Sept. 10, 1929. M. S. LOWER 1,728,161

BULB FOR SYRINGES

Filed Jan. 31, 1927

Fig. 1.

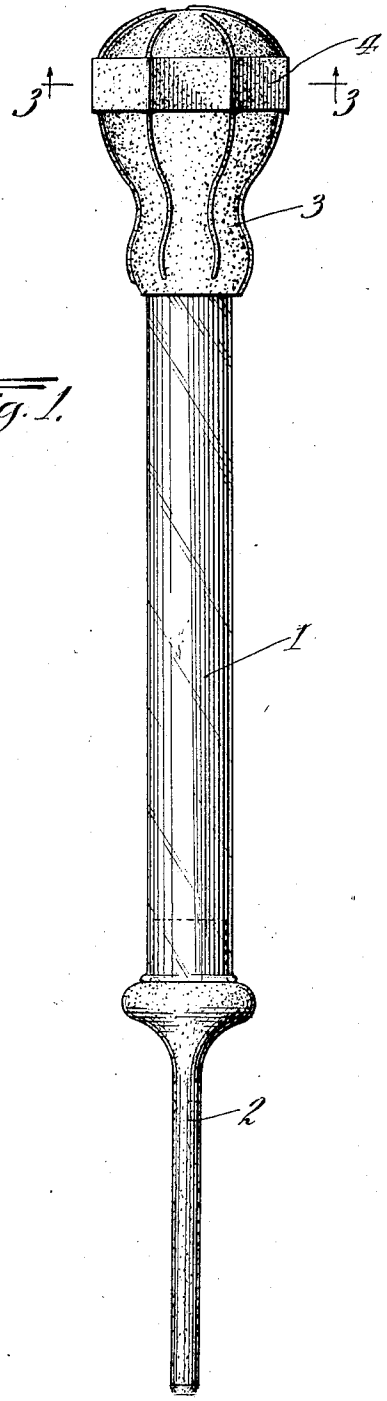


Fig. 2.

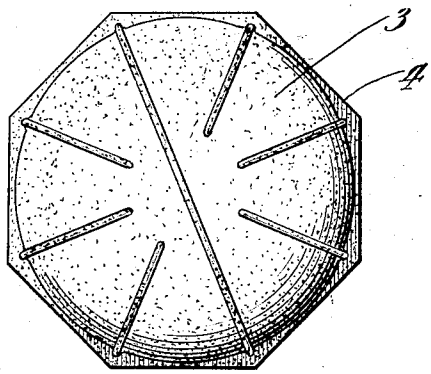
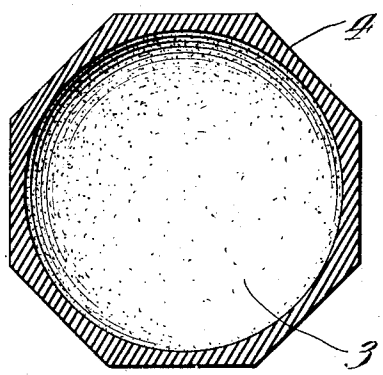


Fig. 3.



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Patented Sept. 10, 1929. 1,728,161

UNITED STATES PATENT OFFICE.

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BULB FOR SYRINGES.

Application filed January 31, 1927. Serial No. 165,024.

The present invention relates particularly to rubber bulbs for hydrometer syringes or the like, and has for its object so to construct such bulbs that they will not roll when laid on a flat surface and, further, will be stiffer or more rigid than ordinary bulbs of the same size and containing approximately the same amount of rubber.

The various features of novelty whereby my invention is characterized will hereinafter be pointed out with particularity in the claims; but, for a full understanding of my invention and of its objects and advantages, reference may be had to the following detailed description taken in connection with the accompanying drawing, wherein:

Figure 1 is an elevation of a hydrometer syringe having thereon a bulb constructed in accordance with my invention; Fig. 2 is a view, on a larger scale than Fig. 1, of the closed end of the bulb; and Fig. 3 is a section taken approximately on line 3—3 of Fig. 1, but on the same scale as Fig. 2.

Referring to the drawing, 1 represents the glass barrel and 2 the nipple or nozzle of a syringe. 3 is a bulb attached to the barrel at the opposite end from that at which the nozzle is located. If all of these parts are generally circular in cross-section, the syringe will roll when laid on a horizontal or a slightly inclined surface and may fall to the floor and be damaged.

In accordance with my invention I so construct the bulb that a band or zone extending around the equator thereof will be non-circular in outline. Then, when the bulb is laid down it will not roll as does a simple round bulb.

Bulbs of this general nature must possess a certain degree of rigidity, this being brought about by a proper thickness of wall. I have found that for the same thickness of wall throughout the body of the bulb as in a simple round bulb, I am able to secure greater rigidity by making the non-circular equatorial zone in the form of a series of connected flat faces that give to this zone externally a polygonal shape. Such a type of zone is indicated at 4 in the drawing. The interior of the bulb may be left circular, all of the excess of material being placed on the outside of the bulb. The thickest points in the equatorial zone are at the apexes of the polygon, whereas the thickness of wall midway two apexes may be the same as at other points in the body of the bulb outside of the reinforced zone. In this way, the bulb is reinforced by the addition of very little material in excess of that required to make a plain bulb having the same thickness of wall, but it will be much more rigid and self-supporting than the plain bulb, and will not roll when laid down.

While I have illustrated and described with particularity only a single preferred form of my invention, I do not desire to be limited to the exact structural details thus illustrated and described; but intend to cover all forms and arrangements which come within the definitions of my invention constituting the appended claims.

I claim:

1. A bulb for a syringe or the like generally circular in cross-section having at the equator an external zone in the form of a polygon whose sides are comparatively long to form flat bases on which the bulb may rest when laid on its side.

2. A bulb for a syringe or the like generally circular in cross-section both internally and externally, there being an excess of material at the equator and on the outer side of the bulb producing an external zone polygonal in shape.

In testimony whereof, I sign this specification.

MELVIN S. LOWER.