Sept. 7, 1943. J. R. EDDINS 2,328,627

EYE CUP

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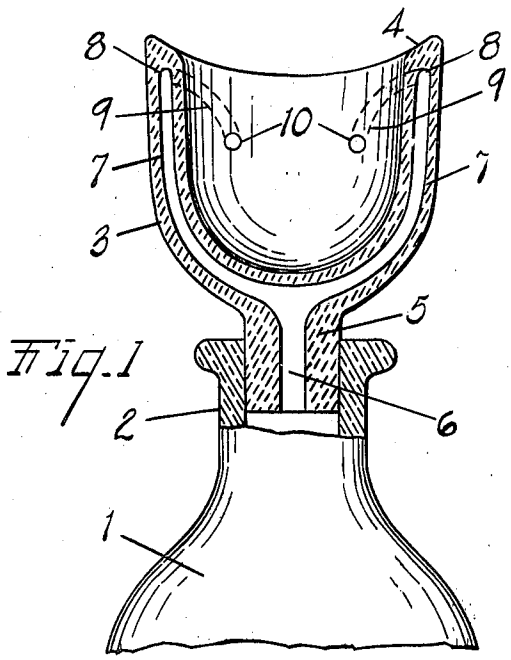

Fig. 1

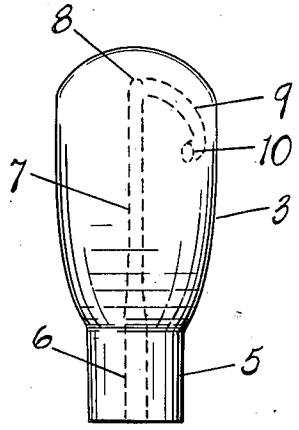

Fig. 2

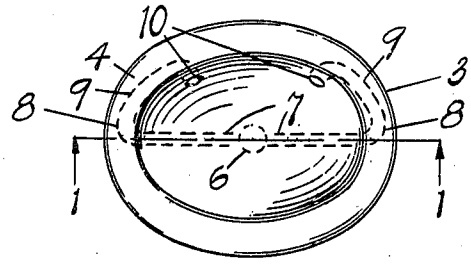

Fig. 3

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EYECUP

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7 Claims. (Cl. 128—249)

This invention relates to improvements in eye cups.

The main objects of this invention are:

First, to provide an eye cup adapted for use in combination with a bottle or like container whereby a closure is provided for the container and the cup is adapted for immediate use merely by positioning and tilting the bottle so that the liquid therefrom will flow into the cup, means being provided for preventing the used liquid from returning to the container.

Second, to provide a structure having these advantages which is very convenient to use and easily kept in a sanitary condition.

Third, to provide an eye cup adapted as a stopper which may be used on bottles or like containers to charge the cup merely by positioning the cup and inverting or tilting the container, and the contents of the cup may be readily discharged and the cup repeatedly used for the full capacity of the container.

Objects relating to details and economies of the invention will appear from the description to follow. The invention is defined and pointed out in the claims.

A preferred embodiment of the invention is illustrated in the accompanying drawing, in which:

Fig. 1 is a vertical section on line 1—1 of Fig. 3 of my improved cup in combination with a glass bottle, a fragment only of the upper portion of the bottle being illustrated.

Fig. 2 is a side elevation of the cup removed from the container.

Fig. 3 is a plan view.

In the embodiment of my invention illustrated, 1 represents a bottle adapted to contain an eye wash or eye treating fluid having the usual neck 2. I have illustrated my invention as adapted to a bottle as eye wash preparations are commonly supplied in bottles or may be prepared and conveniently stored in bottles provided with the usual cork.

My improved eye cup 3 has a suitably conformed rim 4 having high and low portions adapted for application as is customary with eye cups. This eye cup is provided with a stem 5 constituting a stopper for the bottle or container 2. This stem has a longitudinal passage 6 which is extended into branches or delivery passages 7, the outer ends 8 of which are adjacent the top of high portions of the rim of the cup. These passages have return directed delivery portions 9 which open at 10 into the eye cup at points substantially below low portions of the rim of the cup.

With the parts thus arranged, when the cup is assembled with the container, as 1, and applied to the eye and inverted, the fluid will flow into the cup, completely filling it. A plurality of passages are preferably provided to insure more prompt filling of the cup although a single passage is effective. The plurality of passages, however, allows the rim of the cup being held in close sealing relation so that air displaced by the incoming liquid through one delivery passage escapes into the container through the other.

When the eye treatment is completed, the eye cup and container is swung in upright position and the cup removed from the eye when the contents of the cup can be poured out without the used liquid returning to the container and the cup may be readily wiped or cleaned.

While I illustrate in the accompanying drawing a bottle as a container, it will be understood that special types of containers may be employed if desired.

I have not illustrated other modifications or adaptations of my invention which I contemplate as it is believed that this disclosure will enable those skilled in the art to embody or adapt my invention as may be desired.

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

1. The combination with a bottle, of an eye cup having a stem constituting a stopper for the bottle and provided with a longitudinal passage, the wall of the cup having delivery passages therein communicating with said passage in said stem, the outer ends of said delivery passages being adjacent the rim of the cup and having rearwardly directed return portions opening into the cup at points substantially spaced from the rim of the cup.

2. The combination with a bottle, of an eye cup having a stem constituting a stopper for the bottle, the cup having a delivery passage therein opening at the inner end of the stem and extending to a point adjacent the rim of the cup and having a return portion opening into the cup at a point substantially spaced from the rim of the cup to provide a fluid return trap.

3. The combination with a bottle, of an eye cup having a stem constituting a stopper for the bottle, the cup having a delivery passage therein opening at the inner end of the stem and having a return directed discharge portion opening into the cup at a point spaced from the rim of the cup.

4. The combination with a fluid container, of an eye cup having a rim with high and low portions and a stem constituting a stopper for the container and provided with a passage opening at the end thereof into the container and extending to a point adjacent the top of a high portion of the rim and having a return portion opening to the cup chamber at a point substantially below a low portion of the rim of the cup.

5. An eye cup having a rim with high and low

portions and a stem adapted as a stopper for a bottle and provided with a passage opening at the inner end of the stem, the wall of the cup having delivery passages therein communicating with said passage in said stem and the outer ends of said delivery passages being adjacent the top of high portions of the rim of the cup, the passages having return portions opening into the cup at points substantially below low portions of the rim of the cup.

6. An eye cup having a stem adapted as a stopper for a bottle and provided with a passage opening at the inner end of the stem, the wall of the cup having a delivery passage therein communicating with said passage in said stem and the outer end of said delivery passage being adjacent the rim of the cup, the passage having a return portion opening into the cup at a point substantially spaced from the rim of the cup.

7. The combination with a fluid container, of an eye cup mounted thereon and having a passage opening into the fluid container and extending to a point adjacent the rim of the cup, said passage having a return directed discharge portion opening into the cup at a point substantially spaced from the rim of the cup.

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