Jan. 15, 1957 C. M. JOHNSON 2,777,444

SANITARY FILTERED MEDICATED HOT WATER BAGS

Filed Sept. 22, 1954

FIG. 1

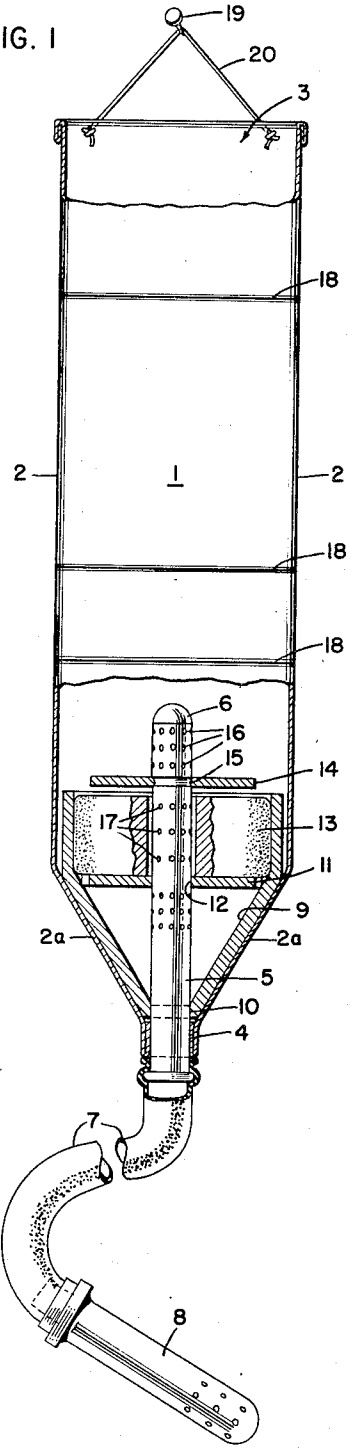


FIG. 2

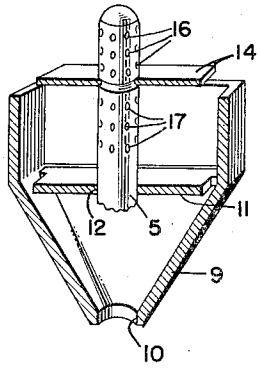


FIG. 3

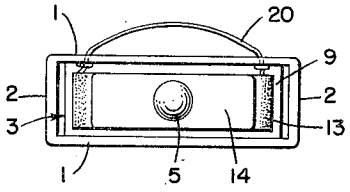
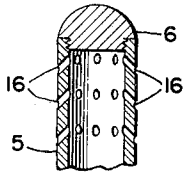


FIG. 4



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SANITARY FILTERED MEDICATED HOT WATER BAGS

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7 Claims. (Cl. 128—227)

This invention relates to an economical, disposable, sanitary, medicated hot water bag suitable for douching, which may be made available for sale through vending machines stationed in public places such as rest rooms, hotels, and at transportation facilities. There is a need for a readily available, disposable, cheap hot water bag incorporating a medicament available for instantaneous use. It is an object of this invention to provide such a device and it includes a filtering element to prevent undissolved medicament from being carried from the bag into the body of the user.

Another object is to combine the medication container or holder with the filtering means. Further objects will appear from a study of the following specification, which is to be read in conjunction with the accompanying drawings which illustrate one embodiment of the invention, and in which—

Figure 1 is a side elevation of my improved bag with parts shown in section.

Figure 2 is an enlarged detail, partly in section and partly in elevation, of the medication container and the discharge tube incorporating a filter element.

Figure 3 is a top plan view of my improved bag.

Figure 4 is a sectional detail of the discharge tube.

My improved bag comprises a body of waterproof paper or thin cardboard, plastic or rubber which is of substantially greater length than width and which is relatively narrow in thickness when open, as is seen in Figures 1 and 3. The body has side walls **1** and end walls **2**, the upper end of the bag being open as shown at **3** and at its lower end the side walls **1** and end walls **2***a* of the bag converge in funnel-like fashion to a small opening **4** in which a tube **5** is fitted, the tube extending vertically into the inner compartment of the bag, the tube being closed at its upper end by a cap **6**. A flexible discharge hose **7**, having a nozzle **8** at its free end, is attached to the lower end of the tube **5**.

Within the bag and seated at the bottom thereof is a cup or container **9** which is also funnel-like in shape so that it conforms to the shape of the interior of the bag. This container has an opening **10** at its lower end which permits it to be inserted over and removed from the tube **5** as it is placed in or removed from the bag. A lower disk **11** having a substantially central opening **12** is supported on the tube **5** above the lower end of the bag and within the container **9**. The side and end edges of the disk are spaced from the container walls. Upon this disk a medicament **13** may be placed, the medicament being of the solid type as a pill or disk with a hole in the center to fit around the tube **5**, or it may be in the form of flakes or a small sack containing a medicament. Powdered material may also be used.

An upper disk **14** having a central opening **15** may then be fitted over the tube **5** and seated thereon over the medicament **13**. This disk may be removed when it is desired to insert a new medicament into the container, after which it may be replaced. This disk is also of lesser

area than the area of the mouth of the container. The tube **5** has a number of small holes **16** formed in its wall and these holes are formed at an angle to the wall of the tube so as to be inclined upwardly towards the interior of the tube. These holes are positioned above the location of the disk **14**. A further series of holes **17** formed radially in the tube **5** are provided below the disk **14**, but the tube is imperforate for a portion of its length above the lowermost region of the container **9**.

The bag and its component parts are intended to be made available as an entity, and accordingly the bag may be folded upon itself along the lines as indicated at **18**, for example, to form a package.

In use, the bag may be suspended from a suitable support **19** by means of a flexible bail **20** suitably secured to the mouth of the bag. Warm or hot water may be poured into the open mouth of the bag, the water splashing against the disk **14** and creating a certain turbulence within the container which facilitates the dissolution of the medicament in the water, the splashing likewise causing a certain amount of water to enter the upwardly directed openings **16** in the tube **5**. Water, with the medicament in solution, will also flow into the lower series of holes **17** and through the tube **5** into the discharge hose **7** and out the nozzle **8**. Within the tube **5** a filtering element (not shown) is provided to filter out any solid, undissolved particles of medicament which may be carried in the water.

While shown at substantially a right angle to the tube **5**, the disk **14** may be tilted with respect to the tube to vary the turbulence of the water poured into the bag. Undissolved particles may settle in the bottom of the bag or in the bottom of the container **9**, where they will collect below the level of the lowermost discharge openings **17**. These particles may later be removed if the bag is to be re-used, or may be disposed of with the bag. At any rate, they will not be discharged into the body of the user.

It will thus be seen that I have provided a simple, economical and practical, disposable hot water bag having a medicament incorporated therein for ready use, said bag being adaptable for dispensing from vending machines in public places, as well as otherwise.

Changes in construction and design of the invention may be made without departing from the scope of the invention as defined by the appended claims.

Having thus described my invention, I claim:

1. A douching device of disposable, impervious material comprising an open-mouthed receptacle capable of supporting a fluid and having a discharge opening at one end, a discharge tube fitted into said latter opening and extending into a receptacle, a cup positioned in said receptacle adjacent said opening and about said tube, a support about said tube for supporting a soluble medicament within said cup, said tube being perforated for a portion of its length to permit the discharge of a fluid from said receptacle.

2. A device according to claim 1 in which a filtering element is supported within said tube.

3. A device according to claim 1 in which said receptacle is foldable for dispensing in a vending machine.

4. A douching device of disposable, impervious material comprising an open-mouthed receptacle capable of supporting a fluid and having a discharge opening at one end, a discharge tube fitted into said latter opening and extending into the receptacle, a cup positioned in said receptacle adjacent said opening and about said tube, a soluble medicament supported within said cup, said tube being perforated for a portion of its length to permit discharge of dissolved medicament from said receptacle.

5. A douching device of disposable, impervious ma-

terial comprising an open-mouthed receptacle capable of supporting a fluid and having a discharge opening at one end, a discharge tube fitted into said latter opening and extending into the receptacle, a cup positioned in said receptacle adjacent said opening and about said tube, said tube having discharge openings in its body, a support member carried by said tube within said cup and a soluble medicament carried by said support, said receptacle being adapted to receive a fluid to dissolve said medicament and to discharge same through said tube.

6. A device according to claim 5 in which a filtering medium is supported within said tube.

7. A douching device of disposable, impervious material comprising an open-mouthed receptacle adapted to receive a fluid, said receptacle having a discharge opening

at one end and a tube fitted into said receptacle through said opening, said tube extending upwardly into said receptacle, said tube being closed at its upper and open at its lower end, a cup within said receptacle positioned about said tube, a disk carried by said tube to support a medicament, a second disk supported above said first disk, said tube having inclined perforations therein above said second disk for discharging any fluid splashing on said second disk as fluid is charged into said receptacle.

References Cited in the file of this patent

UNITED STATES PATENTS

1,519,713	Adkins	Dec. 16, 1924
1,885,218	Berman	Nov. 1, 1932