June 24, 1952 E. VENIS 2,601,573

JACKETED VACUUM FLASK

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FIG. 1.

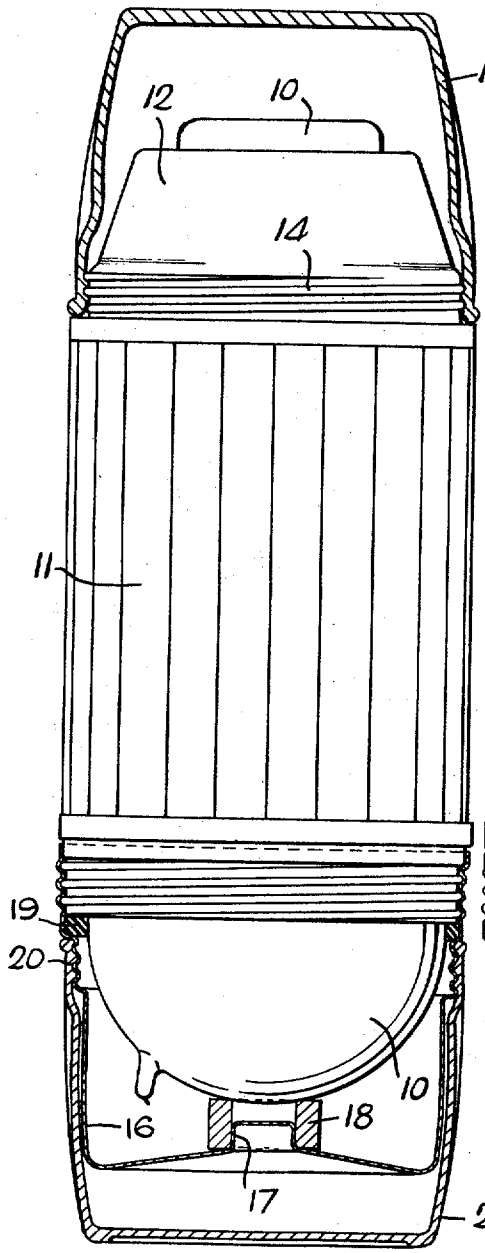
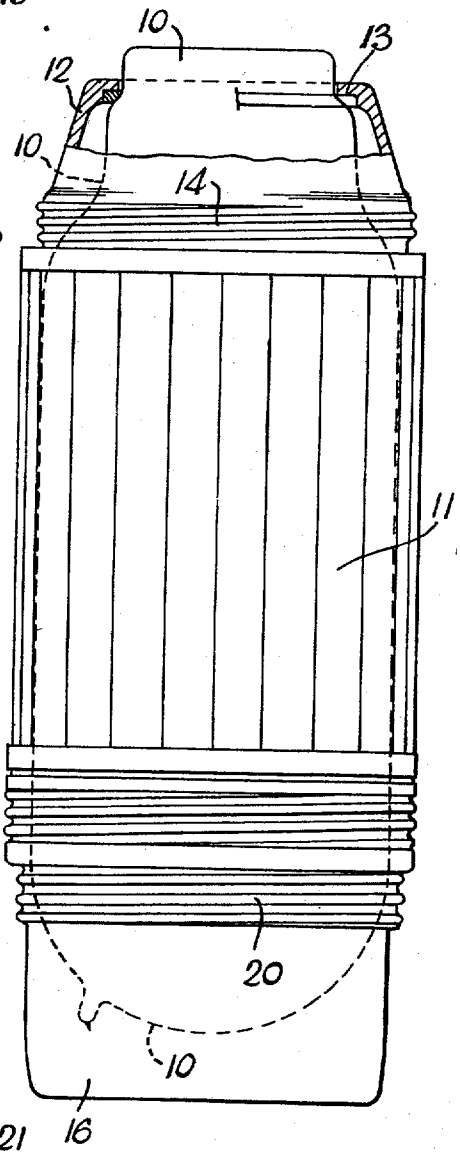


FIG. 2.



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JACKETED VACUUM FLASK

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4 Claims. (Cl. 215—13)

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This invention relates to vacuum jacketed vessels and in concerned more particularly with vacuum jacketed flasks such as are generally employed for conserving heated beverages, liquids and the like.

In accordance with the invention a vacuum jacketed flask includes an outer casing or body which is adapted to house a silvered flask or the like and is so constructed as to allow of the application and attachment to opposite end portions thereof of two cups or like containers adapted on removal from said casing or body to serve as drinking vessels.

In order that the said invention may be clearly understood and readily carried into effect the same will be hereinafter more fully described with reference to the accompanying drawings in which:

Figure 1 shows a vacuum flask according to the invention partly in elevation and partly in section;

Figure 2 is a view similar to that shown in Figure 1 but with the cups or containers removed.

Referring now to the drawing 10 denotes a normal silvered flask which is disposed within a cylindrical or other suitably shaped casing or body 11 the latter being formed with a reduced portion or neck 12 into which the neck of the flask is adapted to fit. The neck of the flask is centered and maintained in position with respect to the neck of the casing or body 11 by means of a ring 13 of rubber or other suitable material which is adapted to engage the same and is seated in an annular recess formed internally of the neck of said casing or body. In order to prevent relative rotation between the flask 10 and the casing or body 11 it may be desirable to roughen or otherwise suitably treat the wall of the recess in which the rubber ring 13 is seated in order to provide a grip for said ring and to prevent any possible rotational movement thereof. The roughening may, for example, be effected by forming a screw thread on the wall of the recess.

As is general with flasks of this character the outer surface of the casing or body is formed or provided with an external screw threaded portion 14 at or adjacent its upper end such threaded portion providing securing means for a cup or like container 15 which is adapted to be applied over the upper end of the complete flask and when in position to form an additional closure therefor.

That end of the casing or body 10 remote from the reduced portion or neck 12 and hereinafter termed the lower end, is adapted to be closed by virtue of the application thereto of a cup shaped closure element 16 which is preferably formed of

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metal. The closure element 16, which may be threaded or otherwise releasably secured in position at the lower end of the casing or body, is preferably formed with a base of dished or other suitable formation adapted to impart thereto a degree of resilience. Additionally, the base is formed, as for example by pressing, with an inwardly directed boss or collar 17 adapted to provide a seating for a ring 18 of resilient or flexible material such as rubber, the arrangement being such that when the flask 10 is in position within the outer casing or body 11 and the closure element 16 is applied thereto the lower end of said flask will seat or bear on the ring 18 which constitutes a resilient cushion or buffer. In order further to support the flask 10 relatively to the casing or body 11 an additional ring 19 of rubber or other suitable material is provided which is adapted to encircle the body of the flask such additional ring being clamped in position on application of the closure element 16 to said casing or body 11.

The closure element is formed externally with a screw threaded portion 20 which is adapted to provide securing means for a second cup or like container 21 which is adapted to be applied to the base of the flask over said closure element. The flask according to the invention thus includes two drinking cups or containers 15 and 21 which are adapted, when not in use, to be applied to opposite ends thereof.

Instead of securing the cups and the closure element in position on the casing or body by virtue of the provision of screw threads on the respective parts it may be desirable to adopt any other readily releasable jointing or securing means such as, for example, bayonet type joints or the like.

Preferably, the general construction is such that when in position on the opposite ends of the casing or body the cups will form a continuation of the surface of such casing or body and will impart thereto a streamlined or substantially streamlined form.

With a vacuum jacketed flask according to the invention insertion and removal of the flask into and from the casing or body is facilitated since, on removal of the closure element 16 the flask may be directly inserted into or removed from the lower end of said casing or body.

While it is proposed to construct the casing or body 11 and the cups or containers 15 and 21 of plastic or similiar material such parts may well be made of metal or other suitable material.

I claim:

1. A vacuum jacketed flask comprising an outer

casing formed at one end with a portion of reduced diameter and having threads at the end portion thereof remote from said portion of reduced diameter, a cup-shaped closure element formed with a stepped side wall defining an annular seat facing axially toward the open end of said closure element, the edge portion of said side wall being formed with threads for removably attaching said closure element to said threaded end portion of the outer casing, a silvered flask disposed within said casing, resilient suspension means for cushioning said flask within said outer casing, said suspension means including a first resilient packing ring carried by said portion of reduced diameter for engagement around the neck of the flask, a resilient buffer element interposed between the base of said flask and the bottom of said closure element and a second resilient packing ring disposed between said remote end of said casing and said annular seat of the closure element to be axially compressed by the latter when it is threaded onto said casing so that said second resilient packing then presses radially upon the flask intermediate the ends of the latter, and two cup-like drinking vessels detachably mounted on said portion of reduced diameter and on said closure element.

2. A vacuum jacketed flask as set forth in claim 1; wherein said portion of reduced diameter is formed with an internal annular recess receiving said first resilient packing ring, and the surface of said internal annular recess is roughened to prevent rotation of said first resilient packing ring relative to said outer casing.

3. A vacuum jacketed flask comprising an outer casing formed at one end with a portion of reduced diameter having threads at the base thereof, the end portion of said casing remote from said portion of reduced diameter being formed with threads thereon, a cup-shaped closure element formed with a stepped side wall widening toward the open end thereof and defining an annular seat facing axially toward said open end, said stepped side wall being formed with threads in the portions of greater and lesser diameter thereof at opposite sides of said seat, the threads in said portion of greater diameter being engageable with the threads on said remote end portion of the outer casing for removably attaching said closure element to said outer casing, a silvered flask disposed in said outer casing, a first resilient packing ring carried by said portion of reduced diameter for engagement with the neck of said flask, a resilient buffer element interposed between the base end of said flask and the bottom of said closure element, a second resilient packing ring disposed between the end edge of said outer casing remote from said portion of reduced diameter and said annular seat of the closure element to be axially compressed by the latter when said closure element is threaded onto said casing so that said second packing ring then presses radially upon said flask intermediate the ends of the latter, a first cup-like drinking vessel having a threaded mouth portion for engagement with said threads at the base of said portion of reduced diameter, and a second cup-like drinking vessel having a threaded mouth portion for engagement with the threads of said portion of lesser diameter of said closure element side wall so that said first and second cup-like drinking vessels may be carried at the opposite ends of said outer casing and when so carried are substantially flush with the outer surface of the latter.

4. A vacuum jacketed flask as set forth in claim 3; wherein said bottom wall of the closure element is dished upwardly to impart a degree of resiliency thereto.

ERNEST VENIS.

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