June 4, 1940. J. B. ENGLERT 2,203,133

DETACHABLE SPOUT FOR CONTAINERS

Filed Jan. 3, 1938 2 Sheets-Sheet 1

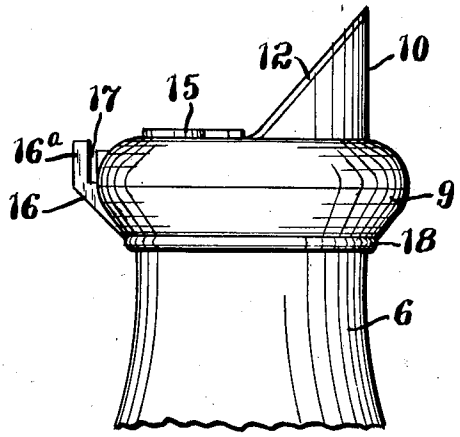


FIG 1

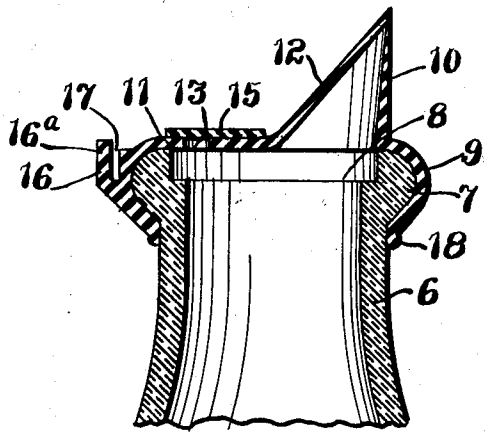


FIG 2

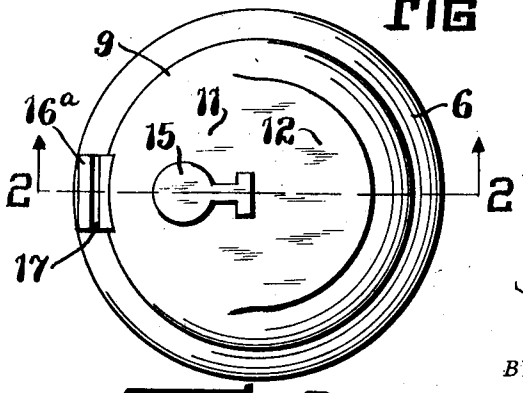


FIG 3

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DETACHABLE SPOUT FOR CONTAINERS

Filed Jan. 3, 1938 2 Sheets-Sheet 2

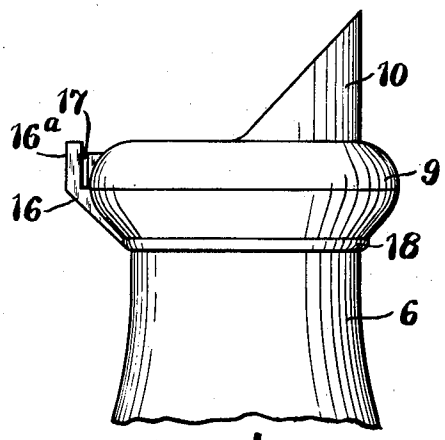


FIG 4

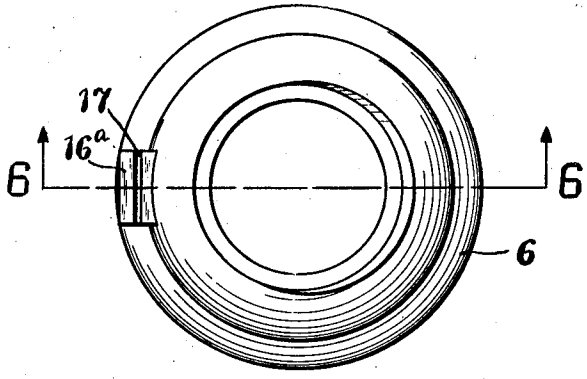


FIG 5

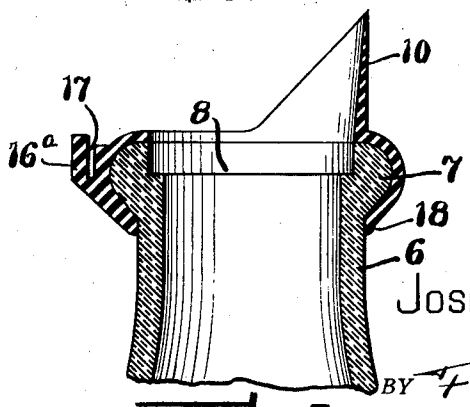


FIG 6

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Patented June 4, 1940 2,203,133

UNITED STATES PATENT OFFICE

2,203,133

DETACHABLE SPOUT FOR CONTAINERS

Joseph B. Englert, Akron, Ohio

Application January 3, 1938, Serial No. 182,988

1 Claim. (Cl. 215—74)

This invention relates to improvements in detachable spouts for containers and while intended for use generally on any form of container to which it may be advantageously applied, it is particularly applicable as an improvement in spouts for milk bottles in which connection it will be illustrated in the drawing and hereinafter described.

Objects of the invention are to provide a spout of simple, durable construction, which may be manufactured at a low cost, which will fit bottles or other containers of different shapes and sizes; which may be quickly and conveniently positioned on a container or removed therefrom; which may be easily cleaned or sterilized and which will be very efficient in use.

Other objects are to provide a closure member for bottles and other containers which will be composed of one piece of elastic material arranged to fit snugly about the mouth of a bottle or other container, and which is provided with a self-closing spout arranged to permit the pouring of liquid from the container without spilling or otherwise wasting the liquid.

An additional object is to provide a spout composed of one piece of elastic rubber, with a lug forming a handle portion and arranged to hold a bottle cap during the pouring operation.

The above and additional objects are attained by the novel construction hereinafter described with reference to the accompanying drawings wherein there is shown a preferred form of the invention, it being understood that the invention may be adapted in various ways to various forms of containers and that changes and modifications may be made which come within the scope of the appended claim.

In the drawings:

Figure 1 is a side elevational view showing the upper portion of a milk bottle with a closure member constructed in accordance with this invention operatively positioned thereon,

Figure 2 is a central, vertical view of same taken as indicated by the lines 2—2 of Figure 3,

Figure 3 is a top plan view of same,

Figure 4 is a side elevational view of the upper portion of a container showing an adaptation of the invention in which the top wall is omitted.

Figure 5 is a top plan view of same,

Figure 6 is a vertical, sectional view taken as indicated by the lines 6—6 of Figure 5.

Proceeding now to a detailed description of the invention with reference to the particular adaptation thereof illustrated in the drawing, the numeral 6 is used generally to denote a bottle or other container. The bottle 6 is provided around the top thereof with the usual flange 7 which in the particular bottle shown in the drawings is of rounded cross sectional shape. The mouth of the bottle 6 is enlarged at the outer end thereof to provide a shoulder 8 which supports the closure cap ordinarily used in covering the mouth of the bottle.

A cap constructed in accordance with this invention is molded or otherwise formed of one piece of rubber and is provided with a base portion 9 which is in the form of a band adapted to fit around the flange 7. The band 9 is preferably bulged outwardly to conform in shape to the flange 7 and is normally smaller than the flange 7 on which it is to be positioned. A spout 10 projects upwardly from one side of the flange 7.

The spout 10 conforms in shape to a portion of a wall of a hollow cylinder and is arranged with the upper edge thereof inclined downwardly toward the central portion of the bottle.

The numeral 11 denotes a top wall which is a continuation of the base 9. A portion of the top wall 11 extends straight across the mouth of the bottle and is continued upwardly to form the inclined flap 12. The flap 12 is formed to be normally positioned against the upper end of the spout 10, whereby the elasticity of the material of which the cap is composed will normally hold the flap 12 in a closed position. The flat top portion 11 is provided with an aperture 13.

The numeral 15 denotes a flap which is composed of elastic rubber and is secured to the top wall 11 at a point spaced from the aperture 13 with the free end of the flap covering the aperture 13 whereby air will be admitted to a bottle to cause a smooth flow of liquid from the spout 10. The flap 15 covers the aperture when the container is in an upright position to exclude dirt, dust or other objectionable substances from entering the said aperture.

In the modification of the invention shown in Figures 4 and 5 and 6, the top wall 11 and the lid 12 are omitted thereby forming a detachable spout which may be positioned on a milk bottle or similar container without interfering with the use of the ordinary closure disk.

The ring 9 is provided on the outer side thereof at a point directly opposite the spout 10 with an integrally formed lug 16 which projects radially therefrom. The lug 16 is provided with a vertical slot 17 for receiving and holding a disk ordinarily used as a closure member. The portion 16a of the lug 16 projects upwardly to form a handle

which may be used in placing the spout on a bottle and in removing the same therefrom.

The ring 9 is preferably provided with an outwardly projecting annular bead 18 on the lower edge thereof which is formed thereon to strengthen the lower edge thereof and to provide means for more securely holding the ring in an operative position on a container.

In use, the base portion 9 is stretched over the flange 7 of a bottle or other container with the spout 10 in the position shown in the drawings. As the structure herein disclosed is composed entirely of elastic rubber, it will be securely held in position on the container and will provide efficient means through which liquid may be poured from the bottle without spilling.

The flap 12 being formed of elastic rubber will be forced open by the weight of the liquid to be poured. The flap 15 is in a position where it can readily be manipulated to admit air to the bottle during the pouring operation. If desired, pressure may be applied to the lid 11 or to the lower portion of the flap 15 to move the same away from the spout 10 and enlarge the pouring orifice.

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

In a cover and spout for containers, a structure composed of one piece of elastic rubber, said structure having an annular base formed to be stretched over the mouth end of a container, an upright spout projecting from the upper side thereof, and positioned around one lateral side thereof, and an integrally formed top wall on said base, said top wall extending over said spout in the form of a flap.

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