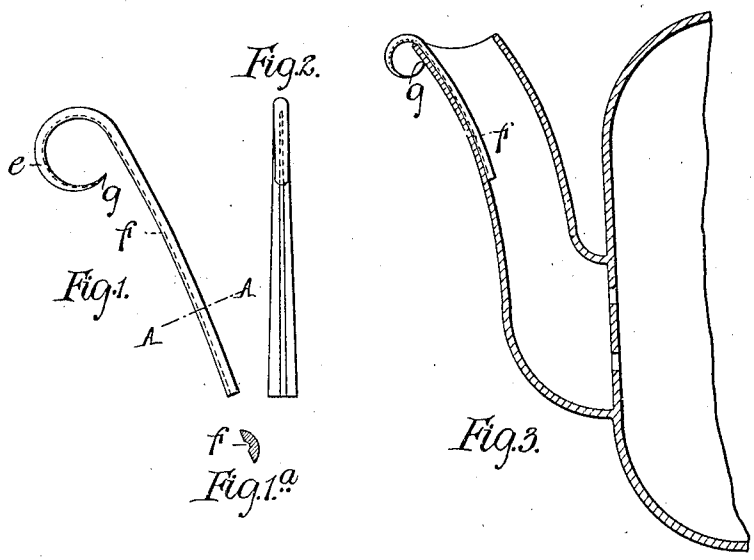
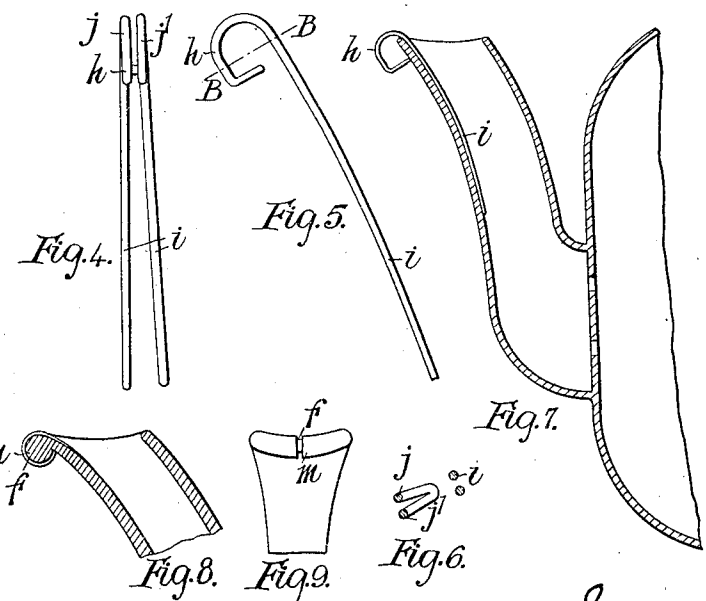
No. 843,443. PATENTED FEB. 5, 1907.

W. COX.

DRIPLESS SPOUT FOR TEAPOTS, &c.

APPLICATION FILED AUG. 6, 1906.





Witnesses:-

Gustave R. Thompson.

Inventor:

William Cox.

by

Frederick A. Holton. Munro, Cameron, Lewis & Mosier

Attys.

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM COX, OF LONDON, ENGLAND.

DRIPLESS SPOUT FOR TEAPOTS, &c.

No. 843,443. Specification of Letters Patent. Patented Feb. 5, 1907.

Application filed August 6, 1906. Serial No. 329,447.

To all whom it may concern:

Be it known that I, WILLIAM COX, a subject of the King of Great Britain and Ireland, and residing at 31 Dermody road, Lewisham, London, England, have invented a certain new and useful Dripless Spout for Teapots and the Like, of which the following is a specification.

This invention relates to improvements in these capillary devices employed with teapot-spouts, bottles, and the like, with the object of preventing a drop of water or other fluid from rolling down the outside of the containing vessel.

The object of the present invention is to provide an improved device of this type applicable to teapots and the like.

The invention consists in providing a capillary passage communicating with the interior of the vessel and with the exterior of the vessel at a point below the pouring edge, such that the drop remaining after pouring gravitates into the capillary passage.

The invention also comprises the improved forms of this device hereinafter described, and illustrated in the accompanying drawings, in which—

Figures 1 and 2 are side and front elevations, respectively, of a claw-shaped piece of metal for attachment to the spout or lip of a liquid-container, Fig. 1ª being a section on the line A A of Fig. 1. Fig. 3 is a sectional side elevation of a spout, showing a metal claw-piece attached thereto. Figs. 4 and 5 are front and side elevations, respectively, of a wire beak for attachment to the spout. Fig. 6 is a section on the line B B of Fig. 5. Fig. 7 is a sectional view of the spout, showing the beak, according to Figs. 4 and 5, attached thereto. Figs. 8 and 9 are section and front views, respectively, of a form of the invention in which the capillary groove is formed in the spout itself.

An essential to this invention is that from the point where the capillary-passage meets the exterior of the spout the capillary passage should sink below a horizontal line drawn through its point of contact with the exterior of the spout. This is essential, so that the drop gravitates into the capillary passage, and its weight thus assists instead of counteracts the capillarity.

According to one form I provide a suitable attachment to the vessel, as shown in Figs. 1 and 2, in which a claw-like or hooked piece of metal *e*, having on its inner curve a capillary groove *f* or a slit, is slipped on the spout, as shown in Fig. 3. The claw-like piece is placed over the edge of the spout or lip and pressed down, its point or hooked end *g* taking a position and gripping on the under side of the lip of the spout, and thereby catching the drop of liquid which travels to the end *g* and then flows by means of the capillary passage from the point *g* down the spout into the vessel when the vessel is brought to the upright position or returned to its usual position. It will of course be understood that if the capillary film or column of fluid be severed, say, at or near the top of the lip or spout the drop will not be returned down the inside of the spout. It will be seen that the drop gravitates into the capillary passage.

Instead of forming the capillary device in the manner above described it may be made of wire bent and arranged for capillary action to take place in the manner hereinbefore referred to. The wire may be bent to the form shown in Figs. 4 and 5 and passed down the spout, being held in position by the spring-pressure of the wire bearing against the spout. The wire is bent double to form a hook or beak *h* in side elevation, the legs *i i* being spread slightly to a narrow **V** form in front elevation. The portions *j* and *j'* of the wire forming the hook are close together, so that capillarity may take place when the wire is wetted during the pouring out of the liquid, the capillary passage starting from a point in the exterior of the spout below the pouring edge. The mode of operation of this device is practically the same as that described with reference to Figs. 1 and 2; but I find in practice that its operation is better than the claw-shaped device, and it is the best form at present known to me. In all cases, however, the beak should fall below a horizontal line drawn from the point of contact with the exterior of the spout, so as to obtain the effect aimed at in this invention—namely, to have gravity assisting the capillarity.

It will be manifest that the invention may be carried out in various ways other than those herein described, and I do not limit myself to the employment only of the forms described. Further, the capillary passage, according to this invention, may be formed in the spout itself, thus dispensing with a separate attachment. Such a form is illustrated

in Figs. 8 and 9, where the spout is formed with a lip or enlarged edge *m*, in which is provided a curved capillary groove *f*.

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

1. A pouring-spout, a capillary passage associated therewith into which the drop left after pouring gravitates, said passage leading from a point outside the pouring-spout below the pouring edge to the interior of the spout.

2. A teapot-spout having a member provided with a capillary passage leading from a point below the pouring edge to the interior of the spout said passage being arranged to fall below a horizontal line drawn from its point of contact with the exterior of the spout, substantially as described.

3. In combination with a pouring-spout a double-wire beak provided with a hooked portion arranged near the pouring edge and forming a capillary passage into which the drop of liquid left after pouring gravitates and by capillary action is drawn into the interior of the pouring-receptacle, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM COX.

Witnesses:

ALBERT E. PARKER,

P. S. H. ALEXANDER.