

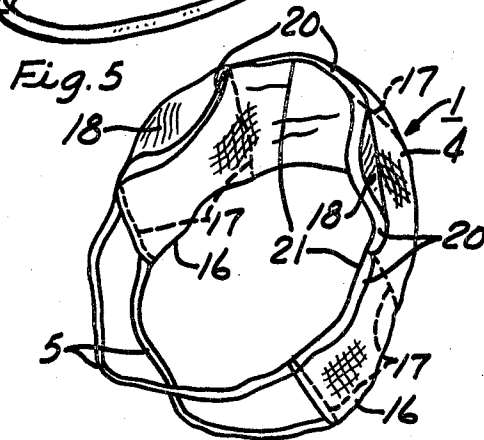
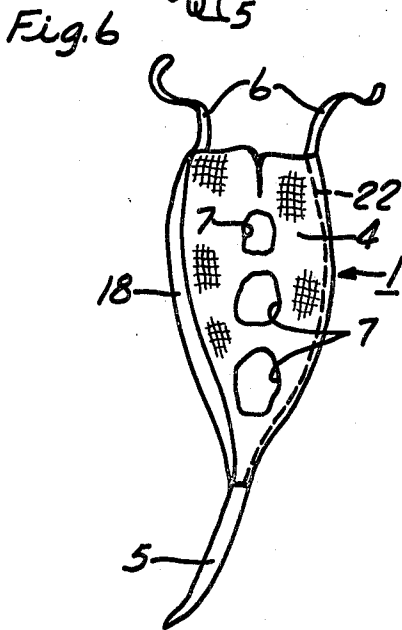
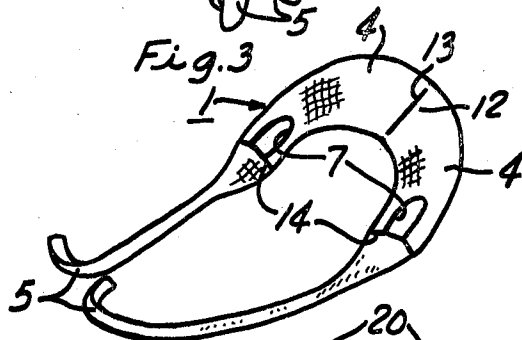
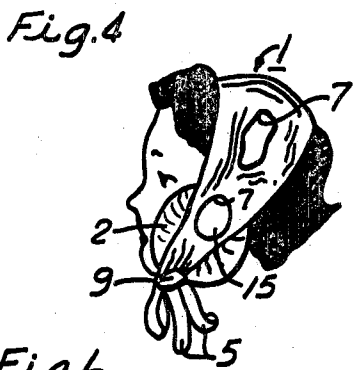
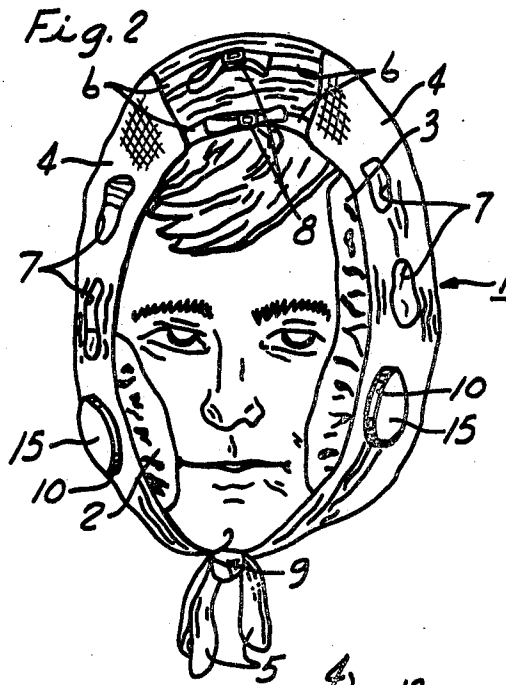
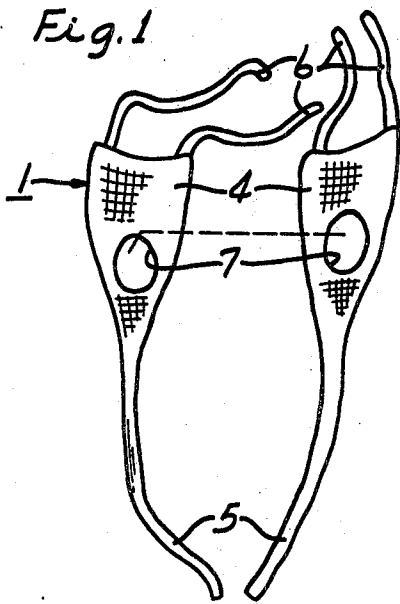
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ADJUSTABLE ICE BAG HARNESS

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ADJUSTABLE ICE BAG HARNESS

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5 Claims

ABSTRACT OF THE DISCLOSURE

An ice bag harness consisting of a band of pliable gauze type material having a series of pockets to receive the thermal pack or a series of annular openings therealong which permissively slightly stretch to receive the annular neck of an ice bag through a selective opening in snug engagement and are clamped by the ice bag closure. Spaced tie means connecting the ends of the harness bag are provided to adjustably fasten the harness band at or about the desired area of treatment on the human body. The spaced ties may be secured by tying them together or securing their opposite ends to the ends of the pliable band.

This invention relates generally to harnesses or slings and more particularly to harnesses for sustained support and positioning of an ice bag against an area of the body to be treated by heat or cold.

Heretofore no practical means has been devised to achieve sustained application of heat or cold treatment for the human body by the use of an ice bag. The ice bag must be either held in position by hand or held against the area to be treated by bandages or the like. In the latter instance the ice bag becomes easily dislodged from the bandages and thereby prolongs treatment and pain suffered by the patient.

Where ice or hot water heat is prescribed or indicated, as for post-operative treatment of bedridden or ambulatory patients, sustained application thereof is difficult to accomplish and can be extremely uncomfortable for the patient. The bag readily becomes dislodged from its area of application by the movements of the patient during sleep and otherwise restricts his movements in order to maintain the bag in position during the hours he is awake.

The harness of the present invention is also advantageous for patients who are not ambulatory. For example, the removal of a wisdom tooth causes prolonged swelling and pain which may be treated by the use of the harness of the present invention in combination with an ice bag and thereby permit the patient freedom of mobility to carry out his daily tasks.

Such sustained treatment made possible by the ice bag harness of the present invention has shown that in most instances of post-operative surgery that swelling and pain can be reduced twenty-four to forty-eight hours earlier than is possible by the conventional methods of application of heat or cold. Furthermore, the patient is more prone to continue sustained application as diagnosed since his constant attention thereto is not required. This is of great importance for treatment of one who must otherwise continue to be active during treatment or for the treatment of a child whose patience does not make sustained application possible.

The principal object of the present invention is to

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provide an ice bag harness which is devoid of the aforementioned disadvantages.

Another object of the present invention is to provide an ice bag harness which is versatile in that it may be utilized for the application of heat or cold to any portion of the human body. This is accomplished by the large degree of adjustability built into the harness. The harness or sling consists of one or more harness bands of a pliable material such as cloth or sponge rubber which has a series of openings therein to receive the neck of the ice bag. Adjustability is further provided by the tie means used to secure the bag adjacent the area to be treated by fastening the harness to itself about the portion of the body immediate the area of attention. The tie means may be in the form of buckles, hooks, mere tie ends or strips of elastic material.

By placing the neck of the opening into the bag in the proper opening of the harness band and with proper adjustment of the tie means, sustained treatment by heat or cold on any area of the body may be accomplished.

In lieu of the series of openings, support means may also be provided in the form of a series of pockets to receive the ice bag at the desired point of application on the harness band. These pockets may be formed by constructing the harness band of two material layers as by longitudinally folding a rectangular piece of material in half and transversely stitching the halves together at spaced intervals to form a series of pockets. In order to secure the ice bag within the selected pocket, one of the longitudinal ends of the band forming the mouths of the pockets is provided with a marginal flap or lip which normally overlaps the opposed longitudinal edge to form a series of closed envelopes. The pliable character of the harness band material permits the normally closed flap to be pried open to permit access into the pocket.

The selectable support means provided by the series of pockets is advantageous over that of the plurality of openings in that the ice bag does not directly contact the area of application which is desirable for example when hot water heat is applied and the ice bag is too hot to permit direct contact with the skin or when condensation or leakage of the fluid in the bag is prevalent. However, the adjustable means provided by the plurality of openings to receive the neck of the ice bag is advantageous over the latter specie of the adjustable means in that the openings may be placed relatively close together thereby providing a greater number of ice bag securing positions along identical lengths of harness band.

It is therefore a further object of the present invention to provide an adjustable ice bag harness which has the advantages of both the aforementioned selection support means. This is made possible by providing the band having a series of openings with an underlying matching band without openings and sewing them together on three ends to form one large pocket.

Another object of the present invention is to provide the pliable harness band with a curved surface to fit the contours of the human body. This enables the harness to keep the ice bag securely fixed where treatment is required for example about the face or knee in which case the harness will fit the contour of the crown of the head or the knee cap. In order to obtain even more secure positioning of the ice bag, the cap or closure which fastens down on the neck of the bag, may be secured into clamp-

ing engagement with the periphery of the opening in the harness.

A more specific object of the present invention is to provide an ice bag harness of absorbent material to absorb moisture as a result of leakage or condensation.

Other objects and advantages of this invention appear hereinafter in the following description and claims.

The accompanying drawings show for the purpose of exemplification without limiting this invention or the claims thereto certain practical embodiments illustrating the principles of this invention wherein:

FIG. 1 is a perspective view pictorially illustrating the ice bag harness of the present invention.

FIG. 2 is a pictorial drawing illustrating the application of the harness shown in FIG. 1 to the human body.

FIG. 3 is a perspective view illustrating a structural variation of the harness as shown in FIG. 1.

FIG. 4 is a pictorial illustration showing the application of the harness of FIG. 3 to the human body.

FIG. 5 is a perspective view pictorially illustrating another embodiment of the present invention.

FIG. 6 is a perspective view pictorially illustrating a further embodiment of the present invention.

Referring to FIG. 1 the harness 1 consists of two harness bands 4 of a pliable material such as cloth or foam rubber. For hospital applications, the bands are preferably of diaper weight gauze. Adjustable and spaced straps or tie means 5 and 6 are provided to connect the bands 4 at both ends in order to fasten the harness to itself about that portion of the body to be treated. The openings 7 are provided in the pliable harness bands 4 to receive the neck of an ice bag as better illustrated in FIG. 2.

FIG. 2 illustrates the application of the harness to the head of a patient and wherein the ice bags 2 and 3 are held securely against the patients face by means of the harness. Here the tie means 6 are secured by means of the buckles 8, however, any similar fastening means is adequate such as the knot 9 placed in the tie means 5 below the chin of the patient. The annular necks 10 of the ice bags 2 and 3 are permitted to pass through the respective openings 7. The openings 7 are preferably made small enough to require slight stretching in order to slip them over the necks 10 thereby making snug engagement.

The harness shown in FIG. 2 is provided with a plurality of the openings 7 in contrast to the individual openings 7 provided in each of the harness bands as illustrated held securely against the patients face by means of the harness thereby giving a large degree of versatility for the application of the ice packs to any area of treatment on the body.

The harness shown in FIG. 2 may thus be used on most any area of the body and is not restricted to use on the head alone. The openings 7 and tie or strap means 5 and 6 make possible the application of an ice bag to any area of the body which would otherwise create difficulties when using conventional methods.

In order to fit the curved contours of the human body the pliable harness band 4 may be provided with the curved surface 12 as illustrated in FIG. 3 which is provided in the gauze harness band 4 by means of the dart 13. In this manner, the curved surface 12 thus enables a contour fit of such portions of the body as the crown of the head or knee cap as better illustrated in FIG. 4.

It should be noted by comparison of FIGS. 1 and 3 that the harness 1 may consist of any number of the bands 4. The harness of FIG. 3 consists of one band having the tie means 5 secured to the band 4 as indicated at 14 whereas the tie means 5 as shown in FIG. 1 provide a greater degree of adjustability than the use of one band as shown in FIG. 3. However, the contoured harness of FIG. 3 is advantageous in applications on the smaller more sharply contoured areas of the body such as the knee, the elbow or the head.

Greater adjustability, and thereby versatility may be

obtained in the harness of FIG. 3 by the provision of a plurality of the openings 7 as indicated at FIG. 4.

As previously mentioned, the bands 4 may be constructed of any flexible or pliable material and in many instances sponge or foam rubber may be desirable such as where the ice bag is applied against the head. This provides cushioning means which aids in comforting the patient when lying against the ice bag. However, for hospital use, a more sanitary diaper weight gauze material is preferred as it may be readily sterilized and is inexpensive enough to be otherwise disposable.

The necks 10 of the ice bags are provided with a closure 15. Such a closure is generally threadably secured on the neck 10. Thus, the closure 15 may be secured on the neck 10 after the neck has been inserted into the opening 7, and the closure thereafter secured in clamping engagement with the bands 4.

FIGURE 5 illustrates a practical variation of the support means provided by the openings 7 as shown in FIGURES 2 and 4. The harness band 4 consists of one piece of pliable material folded longitudinally as indicated at 16 and stitched transversely at spaced intervals as indicated at 17 to form the series of pockets 18 as the support means to selectively receive an ice bag at a desired position along the band.

The marginal flap 20 is provided along one longitudinal edge of the band 4 and is normally held in a closed position overlapping the other longitudinal edge of the band by means of the stitching 17. This flap is easily formed by making a second longitudinal fold in the material of the band 4 as indicated at 21 before the band is stitched along the lines 17. In order to secure the harness band 4 about a desired portion of the body for treatment, it is provided with the spaced adjustable tie means 5 which in this embodiment are elastic bands.

An ice bag is inserted in the desired pocket 18 by merely pulling the flap 20 aside and spreading the pocket 18 open. After inserting the bag, the flap is again closed to contain the ice bag. Thus the overflap 20 functions in the manner of the openings 7 to retain the bags 2 in place.

FIGURE 6 shows an embodiment wherein the pockets 18 of the harness of FIGURE 5 are combined with the support means provided by the plurality of openings 7 of the harness shown in FIGURE 2. The harness band 4 is formed of two layers or plies which may or may not be stitched together along one longitudinal end as indicated at 22. One of the plies of the band 4 is provided with the series of openings 7 to adjustably receive the neck of an ice bag.

In this embodiment the pocket 18 need not serve to position the ice bag as this is accomplished by the openings 7. However, it has the added advantage of the harness shown in FIGURE 5 in that the ice bag does not directly contact the skin of the patient.

I claim:

1. A thermal applicator body harness for versatile application of thermal packs to an area of treatment on the human body comprising a thermal pack having a filling throat with an annular neck on said thermal pack, a removable closure to seal said throat, a harness band of pliable gauze type material having a series of annular openings to slightly stretch to selectively receive said annular neck in snug engagement therewith and clamped to said harness band by said closure, and a pair of strap means secured to said harness band in spaced relation to each other to stabilize and retain said thermal pack on a selected position on the person of the wearer.

2. The thermal applicator body harness of claim 1 characterized by a second pair of strap means secured to said band means in spaced relation to each other and spaced from said first strap means to stabilize and retain said thermal container means on a selected position on the person of the wearer, selected of said pair of strap means are elastic.

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3. The structures of claim 2 characterized by a marginal flap provided along one longitudinal edge of said harness band and a seam secured along the other longitudinal edge of said harness band and lateral seams to provide separate pocket means to receive said thermal container means when its annular neck is received in a selected of harness band annular openings and clamped by said closure.

4. The structure of claim 2 characterized in that selected of said spaced strap means comprises two sets of spaced straps with one set secured to each end of said band means, the opposite ends of which carries said adjustable securing means.

5. The structure of claim 2 characterized in that said band means when lying in a flat plane said band means is in the shape of a horseshoe, and said strap means are one strap at each end of said horseshoe and when applied

to the person of the wearer will position selected of said container means on opposite sides of the body and forward of the middle of said band means when said strap means are tied together to stabilize and retain said thermal container means on a selected portion of the person of the wearer.

References Cited

UNITED STATES PATENTS

919,614	4/1909	Meinecke	-----	150—2.3
1,345,906	7/1920	Augustine	-----	150—2.6

WILLIAM E. KAMM, Primary Examiner

US. Cl. X.R.

128—254, 403; 150—2.3