

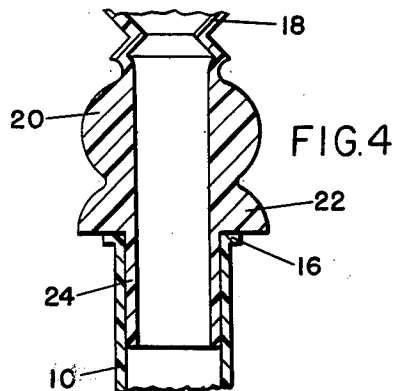
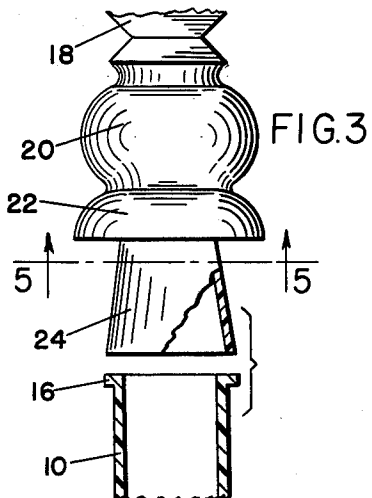
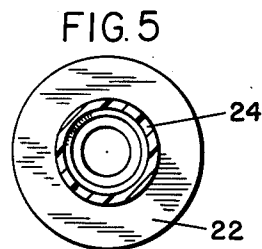
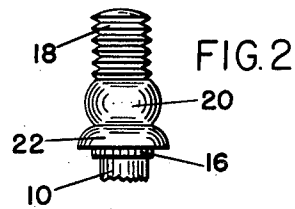
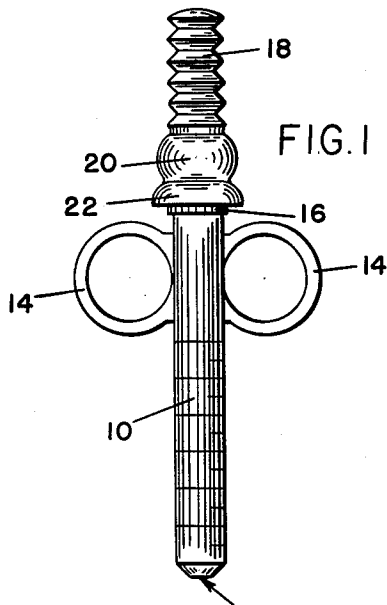
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MEDICINE DROPPER CONSTRUCTION

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1

3,124,171

MEDICINE DROPPER CONSTRUCTION

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2 Claims. (Cl. 141—26)

This invention relates to a new and improved medicine dropper or the like, and the principal object of the invention resides in the provision of a simple molded plastic device which is easily operated to provide a measured quantity of a medicine or other material in a syringe-like device including fingerholds, one at each side of a narrow elongated tubular container and having attached thereto at the end adjacent the fingerholds a bellows-like member which upon being compressed and then released, causes fluid material to be sucked into the container, and including a special new and improved leakproof connection between the bellows member and the tubular container.

Another object of the invention includes the provision of a two-part molded plastic medicine dropper or the like device, one part being a hollow elongated container portion having fingerholds integrally mounted thereon adjacent one end and the other member being a flexible bellows-like member having a special new and improved leakproof connection for said container.

The invention further relates to arrangements and combinations of parts which will be hereinafter described and more particularly set forth in the appended claims.

Reference is to be had to the accompanying drawings, in which

FIG. 1 is a view in elevation illustrating the device;

FIG. 2 is a view similar to FIG. 1, parts being broken away, and illustrating the bellows in contracted position preparatory to sucking in the material;

FIG. 3 is an enlarged view partly in section illustrating the construction of the leakproof connection;

FIG. 4 is a view in section illustrating the connection with the parts secured together, and

FIG. 5 is a section on line 5—5 of FIG. 3.

In carrying out the present invention, it is to be noted that the device is made in two main parts namely, (1) a tubular container portion and (2) a pump portion. One of these parts is a hollow cylindrical plastic tube-like member 10 which has an opening at one end at 12, the opening being smaller than the diameter of the tube. The tube may be marked in any way desired to show the dosage which enters at the opening 12. The opposite end of the tube is provided with a pair of integrally molded and diametrically positioned generally circular fingerholds 14, 14 through which the index and next adjacent finger are to be inserted in the operation of the device, as in a hypodermic syringe.

Mounted at the opposite end 16 of tube 10 from opening 12 there is a soft, flexible, hollow plastic bellows member 18, which when compressed by the thumb with the fingers in the openings 14, 14 in the FIG. 2 position, air is expelled through the cylindrical member 10 and upon release of the bellows the inherent resiliency of the material tends to straighten it out, causing air to flow back into the tube, or if the lower end of the container portion

2

10 is in a medicine bottle, bowl of fluid or the like, such fluid material is sucked up into the tube.

When the correct dosage has been provided in the tubular member 10, then the bellows is used to expel such material into the mouth of the patient.

The container portion 10 and the fingerholds 14 are molded in one piece and may be substantially rigid. The end at 16 is open as perhaps best shown in FIG. 3 and the bellows is provided with a leakproof connection to be inserted into and held within the open end 16 of the tube. This connection is shown in FIGS. 3 and 4, and it is to be noted that the bellows in this case is mounted upon a more rigid or thicker portion 20 which may be provided with ornamentation or the like and also it has a flaring skirt 22 providing at its ends a shoulder which covers the tube 10 at the open end 16 as shown in FIGS. 1 and 2.

Integral with skirt 22 and depending therefrom there is a flared skirt-like member 24 and this is also flexible more or less in the manner of the bellows 18 even though the parts 18, 20, 22 and 24 are all molded in one piece.

By making the skirt 24 flaring as clearly shown in FIG. 3, and then by inserting it and cementing it in the open end of the tube at 16 as shown in FIG. 4, an extremely tight leakproof connection is provided with the natural resiliency of the skirt 24 always straining outwardly against the internal surface of the wall of the container 10 so as to maintain the parts in leakproof condition.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:

1. A two part molded plastic medicine dropper, one part comprising a pump member and the other comprising a rigid tubular medicine container member open at each end and attachable at one end to the pump member and adapted to discharge medicine through the other end; said pump member comprising a flexible bellows member having a relatively rigid base portion secured thereto and having a flaring skirt portion beyond the base portion for attachment to the container member, said bellows members, base portion, and skirt portion being integral, and said flaring skirt portion being adapted to snugly fit within the adjacent end of the tubular medicine container member when the parts are assembled, said medicine containing member having integral finger holds adjacent the end which fits over the flaring skirt portion of said pump member.

2. A medicine dropper as set forth in claim 1, wherein the base member includes a flaring shoulder portion adapted to be engaged by the end of the container member when the parts are assembled, said parts being also cemented together whereby leak-proof connection is provided.

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