April 7, 1936. P. E. YOUNG 2,036,845

HOT WATER BOTTLE AND THE LIKE

Filed June 28, 1934

Fig. 1.

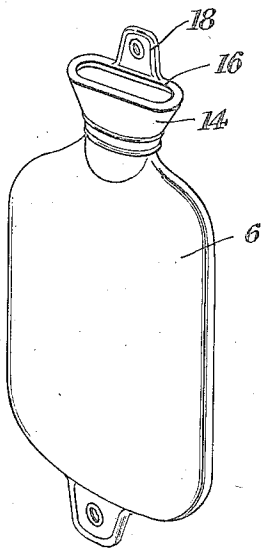


Fig. 4.

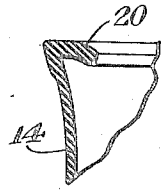


Fig. 3.

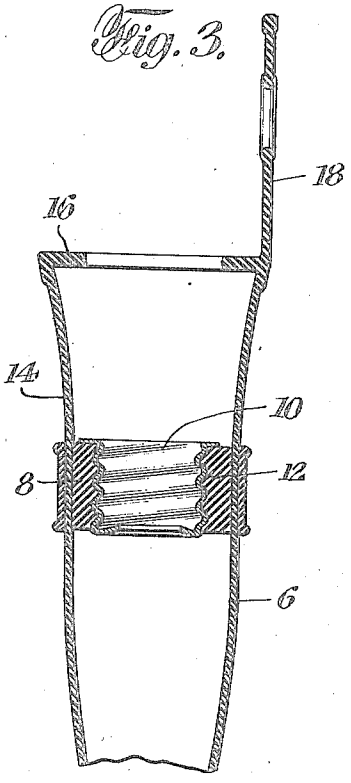
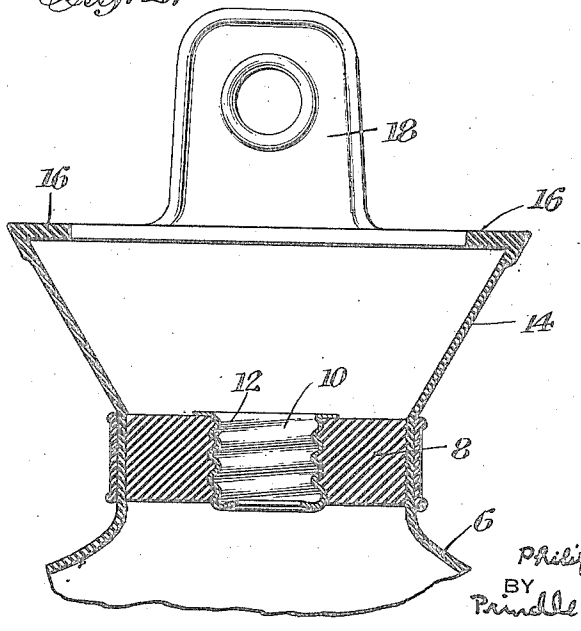


Fig. 2.



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2,036,845

HOT WATER BOTTLE AND THE LIKE

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2 Claims. (Cl. 150—2.1)

This invention relates generally to rubber containers for liquids, and particularly to flexible rubber hot water bottles or bags.

Heretofore rubber hot water bottles have been so formed that in being filled, there was a tendency for persons to splatter hot water over their hands. This difficulty particularly exists in the ordinary form of hot water bottle with a large body and a narrow neck, even though a collar is added around the filling hole, due to the irregular escape of air from the interior of the bottle as it is being filled, and also due to the flexibility of the collar. Because of the nature and use of hot water bottles, the filling hole and hard stopper cannot conveniently be made larger, and splatters resulting from hasty filling are very unpleasant. Therefore, in order to prevent splattering, I have devised a hot water bottle with the normal size body and filling hole, but with the addition of an oval shaped funnel, integral with the bottle, which funnel at its top is provided with an incurved annular rim or lip of restricted diameter. Such an incurved lip intercepts splatters and any water traveling upwardly and outwardly along the funnel portion has its direction changed to inwardly. As the water bubbles through the filling hole there is little likelihood of resulting splatters passing the incurved annular rim of the funnel. Also the rim of restricted diameter acts as a stiffener and tends to prevent distortion of the funnel. Furthermore, by forming the funnel in an oval shape I so center the hanging or gripping flange that the downward pull of the weight of the bag and its contents cannot distort the funnel materially.

My invention will be made clear by reference to the accompanying drawing, which is for illustrative purposes only and are not to be understood as limiting the scope of my invention as the same may be employed in various forms and embodiments.

In the drawing:

Fig. 1 is a perspective view of a hot water bottle embodying my invention; Fig. 2 is a vertical section of the funnel and top portion of the bag; Fig. 3 is a vertical section taken at right angles to the section of Fig. 2; and Fig. 4 is a section showing a modification of the incurved rim or lip.

In these figures a hot water bag 6 is formed with an oval shaped inset 8 through which a filling hole 10 runs, which latter may be threaded as at 12 for the usual stopper. Above the oval inset 8 is an oval shaped funnel member 14. At its top the funnel member may be molded of slightly thicker rubber if desired, and is formed with an incurved annular lip or rim 16 of restricted diameter. On one of the flatter sides of the oval funnel is provided a hanging or gripping flange 18, but as shown the incurved rim is preferably continued uninterruptedly across the face of the flange. Because of the oval shape of the funnel and inset, the flange may be centered almost over the center of gravity of the bag and contents. Therefore in filling, the pull of the weight of the bag and contents against the flange will not greatly distort the funnel or the continuous incurved rim.

As the water is poured or pressure-fed into the funnel, the latter is not distorted because it is stiffened by the annular lip 16, and retains its shape. Splatters caused by the bubbling of air out of the bag, or otherwise, are in the main, intercepted by the incurved rim. Any sudden flow or swirl of water rising on the side of the funnel has its direction changed by the incurved rim or lip.

In Fig. 4 is shown an alternate form of means for diverting and changing the direction of the flow of water ascending the side of the funnel, and for intercepting splatters, comprising an inwardly and downwardly turned lip 20. This form of lip turns back any water surging up the side of the funnel.

While my invention has been described specifically in its application to hot water bottles, it may also be embodied in flexible containers for liquids generally and particularly douche bags, and the appended claims include such embodiments.

What I claim is:

1. A hot water bottle comprising a flared, soft rubber mouth portion and an inwardly extending flange running round such mouth portion and made integral therewith, said flange extending inwardly a substantial distance, whereby the mouth portion will be held substantially against distortion during filling.

2. A structure as specified in claim 1 which also includes an integral support member forming part of the mouth portion and extending upwardly therefrom and in which the said flange extends across the base of such support member.

PHILIP E. YOUNG.