

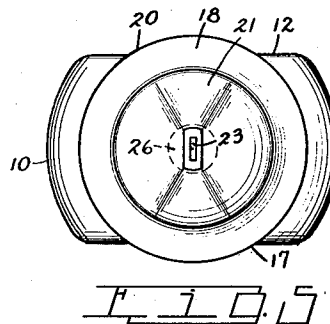
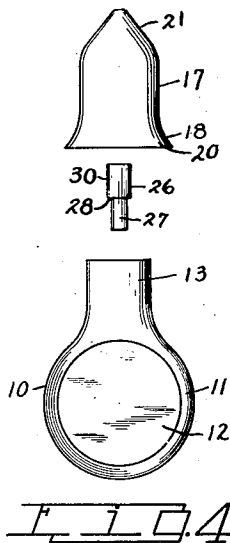
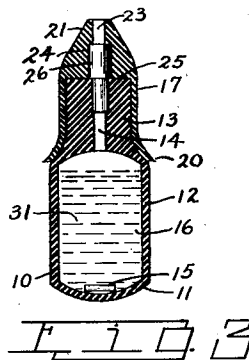
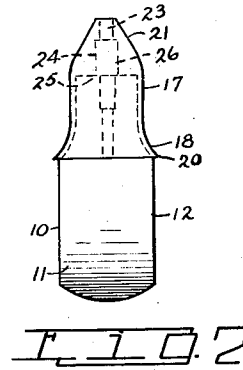
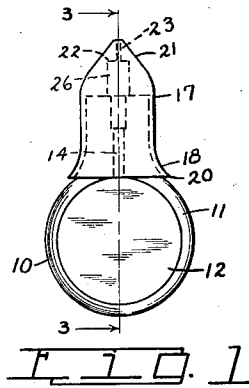
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2,255,833

POCKET SYRINGE

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2,255,833

POCKET SYRINGE

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2 Claims. (Cl. 128—232)

(Granted under the act of March 3, 1883, as amended April 30, 1928; 370 O. G. 757)

This invention relates to a pocket syringe, and has for an object to provide an improved pocket syringe of the type generally shown in U. S. Patents 991,022 and 1,490,966, but having advantages over the devices of these patents in economy of construction and simplicity of use.

A further object of this invention is to provide an inexpensive pocket syringe which can be easily carried and is of the type that it may be carried in the pocket when the syringe is already filled with the antiseptic liquid without danger of leakage, irrespective of the position it may assume in the pocket, and furthermore, may easily have a new antiseptic solution made therein by dropping a soluble capsule containing a concentrated antiseptic therein and then filling the syringe with water so as to dissolve the capsule and make the syringe ready for use, the antiseptic capsule being of a type that may be easily carried in the pocket in a small pill box.

A further object of this invention is to thus provide a pocket syringe having a flattened nozzle, small in size yet capable of providing a number of medicated injections whenever desired. Thus when used as a nostril, ear or meatus syringe and it is necessary in the treatment that a number of applications be applied to the nostril, ear, meatus or other orifices of the body, it is possible for the patient to carry a pill box of antiseptic capsules and the pocket syringe of this invention, whereby he may easily carry a day's or even a week's supply in his pocket, available for use whenever he can get access to water, such as at any drinking fountain, or the like.

With the foregoing and other objects in view, the invention consists in the construction, combination and arrangement of parts hereinafter described and illustrated in the drawing, in which,

Fig. 1 is an elevational view of the pocket syringe of this invention;

Fig. 2 is an end elevation of Fig. 1;

Fig. 3 is a sectional view on line 3—3 of Fig. 1;

Fig. 4 is an exploded view of several parts of the syringe; and

Fig. 5 is an enlarged top plan view of Fig. 1.

There is shown at 10 the pocket syringe of this invention. This syringe 10 includes a bulb 11 which, as shown in Figs. 1 and 3, is provided with flattened sides 12 and has a thickened tip 13 through which extends an opening 14 of sufficient diameter for medicated or antiseptic soluble capsule 15 to pass therethrough into the hollow body 16 of the bulb 11. The bulb 11 and its thickened tip 13 are made of soft, flexible

rubber, the thickened tip 13 having an external diameter slightly less than the thickness of the bulb 11 between its flattened side walls 12. A cap 17, made of hard rubber or other suitable plastic material, is provided with a skirt 18 having an outwardly flared edge 20, the internal diameter of the skirt 18 being just slightly less than the external diameter of the thickened tip 13 of bulb 11. The cap 17 terminates in a somewhat flattened conical nozzle 21 leading to a centrally extending counterbored aperture 22. The small bore 23 of the aperture 22 at the outer point of the cap 17 is somewhat oval shaped and the large bore extends from a point about halfway, more or less, between the outer tip of the conical nozzle 21 and its inner wall 25.

An aluminum sealing pin 26 has a small cylindrical end 27 of a diameter slightly larger than the internal diameter of the bulb aperture 14, so that while the cap 17 is removed from the bulb tip 13 the pin 26 may have its thin cylindrical end 27 inserted in the tip aperture 14 up to the pin shoulder 28 to thus seal the bulb 11 and be held in sealing position by the resiliency of the bulb tip 13. The larger or handle end 30 of the aluminum pin 26 is of such a diameter that it may fit easily within the counterbore opening 24 in cap 17 so that the cap 17 may be placed thereover and be retained in assembled position for carrying purposes by the resiliency of the bulb tip 13.

In operation, as thus described, the syringe 10 may be carried in a garment pocket or handbag, either empty or already filled with the liquid 31. To make it ready for use, the cap 17 is temporarily removed, allowing the sealing pin 26 to be withdrawn from the bulb tip 13, and then the nozzle cap 17 is replaced, as shown in Figs. 1 and 2, making the syringe ready for immediate use, the nozzle tip 21 being placed in the nostril, the ear, meatus, or other body orifice, and the liquid inserted therein by squeezing the sides of the bulb 11, it being noted that the flattened shape of the nozzle tip 21 and of the opening 23 make it more efficient in use.

If the syringe has just been emptied, it may be refilled by dropping another antiseptic or medicated cylinder 15 through the bulb tip aperture 14 into the hollow portion 16 of the bulb 11. Then by squeezing the sides of bulb 11 and inserting the bulb tip 13 into a suitable supply of water, the bulb 16 may be filled with water to dissolve medicated cylinder 15, making the syringe ready for use within a few minutes; or if the user wishes to carry the filled syringe

in his pocket for several hours before using, he may prepare said syringe by inserting the sealing pin 23 and replacing nozzle cap 17.

Other modifications and changes in the proportions and arrangements of the parts may be made by those skilled in the art, without departing from the nature of this invention, within the scope of what is hereinafter claimed.

The invention described herein may be manufactured and/or used by or for the Government of the United States of America for governmental purposes without the payment of any royalties thereon or therefor.

Having thus set forth and disclosed the nature of this invention, what is claimed is:

1. A pocket syringe comprising a bulb body and a bulb tip of compressible material, said bulb tip having a nozzle aperture extending therethrough, an apertured nozzle cap and an extending skirt on said nozzle cap, said nozzle cap and skirt being of relatively non-compressible material, the internal opening within said nozzle cap skirt being slightly less than the outside of the compressible bulb tip, whereby to removably hold said nozzle in operative position on said bulb tip, and a

sealing pin having a small sealing end of a diameter to fit snugly within said bulb tip, the aperture through said nozzle cap being counterbored and having its small end at the nozzle tip and the large end within said cap to fit easily over a large handle end of said sealing pin.

2. A pocket syringe comprising a bulb body and a bulb tip of compressible material, said bulb tip having a nozzle aperture extending there-through, an apertured nozzle cap comprising a conical nozzle and an extending hollow flared skirt on said nozzle cap, said nozzle cap being of relatively non-compressible material, the internal opening within said nozzle cap skirt being slightly less than the outside of the compressible bulb tip, whereby to removably hold said nozzle in operative position on said bulb tip, a sealing pin having a small sealing end of a diameter to fit snugly within said bulb tip, the aperture through said nozzle cap being counterbored and having its small end at the nozzle tip and the large end within said cap to fit easily over the large end of said sealing pin.

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