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W. M. FITZMEYER

2,198,698

BOTTLE WIPER

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Fig. 1.

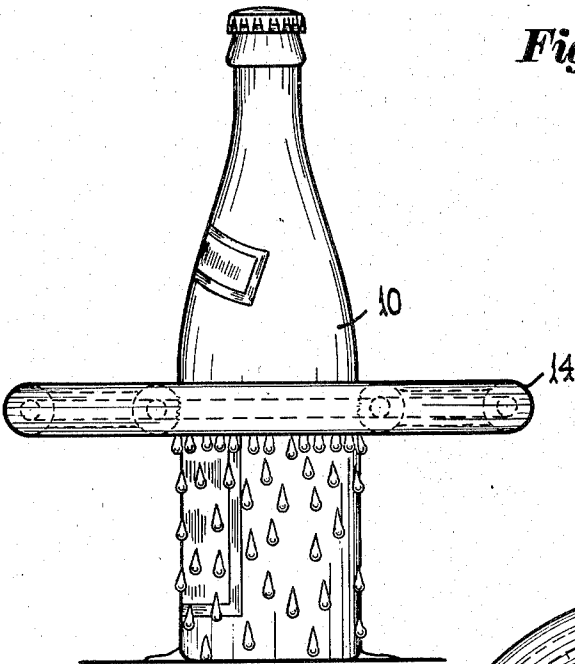


Fig. 2.

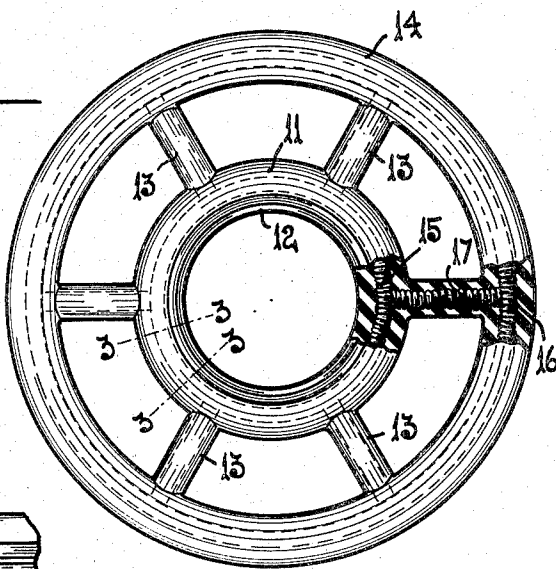
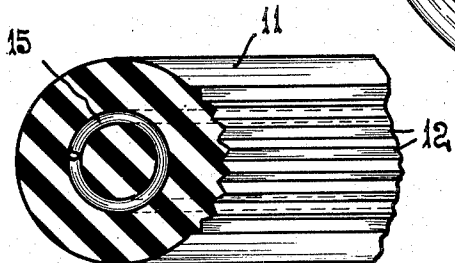


Fig. 3.



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BOTTLE WIPER

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3 Claims. (Cl. 15—210)

This invention relates to the cleaning art and more particularly to bottle wipers.

It is an object of the invention to provide a resilient wiper adapted to contract against the outer surfaces of bottles in a manner to compact wiper surfaces against and within depressions formed on the outer surfaces of bottles including those of imperfect circular contour provided during the manufacture or blowing of the bottles, whereby the bottle surfaces become wiped thoroughly and expeditiously and moisture removed therefrom.

Another object of the invention is to provide a device for the purpose stated which may be manufactured economically and which is durable and efficient in operation.

Other and further objects and advantages of the invention will be understood from the following detailed description thereof, reference being had to the accompanying drawing in which:

Figure 1 is a side elevation of a bottle and showing the new device applied thereto in a position of operation.

Figure 2 is a plan view of the new device, certain portions thereof showing in section.

Figure 3 is a sectional view of a portion thereof, the view being taken substantially between the line 3—3 of Figure 2.

As heretofore practiced in the art bottles have been immersed in ice water or the like for chilling the liquid contents thereof and upon serving a bottle to a customer for drinking directly from the bottle the moisture is first removed from the side walls of the bottle in order that said moisture does not impinge upon the clothing of the customer and for this purpose towels have been primarily used which are slow in operation. Also numerous expedients have been employed in lieu of towels which includes elongated devices of expensive construction and devices which do not thoroughly wipe the side walls of the bottles and the present invention contemplates the provision of a device for obviating the undesirable prior practices.

Referring now to the drawing for a more particular description 10 indicates a bottle, the side wall of which is substantially circular in cross section, said bottle being adapted to contain pop, beer or similar liquids.

The new device includes a medially disposed annulus 11 formed of rubber, the inner wall of which is provided with annularly disposed serrations 12 formed thereon for contact with the side wall of the bottle 10 as later explained.

A plurality of rubber spoke-portions 13 extend radially from the annulus 11 and are formed integral therewith, the outer ends of said spokes also being integral with an outwardly disposed ring 14.

The portions 11 to 14 inclusive are formed of rubber or an equivalent resilient material. As best shown in Figure 3 the annulus 11 is provided with an annular spring 15 embedded in a medial portion thereof. The ring 14 is provided with a similar spring 16, as best shown in Figure 2. Between the annular springs 15 and 16 a radial spring 17 extends through each of the spokes 13, said radially disposed springs 17 being secured at their opposite ends respectively to the springs 15 and 16, as best shown in Figure 2, the said springs all being of the contracting type for reinforcing the rubber portions of the device.

It will be understood that the device is formed of comparatively soft, pliable rubber and that the said spring 15 facilitates a contraction of the annulus 11 about the wall of a bottle and particularly the annularly disposed serrations 12. The spring 16 is preferably formed of stiffer wire than the spring 15, providing a greater degree of stiffness for the ring 14 whereby an operator may grasp the ring 14 between his fingers for passing the device over a bottle as shown in Figure 1, during which time the spring 15 causes the annular serrations 12 to snugly compact against the wall of the bottle and including walls which are of irregular circular contour or slightly oval in plan, and it will be understood that during a longitudinal movement of the annulus 11 with respect to the bottle that moisture collected on the side walls of bottles becomes scraped and freed therefrom as illustrated in Figure 1. Also the ring of the device may be rigidly clamped to a counter or the like and bottles passed through the annulus 11 for said purpose.

It is well known that rubber deteriorates from exposure to light and with age and at the time the annulus 11 becomes of less resiliency than initially that the said spring 17 cooperates to compact a deteriorated annulus 11 against bottle walls as above stated and provide a durable device for an extended period of usefulness.

From the foregoing description it is thought to be obvious that a bottle wiper constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that my invention is susceptible of some change and

modification without departing from the principles and spirit thereof and for this reason I do not wish it to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as claimed.

What is claimed is:

1. A bottle wiper comprising a rubber annulus, a rubber ring of greater diameter than said annulus and spaced apart rubber spokes radially disposed with respect to said annulus between the latter and said ring and connecting the annulus and ring.

2. A bottle wiper comprising a rubber annulus, a rubber ring of greater diameter than said annulus and spaced apart rubber spokes radially disposed with respect to said annulus between the latter and said ring and connecting the annulus and ring, a normally contracted spring embedded in said annulus, a normally contracted spring embedded in said ring, and a normally

contracted spring embedded in each spoke and having their opposite ends connected to the springs in the annulus and the ring.

3. A bottle wiper comprising a rubber annulus having serrations on its inner face, a rubber ring of greater diameter than said annulus and spaced outwardly therefrom, a plurality of spaced apart rubber spokes radially disposed with respect to said annulus between the latter and said ring and connecting the annulus and ring, a normally contracted spring embedded in said annulus for normally urging the serrations of the annulus into contact with the outer surface of a bottle, a normally contracted spring embedded in said ring and being of greater strength than the spring in said annulus, a normally contracted spring in each of said spokes and having their opposite ends connected to the springs in the annulus and the ring.

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