

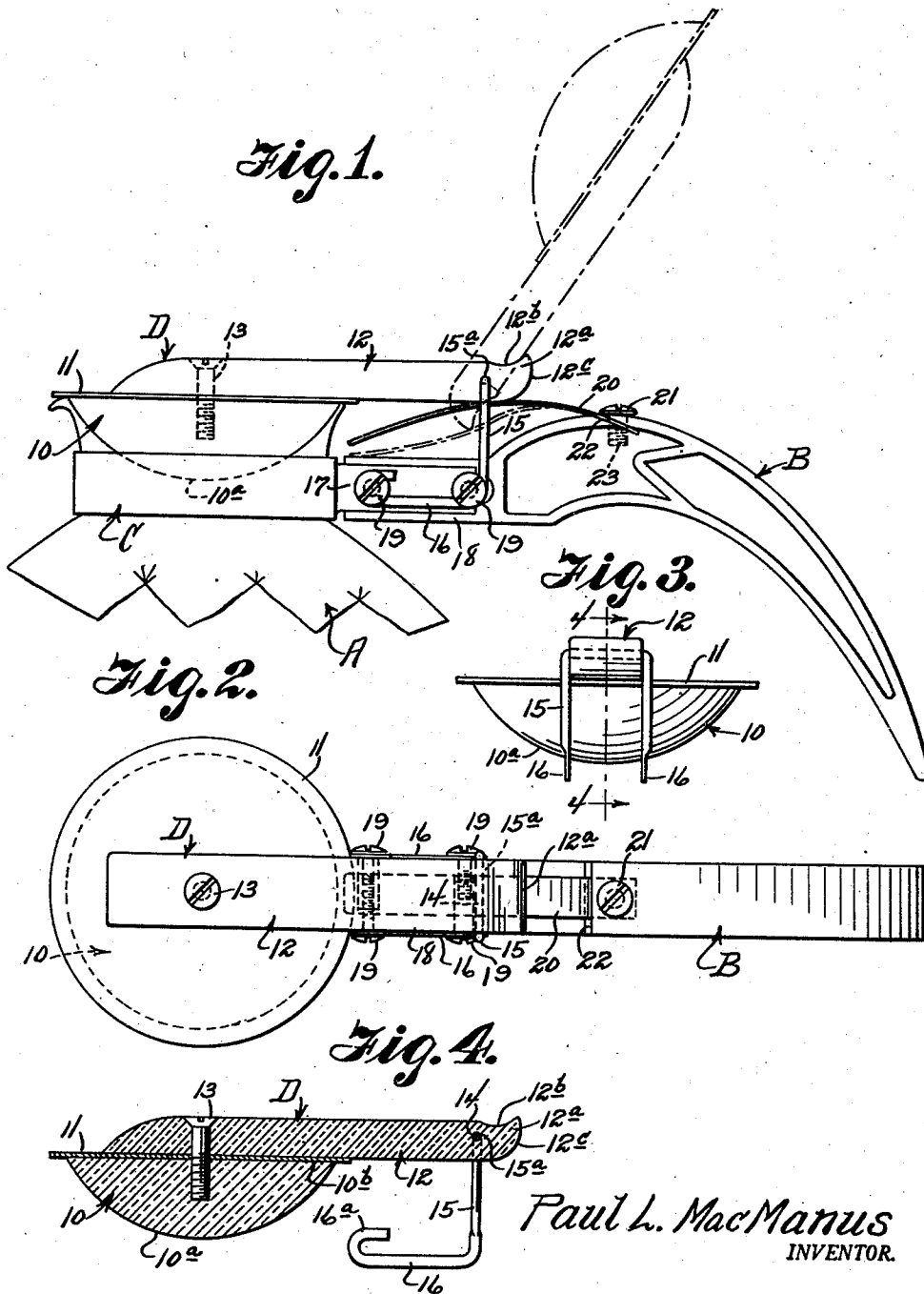
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PRESSURE CAP FOR DECANTER UNITS OF COFFEE-MAKERS

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PRESSURE CAP FOR DECANter UNITS OF
COFFEE MAKERS

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1 Claim. (Cl. 215—71)

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This invention relates to a pressure closure for a container, and more especially to a pressure closure for the decanter unit of a coffee-maker.

The primary object of the invention is the provision of a closure of the character stated which will embody a stopper adapted to seat so snugly within the mouth of the decanter unit as to effectively protect the contents of the unit from deleterious action of the atmosphere.

Another object of the invention is to provide a closure of the character stated which will embody means adapted, when the decanter unit is on a heater, to maintain the stopper fully seated until there is generated within the unit steam or vapor pressure above a predetermined degree, and to promptly return the stopper to seated position on the escape of the excess steam or vapor, whereby to enable the coffee to be maintained heated without exposing it to the atmosphere.

A still further object of the invention is to provide a closure of the character stated which will be adapted to be mounted on the decanter unit through the medium of the means by which the handle of the unit is secured to the unit.

With the foregoing and other objects in view, the nature of which will appear as the description proceeds, the invention resides in the construction, combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, wherein:

Figure 1 is a view in side elevation of a fragmentary portion of a decanter unit equipped with a closure constructed in accordance with my invention, the closure being shown in closed position by solid lines and in open position by broken lines.

Figure 2 is a top plan view.

Figure 3 is a view in rear elevation of the closure detached from the decanter unit, and

Figure 4 is a vertical sectional view taken on the plane indicated by the line 4—4 of Figure 3.

Referring in detail to the drawing, A designates a fragmentary portion of the decanter unit of a coffee-maker, B the handle of the decanter unit, and C the band by which the handle is secured to the decanter unit.

My improved closure which is generally designated D, comprises a stopper 10 having a convex lower side 10a which may weigh about 2 oz. and a flat upper side 10b, and a disk 11 of larger diameter than the upper side of the stopper 10 and arranged upon the said side of the stopper in concentric relation to the stopper. The lower side 10a of the stopper 10 is of such size and curvature as to fit snugly within and fully close the

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mouth of the decanter unit A. The projecting edge portion of the disk 11 rests upon the upper edge of the mouth of the decanter unit A when the stopper 10 is in seated position. An arm 12 extends diametrically across the upper side of the disk 11, and it, the disk and the stopper 10 are secured in assembled relation by a bolt 13. The arm 12 extends rearwardly beyond the stopper 10 and disk 11 and is provided at a point rearwardly of the stopper and disk with a pivot bearing 14.

The stopper 10 is pivotally mounted upon the decanter unit by a vertical bracket 15 of inverted U-form, the bight 15a of the bracket extending through the bearing opening of the arm 12 to effect the pivotal mounting of the stopper. The pivoting bracket 15 is provided with elongated base members 16 which are formed integrally therewith and which extend forwardly therefrom. The front ends of the base members 16 are provided with rearwardly facing loops 16a located at the upper sides of the base members. The sides of the pivot bracket 15, and the base members 16, lie at opposite sides of the ears 17 of the band C to and between which the forward end portion 18 of the handle B is secured by bolts 19. The lower ends of the sides of the pivot bracket 15 contact with the rear bolts 19, the base members 16 contact with the lower sides of the bolts, and the loops 16a of the base members embrace the front bolts, these parts being located between the ears 17 and the heads of the bolts 19.

A leaf spring 20 underlies, and contacts with, the lower side of the arm 12 rearwardly of the pivot of the arm. The leaf spring 20 has its rear end secured to the upper side of the handle B by a screw 21, the front end of the spring being free to enable the spring to flex during the opening or closing of the stopper 10. Since the tension exerted by the spring is designed to bear a relationship to the weight of the stopper 10 pressure generated by steam within the decanter will automatically lift the stopper to permit escape of steam, whereupon the stopper will again assume seating position.

That portion of the arm 12 extending rearwardly beyond the pivot 15a provides means by which the stopper 10 may be conveniently opened by the thumb of the hand grasping the handle B. The upper side of the arm extension 12a may be of any desired or required length to best adapt it for use in the opening of the stopper 10. The arm extension 12a is provided in its upper side with a thumb receiving recess 12b and its rear end is curved as at 12c.

To apply my improved closure to the decanter unit of a coffee-maker, it is only necessary to provide the handle B of the decanter unit with a slot 22 and a recess 23 for the reception of the rear end of the spring 20 and the bolt 21, respectively. After the spring 22 has been secured in place by the screw 21, the bolts 19 are loosened to permit the base members 16 of the pivot bracket 15 to be engaged therewith between their heads and the clamp ears 17. The closure is securely held in place by turning up the bolts 19. The spring 20 normally holds the stopper 10 in closed position by reason of its contact with the underside of the arm extension 12a rearwardly of the pivot 15a. When it is wished to open the stopper 10, preparatory to pouring the contents of the decanter unit, downward pressure is applied to the arm extension 12a by the thumb of the hand grasping the handle B. When the arm extension 12a is released, the stopper 10 is returned to its closed position by the spring 20. The spring 20 is also adapted to releasably maintain the stopper 10 in the opened position shown by broken lines in Figure 1. With the stopper 10 in this position, the decanter unit may be readily cleaned and used for the purpose of making coffee. When the stopper 10 is in fully opened position, the upper rear corner of the arm extension 12a contacts with the spring at a point below and forwardly of the pivot 15a.

From the foregoing, it should be understood that the closure may be easily and quickly applied to the decanter unit of a coffee-maker, that it will protect the contents of the decanter unit from the deleterious action of the atmosphere while permitting the escape therefrom of excess steam or vapor that may be generated within the unit when it is on the heater, and that the closure is simple and inexpensive.

What is claimed is:

The combination of a decanter unit having a mouth, a handle secured to the unit by bolts and

a band, a stopper adapted to fit within the mouth of the decanter unit, a pivot bracket having a pivot portion and base members which are secured to said handle by said bolts, an arm secured to the stopper and pivoted on said pivot portion, an extension on the arm extending rearwardly beyond the pivot portion to provide means by which the stopper may be moved into open position and a spring which has one end secured to the handle and the opposite end coacting with the extension of the arm to hold the stopper in closed or open position.

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