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2,548,359

BAG FOR MEDICAL AND HYGIENIC PURPOSES

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FIG. 1.

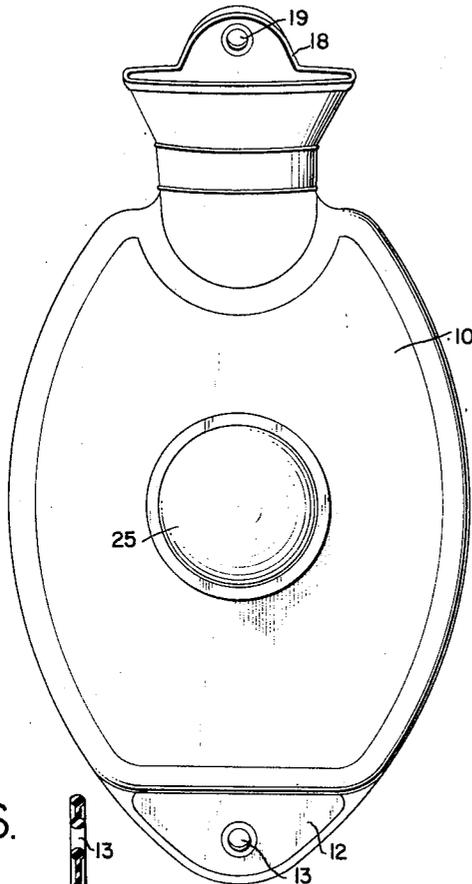


FIG. 2.

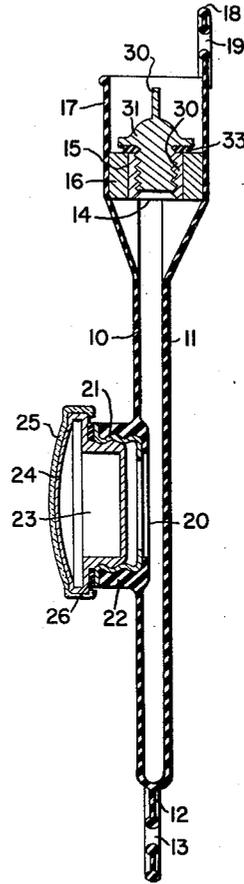


FIG. 6.

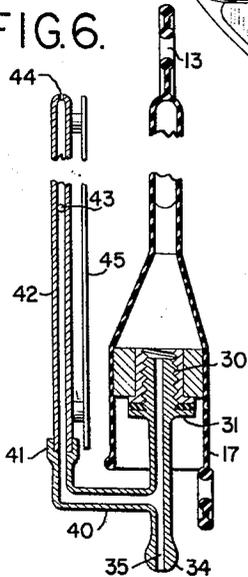


FIG. 3.

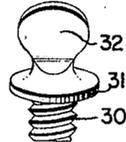


FIG. 4.

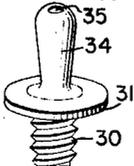


FIG. 5.



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BAG FOR MEDICAL AND HYGIENIC PURPOSES

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2 Claims. (Cl. 128—227)

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The present invention relates to bags for use in medical and hygienic fields and particularly to bags constructed of flexible material.

An object of the invention is to provide such a bag having a suitable shape and having a plurality of orifices therein, one of said orifices being for use with liquids and the other orifice being larger and adapted to allow the bag to be used with lumps of ice for constituting an ice bag.

Another object of this invention is to provide alternative plugs for use with the bag.

A still further object of the invention is to provide means for indicating the amount of liquid contained within the bag when used as an enema or douche bag and the like.

A further object of the invention is to provide such indicating means which are readily visible and calibration means in conjunction therewith.

Other objects of the invention will be readily apparent from the following detailed description of an embodiment of the invention when taken together with the accompanying drawings, in which

Figure 1 is a plan view of the bag of the invention.

Fig. 2 is a sectional view along the centre line of the bag at right angles to Fig. 1.

Fig. 3 is a perspective view of a form of plug intended for insertion into the smaller orifice when the bag is used as a hot water or ice bag.

Fig. 4 is a perspective view of a plug intended for insertion in the smaller orifice for enema or douching purposes.

Fig. 5 is a perspective view of an alternative form of plug intended to connect a flexible pipe to the bag for enema or like purposes.

Fig. 6 is a sectional view on a somewhat smaller scale than Fig. 2 showing the bag fitted with means for indicating the level of the liquid in accordance with this invention.

Referring to the drawings; the bag illustrated in Figs. 1 and 2 is of generally oval shape but is to be understood that without departing from the scope of this invention the shape may be modified as described. The bag has two flat sides 10 and 11 which are joined around their edges. At one end the bag has a tab 12 provided with a hole 13 by means of which the bag may be hung up either when not in use or when it is desired to use it for enema or like purposes. At the other end of the bag is provided a small orifice 14 which may be found in an insert 15 of metal or other hard material which is moulded into a ring 16 which itself is secured during

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moulding or otherwise in a funnel shaped end 17 provided at that end of the bag. The funnel shaped end 17 may also be provided with a tab 18 having a hole 19 by means of which the bag may be hung up. The funnel provides convenient means for filling the bag with liquids.

At the centre or any other convenient part of the flat face 10 of the bag is provided a second orifice 20 which is intended to provide access to the interior in order to permit the insertion of ice for example so that the bag may be used as an ice pack. The orifice 20 has a metal insert 21 which is moulded into the bag and surrounded by a ring 22 of the material of which the bag is made. The size of the orifice 20 may conveniently be made about 1½ inches in diameter for this purpose. The orifice 20 is provided with a closure plug 23 which in the form of construction illustrated consists of a metal core 24 which may advantageously be hollow and consist of a pressing or spinning as shown. The face of the plug which is exposed on the exterior when the plug is screwed into the orifice 20 is provided with a heat insulating covering 25, which may for example be of rubber, Celluloid or other material in order to prevent the burning of the user when the bag is used as a hot-water bottle. It is to be understood that the closure plug for the orifice 20 may alternatively be made entirely of heat insulating material consisting for example of a moulding in phenol-formaldehyde synthetic resin or other plastic material.

A washer 26 is provided between the flange of the plug 23 and the flange of the metal insert 21.

When it is intended to use the bag as a hot water bottle or ice bag a closure plug, for example of the form illustrated in Fig. 3, may be used. In this form the plug has a screw threaded part 30 for cooperation with the thread on the insert 15 and is provided with a flange 31 and a flat wing head 32. A washer 33 may be provided to ensure a water tight closure.

The plug illustrated in Fig. 4 is intended for use when it is desired to use the bag for enema douching or like purposes. It has a screw-threaded part 30 and flange 31 similar to those provided on the plug illustrated in Fig. 3. Instead of being provided with a wing head the plug is formed with a nozzle 34 and has an axial bore 35 communicating with the interior of the bag so that liquid contained therein may be expelled through the nozzle.

A further alternative form of plug is illustrated in Fig. 5. This plug also has a screw-threaded part 30 and a flange 31 as provided on

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a plug illustrated in Fig. 3. It is provided with a spout 36 having at its end an annular projection 37 to facilitate the securing of a rubber or other flexible pipe thereon. An axial bore 38 is provided to put the pipe into communication with the interior of the bag.

Fig. 6 shows a further alternative form of plug which may be inserted in the smaller orifice, being provided with a screw-threaded part 30 and flange 31 similar to those provided on the plug illustrated in Fig. 3. As shown in Fig. 6 the part of the plug which extends beyond the funnel 17 of the bag is formed as a nozzle 34 and is provided with an axial bore 35 and in addition a branch pipe 40 extends laterally and is then bent at right angles to run approximately parallel to the axis of the bore 35. The end of the branch pipe 40 is formed as a socket 41 to receive the end of a transparent pipe 42 which may be made of glass or preferably of a transparent plastic material. It will be seen that the tube 42 extends alongside the bag and by reason of the branch pipe connection 40 will indicate the amount of liquid contained in the bag. An observation of the liquid level in the tube 42 might be rather difficult especially if the liquid is colourless, a float 43, for instance in the form of a coloured ball, may be provided within the tube 42 to indicate clearly the level of the liquid therein. The tube 42 itself or an associated scale indicated at 45 may carry calibration markings to indicate at least approximately the volume of liquid in the bag. The end of the tube 42 may be closed in slightly at the end as indicated at 44 to prevent removal of the float. At the end of the tube 42 which enters the socket 41 the tube can either be permanently attached to the socket or may be detachable therefrom for instance by being made a push fit therein.

It is to be understood that while rubber has

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been mentioned as a suitable material for the bag other flexible materials which will resist water and the other solutions which are likely to be used in the bag may alternatively be employed.

I claim:

1. A nozzle for a syringe bag and the like comprising an elongated tube having a bore there-through, bag connecting means on one end of said tube, the other end of said tube forming the insertion end for said syringe, and means connected to said tube and communicating with said bore for indicating the amount of liquid in said bag, said indicating means comprising a hollow pipe extending at right angles to said tube and then bent parallel to said tube in the direction of said bag, and a transparent pipe connected to the free end of said bent pipe and extending parallel to said tube alongside said bag, said transparent pipe being open and of reduced cross sectional area at its free end.

2. A nozzle for a syringe bag and the like as claimed in claim 1, a float in said transparent pipe for indicating the level of liquid therein.

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