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TIE-ON ICE OR WATER BAG

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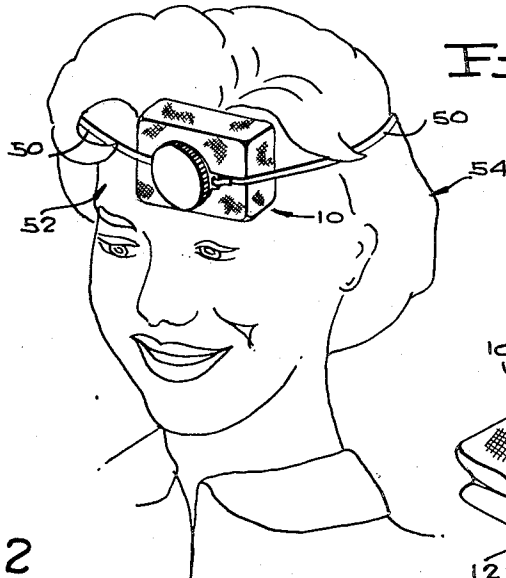


FIG. 1

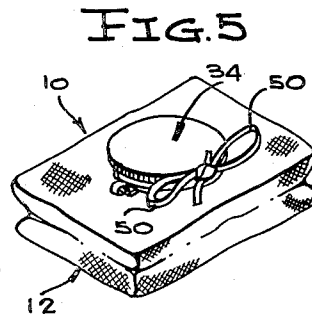


FIG. 5

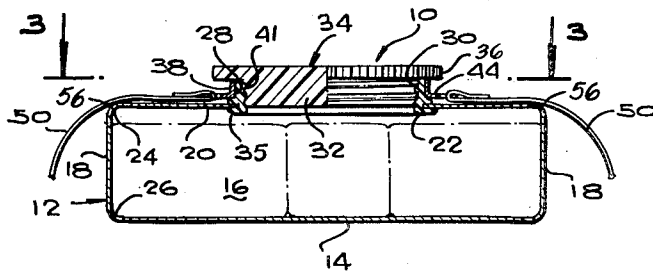


FIG. 2

FIG. 4

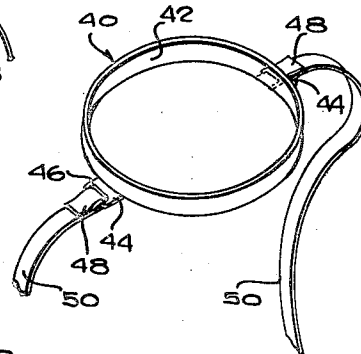
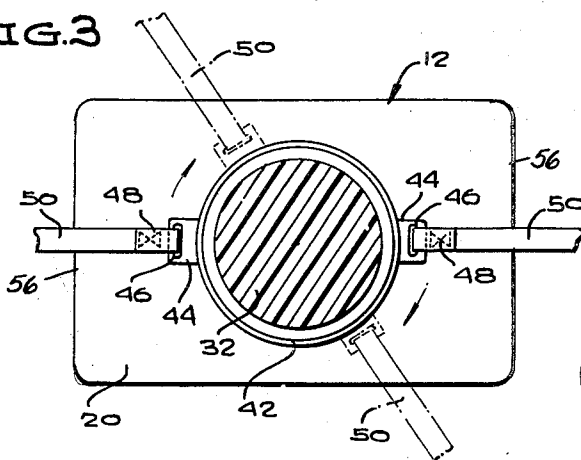


FIG. 3



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TIE-ON ICE OR WATER BAG

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3 Claims. (Cl. 150—2.3)

This invention relates to improvements in combined ice and hot water bags, and more particularly to an improved miniature tie-on bag of this kind, for either hospital or home use.

That primary object of the invention is to provide a more practical and efficient device of the character indicated, for application of cold or heat to localized areas of body members, which is adapted to be tied to the body member, so as to make the device suitable for use by ambulatory patients and others, and eliminate the need for holding the device in place with the hand or hands, and/or bandages and coverings.

Another object of the invention is to provide a small lightweight and compact device of the character indicated above whose container is of minimal size and bulk, yet sufficiently large to hold two or three ice-cubes or a correspondingly effective amount of hot water, so that the application of cold or heat can be desirably limited to affected areas of body members, and the device presents no burden or inconvenient incumbrance to patients.

A further object of the invention is to provide a device of the character indicated above whose container is preferably made of non-sweating or sweat-producing material, and requires no absorbent cover to eliminate objectionable moisture at the points of contact with patients, and at the same time reduce or eliminate the objectionable shock to the skin of patients characteristic of application of cold or hot rubber bags thereto.

A still further object of the invention is to provide a lower cost but more desirable and rugged device of the character indicated above, which is readily susceptible of being attractively colored for patient appeal, and wherein the tie strings or straps are secured to the container to rotate around the neck of the container, both for ease in application and adjustment of the device and for elimination of life-shortening wear and strains on the container and straps.

Other important objects and advantageous features of the invention will be apparent from the following description, and the accompanying drawings, wherein, for purposes of illustration only, a specific form of the invention is set forth in detail.

In the drawings:

Figure 1 is a perspective view showing a device of the invention applied to the forehead of a patient;

Figure 2 is an enlarged vertical longitudinal section taken through said device, the tie strings or straps being abbreviated;

Figure 3 is a horizontal section taken on the line 3—3 of Figure 2, rotated positions of the strings or straps being shown in full and in phantom lines;

Figure 4 is a fragmentary perspective view of the tie strings or straps and associated ring; and

Figure 5 is a reduced perspective view showing the strings or straps tied around the neck of the device and the container compressed for compact storage.

Referring in detail to the drawings, wherein like numerals designate like parts throughout the several

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views, the illustrated device, generally designed 10, comprises a flexible but shape-retaining container 12, preferably of elongated rectangular shape, and desirably about four and one-half inches long and three inches wide, and made of moisture repellant materials, such as Zelan, combed Dacron and cotton blend, poplin, and permissibly but less desirably rubber. Such materials, other than rubber, adequately confine liquid within the container 12, and have the additional purpose of eliminating the sweating produced by rubber materials, and the skin shocks incidental to application of cold or hot rubber bags to the skin of patients. In addition, such non-rubber materials lend themselves to being variously and gayly colored for better patient acceptance and to enhance the attractiveness and sales appeal of the device.

The container 12 comprises a relatively flat bottom wall 14, upstanding side walls 16 and end walls 18, and a top wall 20, provided with a centralized preferably round opening 22, preferably about two inches in diameter, in order to easily pass standard size ice-cubes, two or three in numbers, into the container. The upper and lower corners, around the container 12, are preferably internally rounded, as indicated at 24 and 26, respectively, in order to eliminate retention of moisture in sharp corners when the container is emptied and stored for use.

It will be understood that the longitudinal and transverse cross sections of the container are not limited to being rectangular, as shown, but can be varied to accommodate the container to different applications.

Secured in the container top wall opening 22 and extending above the top wall 20, is a rigid circular tubular neck 28 having internal screw threads 30, into which is adapted to be threaded the stopper 32 of a closure plug 34 having an enlarged disc head 36 adapted to bias sealingly upon the upper or outer edge of the neck 28. Suitable materials for the neck 28 and the plug 34 are molded plastics, and lightweight non-corrosive metals, and the like.

An external annular rib 35 on the lower end of the neck 28 is provided with an encircling annular groove 38 into which is suitably secured the edge 41 of the container top wall opening 22, as shown in Figure 2, so that the neck 28 is firmly assembled to the container.

Mounted rotatably and removably on the neck 28 is a tie-string or strap assembly, generally designated 40, which comprises a relatively rigid circular flat ring 42, of non-corrosive metal or plastic, having fixed on its lower edge two diametrically opposed outwardly projecting ears 44 having therein transverse slots 46, through which are looped and suitably secured, as indicated at 48, elongated flexible, and preferably flat tie-strings or straps 50. The ring 42 is only slightly larger in diameter than the container neck 28 and is freely and rotatably circumposed thereon, and held in place by the plug head 36. The assembly 40 can be quickly and easily removed and replaced when desired, as when worn or soiled.

As shown in Figure 5, when not in use, the device can be made compact for storage, by flattening or compressing the container 12, and by winding the tie-straps 50 around the ring 42 and the neck 28 and tying their ends together.

When the device 10 has been filled with ice-cubes or hot water (not shown) the container bottom wall 14 is applied to the immediate area of a body member to be treated, as to a limited area of the forehead 52, and the straps 50 pulled around the patient's head 54 and tied at their ends therebehind, so that the device 10 is held secured and properly in place, without the use of the hands of the patient or nurse, or bandages or covers, so that the patient is free to move about without concern for proper retention of the device 10 in place, and with-

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out the inconvenience and discomfort of the relatively great weight and bulk of ordinary hot or cold packs.

It is to be noted that, as shown in Figures 1, 2 and 3, the tie straps 50, when extended and tied around a body member, bear harmlessly and non-abrasively upon rounded external edges 56, produced by the rounding of the container corners, and the top wall 20 of the container, so that undue wear upon the straps and upon the container is eliminated in all crosswise or diagonal positions of the straps. Further, the tethering of the straps 50, by means of the ring 42 to the neck 28 puts the main pull of the straps 50 on the neck and at the center of the container, so as to eliminate undistributed strains and stresses and prolong the useful life of the device.

Although there has been shown and described herein a preferred form of the invention, it is to be understood that the invention is not necessarily confined thereto, and that any change or changes in the structure of and in the relative arrangements of components thereof are contemplated as being within the scope of the invention as defined by the claims appended hereto.

What is claimed is:

1. A combined ice and water bag comprising a flexible container having a bottom wall for application to a body area to be treated and a top wall, a relatively rigid tubular neck secured in a centralized opening provided in said top wall, a closure plug securably and removably engaged in and closing said neck, a pair of diametrically opposed tie straps having free outer ends and inner ends, and means connecting the inner ends of the strap to said neck, said plug having an enlarged head extending beyond the sides of the neck, and said connecting means comprising a ring rotatably and removably circumposed on said neck and retained by the enlarged head.

2. A combined ice and water bag comprising a flexible container having a bottom wall for application to a body area to be treated and a top wall, a relatively rigid tubu-

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lar neck secured in a centralized opening provided in said top wall, a closure plug securably and removably engaged in and closing said neck, a pair of diametrically opposed tie straps having free outer ends and inner ends, and means connecting the inner ends of the straps to said neck, said plug having an enlarged head extending beyond the sides of the neck, and said connecting means comprising a ring rotatably and removably circumposed on said neck and retained by the enlarged head, and external diametrically opposed ears fixed on said ring to which the inner ends of the tie straps are secured.

3. A combined ice and water bag comprising a flexible container having a bottom wall for application to a body area to be treated and a top wall, a relatively rigid tubular neck secured in a centralized opening provided in said top wall, a closure plug securably and removably engaged in and closing said neck, a pair of diametrically opposed tie straps having free outer ends and inner ends, and means connecting the inner ends of the straps to said neck, said plug having an enlarged head extending beyond the sides of the neck, and said connecting means comprising a ring rotatably and removably circumposed on said neck and retained by the enlarged head, and external diametrically opposed ears fixed on said ring to which the inner ends of the tie-straps are secured, said container having rounded corners at the junctures of the top wall with side and end walls of the container, and said tie-straps when in use bearing supportably and non-abrasively upon the top wall and related corners of the container.

References Cited in the file of this patent

UNITED STATES PATENTS

35	685,894	Williams	Nov. 5, 1901
	1,506,516	Craig	Aug. 28, 1924
	1,567,931	Epler	Dec. 29, 1925
	1,603,001	Carter	Oct. 12, 1926