G. P. VAN WYE.

VACUUM INSULATED BOTTLE.

APPLICATION FILED MAR. 15, 1909.

922,364. Patented May 18, 1909.

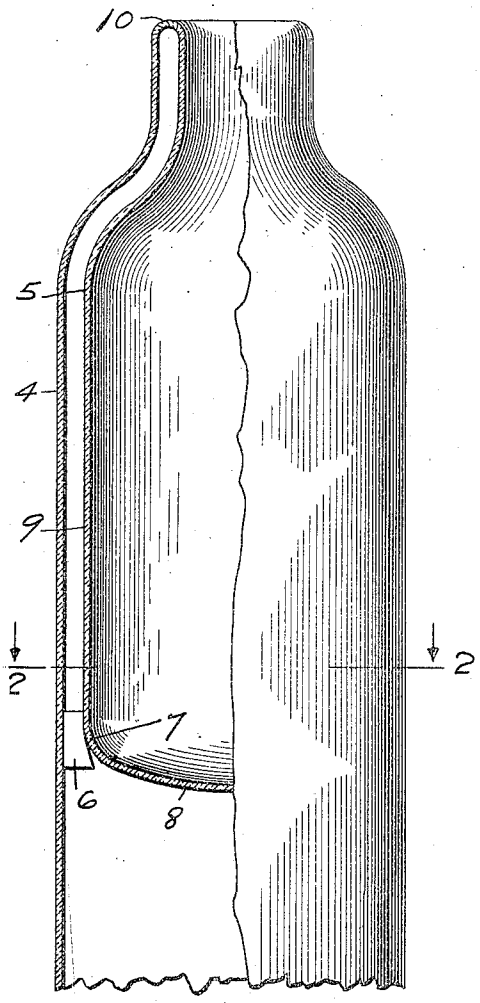


Fig. 1.

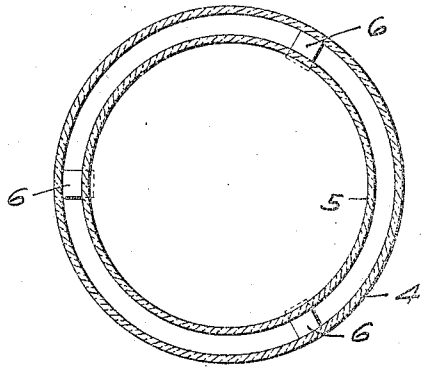


Fig. 2.

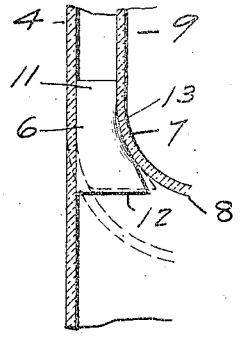


Fig. 3.

Witnesses:

C. H. Berthoff

P. A. Conroy

Inventor

Garry P. Van Wye.

UNITED STATES PATENT OFFICE.

GARRY P. VAN WYE, OF CHICAGO, ILLINOIS, ASSIGNOR TO WILLIAM BOYCE MORRISON, OF NEW YORK, N. Y.

VACUUM-INSULATED BOTTLE.

No. 922,364. Specification of Letters Patent. Patented May 18, 1909.

Original application filed August 17, 1908, Serial No. 448,951. Divided and this application filed March 15, 1909. Serial No. 483,361.

To all whom it may concern:

Be it known that I, GARRY P. VAN WYE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Vacuum-Insulated Bottle, of which the following is a specification.

This invention relates to vacuum insulated vessels; and is presented as a divisional application of my application for patent for vacuum insulated bottle, filed August 17, 1908, Serial Number 448,951.

The object of this invention is to provide supporting means for the inner bottle which can be easily placed in position; and which will securely brace and support the inner bottle.

The invention is illustrated in the accompanying drawing, in which—

Figure 1, is a view of a bottle in the process of construction, a part being broken away to show my improvement; Fig. 2, is a cross section thereof, on the line 2—2 of Fig. 1; and, Fig. 3, is a detail on an enlarged scale.

In the drawing, like numerals of reference refer to the same parts in each of the views; and in practice I provide a vacuum insulated bottle comprising an outer wall, 4, an inner wall 5, and a plurality of supports 6. The inner wall is provided with vertical side walls, and with a base, the connection 7, between the base 8, and side wall 9, being rounded, or curved, and when the bottle is completed by fusing the walls together at the lip 10, the outer wall will be similar in shape to the inner bottle, or wall at the base, as indicated in dotted lines in Fig. 3.

The supports 6, are made wedge-shaped, as more clearly illustrated in Fig. 3,—the small end 11, being proportioned in thickness so that it can be slipped up between the walls 4, and 5, above the curved portion 7, of the inner wall, and when in place, the projecting portion 12, of the support will lie within the vertical plane of the inner bottle, projecting beneath the base thereof; and in cutting these wedges, they are left sufficiently thick so that in forcing the end 11, up between the walls, a portion of the wedge will be compressed against the curved portion 7, of the inner wall, as indicated by the shaded lines 13, in this figure.

In operation, when the outer and inner walls 4, and 5, are fused together at the lip, the supports 6, preferably three in number, are forced up between the walls, as shown, compressing a portion of the wedge-shaped supports against the portion 7, as described. Heat is then applied to the outer wall in the usual manner, and it is closed in beneath th base of the inner bottle, as indicated in dotted lines in Fig. 3, and when closed in and has cooled, the lower part 12, of the supports will be carried over, as indicated in dotted lines in Fig. 3, either into contact with the base 8, of the inner wall throughout its extent, or substantially so, and the compression of the support at 13, will have considerably increased. If the lower part 12, does not quite contact with the base of the inner part, or contacts but lightly therewith, there will be considerable resiliency or elasticity in this part owing to the compression at 13, and the inner bottle will be braced in an effective manner, and will also be substantially supported.

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

1. A vacuum insulated bottle comprising a double walled vessel integrally connected at the lip; and a plurality of wedge-shaped, resilient supports mounted between said walls and engaging the connection between the side and base thereof, and engaging the side walls above said connection.

2. A vacuum insulated bottle comprising a double walled glass vessel integrally connected at the lip, the walls forming said vessel being rounded between the sides and bases thereof, and a plurality of wedge-shaped resilient supports mounted between said walls and engaging said rounded connection, the small end of said supports engaging both of the side walls, as and for the purpose set forth.

3. A vacuum insulated bottle comprising a double walled glass vessel integrally connected at the lip, and a plurality of wedge-shaped resilient supports mounted between said walls, the small end of said supports engaging both of the side walls of said vessel, and the large end of the supports being held in a flexed position by the outer wall.

Dated this 13th day of March, 1909.

GARRY P. VAN WYE.

Witnesses:

P. A. CONROY,

HERMAN GUSTOW.