Nov. 2, 1943. J. KLARCHUK 2,333,383

SYRINGE NOZZLE

Filed May 15, 1942

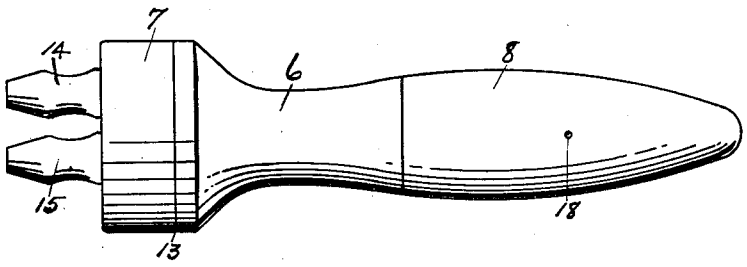


Fig. 1

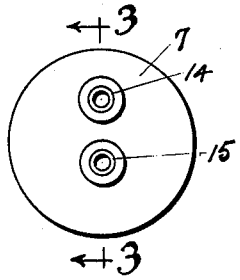


Fig. 2

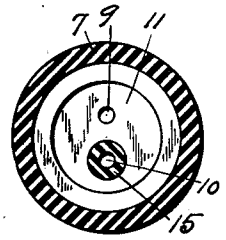


Fig. 4

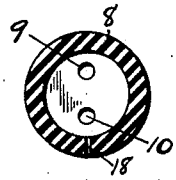


Fig. 5

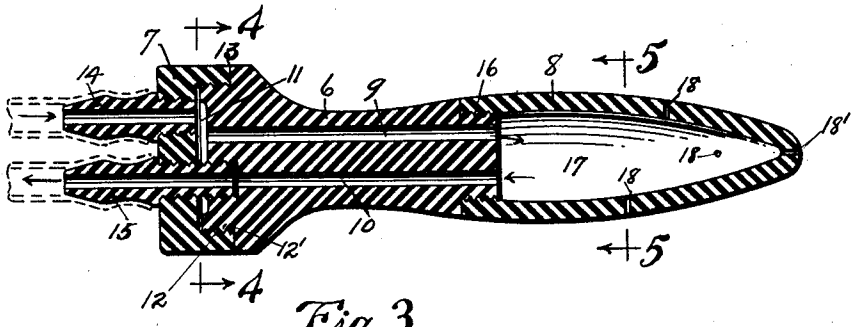


Fig. 3

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2,333,383

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SYRINGE NOZZLE

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Application May 15, 1942, Serial No. 443,066

4 Claims. (Cl. 128—239)

My invention relates to syringe nozzles, and more particularly to an improved syringe nozzle made in three parts, easily separable by means of threaded joints, and with two small nipple elements connected therewith, through the head of the nozzle, whereby one of said nipple elements is connected in alinement with a passageway through the body and interlocks two parts of said nozzle together, whereas the other nipple element connects with a chamber between said two parts and said chamber connects with a second passageway through the body of said nozzle, the free end of said nozzle being detachable and in open communication with the said passageways, whereby one of said passageways is for inflow and the other is for outflow.

Other advantages of my improved syringe nozzle will be pointed out in connection with the following detailed description of one embodiment thereof shown on the accompanying sheet of drawings, in which:

Figure 1 is an elevation of a syringe nozzle embodying my invention;

Figure 2 is an end view thereof;

Figure 3 is a longitudinal sectional view thereof, taken on the line 3—3 of Fig. 2;

Figure 4 is a cross sectional view taken on line 4—4, Fig. 3; and

Figure 5 is a similar view taken on line 5—5 of Fig. 3.

Referring now in detail to the drawing, my invention as here shown is represented as made of hard rubber, though it can be made of any other suitable material, and even of wood.

It is composed of three main parts which I will refer to as the body, designated 6, the head, designated 7, and the end, designated 8. The body is provided with two parallel bores, 9 and 10, and its head end is provided with a concaved form providing a chamber 11, with which the passageway or bore 9 connects, as shown.

The head 7 is connected with the end of the body by a threaded joint, as at 12, and for this purpose the end of the body is reduced in diameter, as at 12', whereby the head and the body are of the same outside diameter, making a flush joint, at 13.

The head is provided with two nipple elements, 14 and 15. Nipple element 14 screws through the head and terminates with the inside surface of said head and in communication with the chamber 11. The passageway of this nipple element, it will be noted, is to one side of the passageway or bore 9, because it would put the two nipple elements too close together, for one reason, and the other reason is that the inflow first fills up the chamber and then flows more evenly through the passageway or bore 9 to the end 8 of said nozzle.

Nipple element 15, it will be seen is threaded through the head 7 and into the end of the body, in alinement with the bore or passageway 10, as shown. This nipple element, therefore, when in place, interlocks the head 7 on the body 6, and must be removed before the head can be removed. The nipple elements are designed to receive the ends of two rubber tubes, as indicated in light broken lines, and in a manner well known.

The end of the nozzle is also screwed on to the end of the body 6, which is reduced and threaded, as at 16, said end part being in one piece and having a single chamber therein, designated 17, with small leak vents, as 18, 18, through its wall for the purpose of allowing moisture to leak through for lubrication by moisture. These openings are very small, as indicated. The drawing shows the full sized nozzle.

In use the inflow is through nipple element 14 and into the chamber 11, thence to the bore or passageway 9 and to the end chamber 17, with a return through bore or passageway 10 and out through nipple element 15 and out through an outflow tube, as indicated.

This syringe nozzle may be used for the application of heat or cold, as will be understood, and it is particularly designed for treatment of the rectum, though not limited to that part of the body. It is most effective in alleviating inflammation and if it is desired that either warm or cold water, or other liquid, be discharged from the nozzle, it will be evident that if the pressure is increased, more liquid will be discharged through the small openings 18 and the opening through the end, designated 18'.

I do not limit my invention to the exact details of construction here shown for purposes of explanation, except as I may be limited by the hereto appended claims.

I claim:

1. A syringe nozzle including a body portion having two passageways therethrough, a detachable end portion having a chamber therein with which both of said passageways communicate at their ends, a head portion detachably mounted on the other end of said body portion with a chamber formed between the end of said body portion and said head portion and communicating with one of said passageways, a nipple element inserted through said head portion and communicating with the chamber between said head portion and said body portion to supply liquid to said

chamber and to one of said passageways, a second nipple element inserted through said head portion and connected into the end of said body portion and the other of said passageways in said body portion, said nipple elements being adapted to have flexible tubes connected therewith for supply and discharge of liquid to and from said nozzle.

2. A syringe nozzle including a body portion having two parallel passageways therethrough, a detachable end portion having a chamber therein with which both of said passageways communicate at their ends, said end portion having small outlet openings through its wall, a head portion detachably mounted on the other end of said body portion with a chamber formed between the end of said body portion and the inside of said head portion and in open communication with the end of one of said passageways, a nipple element threaded through said head portion and communicating with said chamber between said head and body portions, and a second nipple element threaded through said head portion and into the end of said body portion in alinement with the other passageway in said body portion, said nipple elements being adapted to have supply and discharge tubes connected therewith outside of said head portion.

3. A syringe nozzle having a middle body portion with two passageways therethrough, an end portion screwed on to the end of said body portion and having a chamber therein with which both of said passageways communicate at their ends, a head screwed on to the other end of said body portion with a chamber formed between the end of said body portion and said head, said latter chamber being in open communication with one of said passageways, a nipple element screwed into said head and in open communication with the chamber between said body and said head, and a second nipple element screwed through said head and into the end of said body and in open alinement with the other passageway in said body, said nipples being adapted to have supply and discharge tubes connected therewith for supplying liquid through one of said nipple elements, said chamber between said body and said head and through one of said passageways and into the chamber in said end portion, and out through the other passageway and directly through said other nipple element to said discharge tube.

4. In a syringe nozzle of the character referred to, a body having parallel passageways therethrough, an end portion having a chamber common to both of said passageways, a head screwed on to the other end of said body, with a chamber formed between the end of said body and said head, a nipple element screwed through said head to communicate with the latter chamber between the body and head, and a second nipple element screwed through said head, through said latter chamber and into the end of said body, in alinement with one of the passageways in said body, said second nipple element interlocking said head and said body together, and said nipple elements being adapted to have flexible tubes connected therewith.

JACOB KLARCHUK.