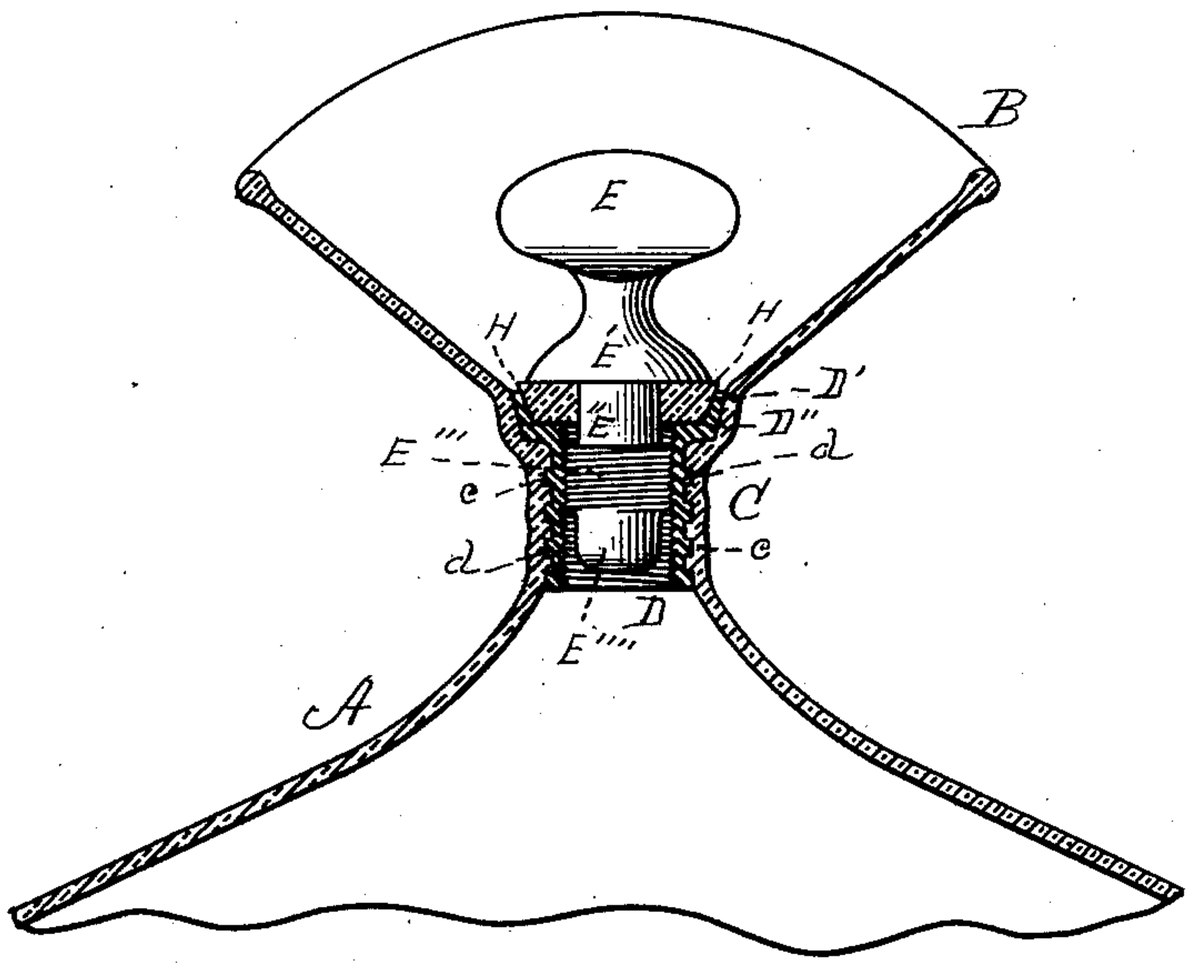

Fig. 1.

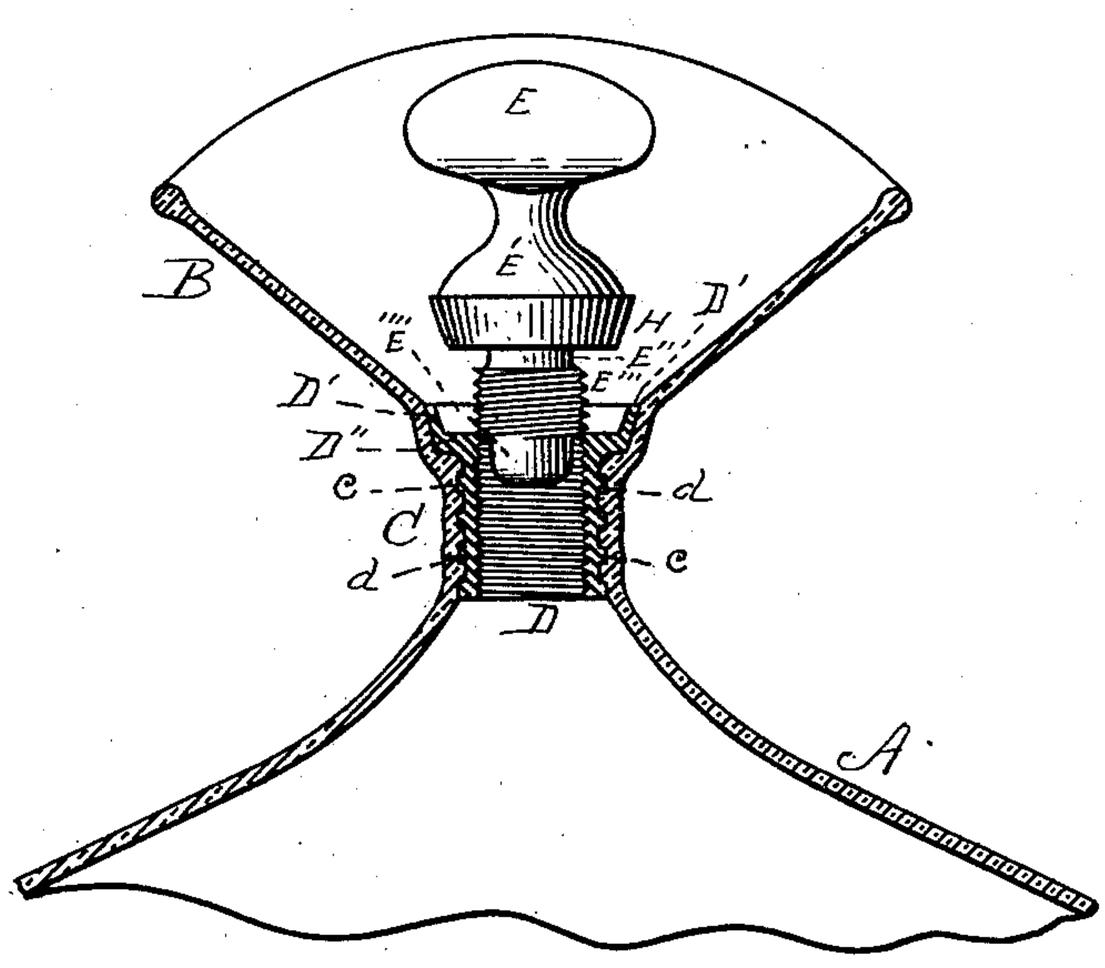

Fig. 2.

WITNESSES

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ANDREW McTERNEN, OF ANDOVER, MASSACHUSETTS.

HOT-WATER BOTTLE.

SPECIFICATION forming part of Letters Patent No. 428,692, dated May 27, 1890.

Application filed February 10, 1890. Serial No. 339,889. (No model.)

To all whom it may concern:

Be it known that I, ANDREW MCTERNEN, of Andover, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Hot-Water Bottles, of which the following is a specification.

This invention relates to that class of hot-water bottles which are constructed principally of rubber, and are intended for use in the sick-room; and it relates particularly to the mouth or neck of the bottle and the stopper of the same, the improvement being intended principally to render the bottle perfectly tight at that point when closed and to facilitate the application of the stopple, whereby it can be easily and quickly applied without the exercise of any particular skill or care.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a vertical section of the upper portion of a hot-water bottle embodying my improvement, with the stopple in position and the bottle closed. Fig. 2 is a similar view with the stopple in elevation and about to be applied and screwed into position.

A represents the body of the bottle, constructed usually of rubber, and in the usual form. The upper portion only of the body is shown, as there is nothing new in its construction.

B is a flaring funnel-shaped mouth, not new in this invention, and C is the neck.

D is an internally-screw-threaded socket or well cemented into the neck and securely supported therein in any desired manner. In the drawings the socket is provided externally with integral annular ribs or rings *d*, which fit into corresponding grooves *c* on the inner side of the neck C. This socket is countersunk at D″, whereby its upper and larger portion D′ is adapted to receive the washer (below described) on the stopple, and such portion D′ is preferably flared or tapered in order to fit said washer.

The stopple consists of the handle or thumb-piece E, the head E′, neck E″, screw-threaded portion E‴, and ball end E⁗. This ball end is at the lower terminus of the stopple and is in vertical section curved or substantially arc-shaped, as shown. Next, under the head and around the neck is the rubber washer H, tapered or beveled on its outer side to fit the portion D′ of the socket. The screw-threaded portion E‴ fits into the screw-thread of the socket, and the stopple terminates in the ball end E⁗. When the stopple is to be inserted in the socket in order to close the bottle and make it water-tight, it is simply dropped into the position shown in Fig. 2. The ball end enters the socket, as shown, being guided thereto by the flange D′, and a single turn of the handle E causes the thread of the stopple to engage in the thread of the socket. A few turns brings the washer H against the socket and it is tightly pressed between the head and neck E′ E″ of the stopple and flange D′ and upper end of the main portion D of the socket. Thus a perfectly water-tight joint is effected, and by means of the ball end E⁗ the stopple is ready for instant engagement of the screw-threads without the loss of time common in inserting the stopples into most hot-water bottles.

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

In a hot-water-bottle provided with a flaring mouth B, the combination, with the internally-screw-threaded socket D, flared at its upper end D′, of the externally-screw-threaded stopple described, consisting of the handle, the head E′, neck E″, screw-threaded portion E‴, and downwardly-projecting ball end E⁗ at the lower terminus, such ball end being in vertical section curved or substantially arc-shaped, whereby the stopple is guided as it drops into a position in which the screw-thread of the stopple may quickly and readily engage the screw-thread of the socket and a washer H engaged between the flared portion D′ of the socket and the head of the stopple, substantially as set forth.

ANDREW MCTERNEN.

Witnesses:

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