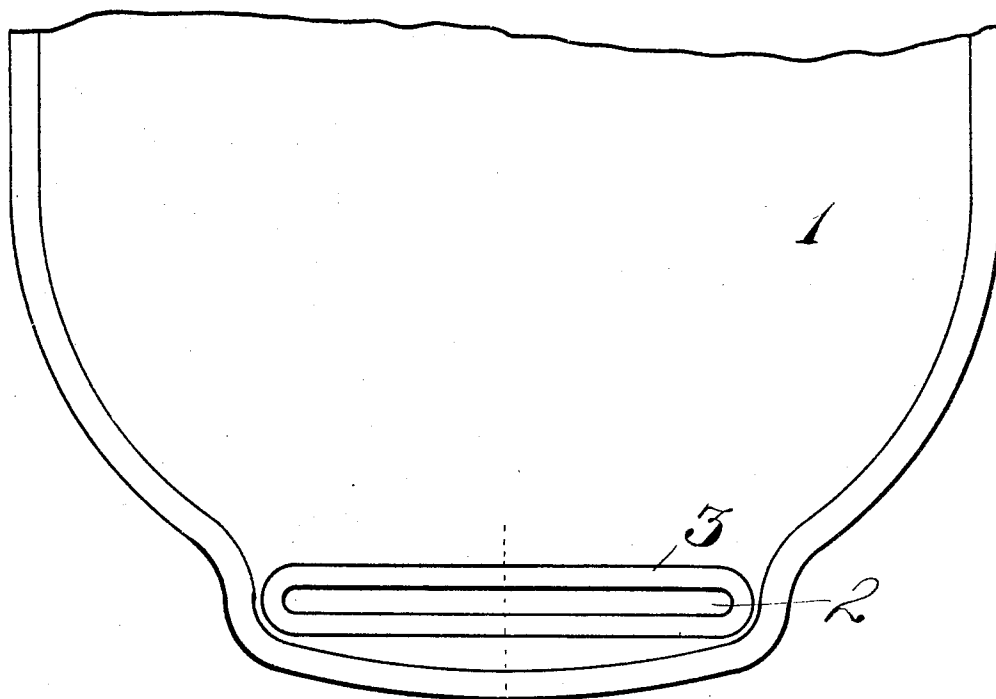


No. 809,142.

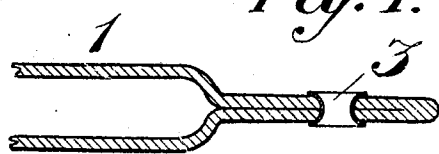
PATENTED JAN. 2, 1906.

E. J. SCHUTZ.  
HOT WATER BOTTLE.  
APPLICATION FILED MAR. 27, 1905.



→  
x

*Fig. 1.*



*Fig. 2.*

Witnesses,  
P. H. Stuart  
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Atty.

# UNITED STATES PATENT OFFICE.

EDWARD J. SCHUTZ, OF AKRON, OHIO.

## HOT-WATER BOTTLE.

No. 809,142.

Specification of Letters Patent.

Patented Jan. 2, 1906.

Application filed March 27, 1905. Serial No. 252,402.

*To all whom it may concern:*

Be it known that I, EDWARD J. SCHUTZ, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented new and useful Improvements in Hot-Water Bottles, of which the following is a specification.

This invention relates to improvements in hot-water bottles; and the object thereof is to provide a bottle with an opening through the walls thereof of sufficient size to permit the withdrawal of a core or mandrel on which the bottle is formed without injury to the integrity of the bottle and afterward reinforcing this opening by lining it with a gromet of correct form in order that the opening thus made may serve as a means for attaching the bag to a suspending medium.

With the foregoing and other objects in view the invention consists of the novel construction, combination, and arrangement of parts constituting the device to be hereinafter referred to, and illustrated in the accompanying drawings, which form a part of this specification, in which is shown the preferred embodiment of the invention; but it is to be understood that changes, variations, and modifications can be resorted to which come within the scope of the claim hereunto appended.

In the accompanying drawings, in which similar reference-numerals indicate like parts in both figures, Figure 1 shows a side view of the lower portion of a hot-water bottle, the upper portion of which is broken away; and Fig. 2 is a section of Fig. 1 at the line X.

In the drawings, 1 represents the body portion of a hot-water bottle made of a preferred material and generally contracted in width at its lower portion, with the edges of the bottle formed upon curvilinear lines to avoid roughness and for the sake of affording a pleasing appearance. In constructing bottles of this type they are usually made from two flat pieces of rubber of the required shape and with their outer edges united and their center filled with soapstone to prevent accidental adherence of the side walls to each other. This mode of making bottles is not entirely satisfactory for a variety of reasons well known to manufacturers of rubber

goods, and cores or mandrels are not used for other reasons, but primarily from the fact that the core or mandrel is of the same size as the interior of the bottle, and the removal thereof is attended with difficulty, because it has heretofore been usually attempted at the upper or filling end of the bottle. As the opening for the stopper-receiving socket at the funnel end is relatively small, it is impossible to remove this core or mandrel satisfactorily. Hence in order to use a core, which is the best way of manufacturing bottles, and to permit the removal of the mandrel from the interior of the finished bag I cut, preferably, although not necessarily, across the lower end of the bag an opening 2 through both walls of the bottle, and as this opening is relatively large it will permit of the withdrawing of the core or mandrel with comparative ease and with little or no danger of tearing or injury to the walls of the bottle. After the core or mandrel has been removed the edges of the opposite walls of the bottle are united together by cement around the opening 2, and a gromet 3, suitably shaped to assist in compressing the edges of the side walls of the bottle upon each other, is inserted in the opening 2 and upset sufficiently to bear firmly upon the rubber. The use of this gromet 3 affords to the opening 2 a firm and preferably metallic lining, which insures against the opening tearing out under any strain to which it might be subjected, and the opening in the gromet also affords a means for attaching the bottle to a hook or nail for the purpose of suspending the bag when not in use.

It will be obvious, of course, that the opening 2 may be made at other parts of the bag with substantially equally efficient results; but as it is customary to suspend the bag for the purpose of drying or draining with the filling end downward I have found that the placing of the opening 2 and gromet 3 at the bottom of the bag usually gives the best results.

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

A hot-water bottle having the walls thereof provided with a transversely-extending opening of sufficient size to permit the with-

drawal therethrough of a core or mandrel on  
which the bottle is formed without injury to  
the bottle and further having that portion of  
the walls around the opening secured to-  
5 gether, and a gromet extending through the  
opening, secured to the walls and constitut-  
ing a lining for said opening.

In testimony whereof I have hereunto set  
my hand in presence of two subscribing wit-  
nesses.

EDWARD J. SCHUTZ.

Witnesses:

C. E. HUMPHREY,  
GLENARA FOX.