# United States Patent [19]

## Hariu

## [54] BODY HEATING DEVICE

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- [51]
   Int. Cl.
   H05b 1/00

   [58]
   Field of Search
   219/211, 527–529;
  - 128/379, 380, 402

### [56] **References Cited** UNITED STATES PATENTS

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2,579,383	12/1951	Goudsmit 219/527 X	
2,718,585	9/1955	Hariu 128/380 X	

## [11] **3,839,621** [45] **Oct. 1, 1974**

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#### [57] ABSTRACT

A body heating device comprising a plurality of primary elements wherein the primary elements are adapted to be used in combination, which device may be used for the treatment or cure of common respiratory ailments. One of the primary elements is in the form of a flexible helmet having a visor adapted to cover the face and chin. Another of the primary elements, in the form of a slip-over vest, is adapted to cover portions of the upper torso and is provided with detachable sub-elements for selective heating of different portions of the body. Detachable absorption liners are provided which may be attached to the primary elements to absorb perspiration.

## 2 Claims, 4 Drawing Figures



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## **BODY HEATING DEVICE**

This invention deals with aids for respiratory ailments and particularly ailments such as the common cold.

The present invention is an improvement in body 5 heating devices and heating pads over prior inventions of the inventor, particularly those described in the inventor's U.S. Pat. Nos. 2,718,584 and 2,718,585, patented Sept. 20, 1955.

areas of the head, back and chest aid in the treatment and cure of respiratory ailments and give relief to the sufferer. It is also found that frequently heat applied to a specific portion of the body, such as the back of the neck or chin in addition to head applied generally to 15 tour so as to contain and surround the nose of a typical the head and chest will give a considerable amount of relief and greatly aid in the treatment of respiratory ailments

Unfortunately, one of the problems inherent in the application of heat to the body is the formation of 20 sweat and perspiration. Where the method of application of heat is through the use of heating pads, this perspiration will cause the pads to become wet and to feel uncomfortable unless some method is provided to 25 catch and remove the perspiration.

An object of the present invention is to provide greater flexibility and ease of use of the invention over prior inventions in this field, including those disclosed in the aforementioned patents.

A second object of the invention is to provide a device for use in treating respiratory ailments, such as the common cold, which will be highly effective but which is easy and convenient to use and to maintain.

Another object of the invention is to provide a heat- 35 ing device for use in treating respiratory ailments having a detachable inner liner which will absorb sweat and moisture from the skin.

A further object of this invention is to provide a body heating device which has great flexibility and which can 40 be used for selectively heating or not heating different parts of the body, and which has detachable pads for the selective heating or non-heating of certain predetermined portions of the body.

Yet another object of this invention is to provide a 45 washable, detachable liner for use with a bodyconforming heating pad which is removable from the pad and which has the dual function of absorbing perspiration and of keeping the heating pad clean.

These and other objects of the invention will appear 50 from time to time as these specifications proceed and with reference to the accompanying drawings wherein:

FIG. 1 is a left side view of the head portion of the 55 invention.

FIG. 2 is a front view of the head portion of FIG. 1 with the front flat raised to show a portion of the interior of the invention.

FIG. 3 is a front view of the upper torso portion of the invention.

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FIG. 4 is a rear view of the upper torso of FIG. 3.

Referring to the drawings in which the same or similar parts have been given the same numerals in the several figures:

The invention, designated generally by the numeral 10, comprises two primary portions, a head portion, designated by the numeral 11, and a upper torso por-

tion, designated by the numeral 12, which two portions will generally be used in combination.

The head portion, 11, which is in the form of a flexible helmet, has a front visor or flap, 13, which extends downwardly so as to cover the chin of the user, and is provided with an adjustable strap, 17, for fastening the visor in place. Within the visor area, a nose and mouth opening, 20, is provided which is located so as to conform generally to the location of the nostrils and mouth It has been found that the application of dry heat to 10 of a typical user of the invention. The visor, 13, is formed with a channel, 19, which extends upwards above the nose and mouth opening, 20, to where the ridge area of the nose of a typical user would be located, and which channel, 19, is of such shape and conuser of the invention when the visor, 13, is fastened in place. The visor, 13, is provided with a pair of flexible wings, 35, suitably located at the sides of the visor so that they may be drawn around the eye of a typical wearer and fastened by means of suitably located snaps, 22, to form eye openings in the head portion, 11, of the invention.

The upper torso portion of the invention, 12, shown in FIGS. 3 and 4, is in the form of a slip-over vest, open at the sides, and has a front portion 37 and a back portion 38, which are adapted to cover the upper shoulder areas, the front central chest area, and the posterior region. The front portion 37 and the back portion 38 are held in position by a plurality of adjustable straps 27 30 which are mounted on the front portion 37, with the mating portions of the straps being mounted on the back portion 38.

A neck collar 29 is removable attached to the upper torso portion 12 of the invention 10 by means of snaps or other suitable attachments 22, and has two upwardly extending protrusions 36 which are located in that region which would be located immediately behind the ears of a user of the invention. Between said upwardly extending protrusions 36 a nape pad 32 is removably attached by means of snaps or other suitable attachments 22, and is adapted to cover the back portion of the head and neck of a user of the invention.

Positioned throughout and located between the two surfaces of the material used in each of the various parts of the invention, there are provided continuous electrically insulated resistance wires or heating elements 14, of well known design, which will generate heat when a current passes through the wire. The wiring is arranged so that a substantially uniform heating effect is created on the inner surfaces of each of the various parts of the invention 10. The amount of current passing through the heating elements 14 is easily controlled by means of one or more rheostats, 15 and 25, which are wired in series with the various heating elements 14 of the different parts of the invention 10.

In the upper torso portion 12 of the invention, the detachable neck collar 29, which contains electrically insulated resistance wire type electrical heating elements 31, similar to elements 14, may be easily detachably connected to the wiring in the vest, either in parallel or in series, by means of electrical connector 30 and its mating portion.

The detachable nape pad 32, which contains electrically insulated resistance wire type electrical heating elements 34, similar to elements 14, may be detachably electrically connected to the upper torso portion of the invention, either in series or in parallel, by means of an electrical connector 33 and its mating portion. The collar 29 and the nape pad 32 are each wired separately in series, through connectors 30 and 33 respectively, with the rheostat 25 provided for the control of electri- $_5$  cal current flowing through the vest.

Within the interior 18 of the head portion, and also within the interior 28 of the upper torso portion of the invention, separate detachable liners, 21 and 23, conforming to the contours of the portions, 18 and 28 re- 10 spectively, with which they are associated, are provided, which are removably held in place by means of snaps, 22, or other suitable attachments appropriately positioned in the interior portions of the various parts of the invention. The liners, 21 and 23, are made of an 15 absorbent material, such as terry cloth, and are used to absorb perspiration. By making the liners, 21 and 23, detachable, the liners may be removed from their positions within the interior, 18 and 28, of the various parts of the invention and allowed to dry or to be washed. 20 The drying of the liners, 21 and 23, by detaching them from the interior of the invention, will be faster than if the liners, 21 and 23, were left in place, and enables the invention to be used more frequently and in greater comfort than if the detachable liners, 21 and 23, were 25 not provided. Also, the detachable liners permit better and more hygienic use of the invention 10, where the invention may be used for several different people.

Use of the invention is readily comprehensible by an understanding of the purpose of the invention. The 30 head portion 11 and the upper torso portion 12 may be used either separately or in combination, although their combined use will generally be preferred. In addition, by making use of the neck collar attachment 29 to the upper torso portion 12, and of the nape pad attachment 35 32 to the neck collar 29, great flexibility in use may be achieved.

When a sufferer of a respiratory ailment, such as the common cold, senses the start of an attack, the sufferer will don either the head portion 11 or the upper torso 40 portion 12 of the invention, or both, depending on the intensity of the attack and its location. The invention is then connected to a suitable source of electrical power through electric wires 16 and 26 and the sufferer will soon feel a dry heat in the vicinity of the affected 45 areas, which will generally bring prompt relief to the sufferer.

By attaching the neck collar 29 and connecting the

neck collar to a source of electrical power, using the electrical connectors provided on the vest, the sufferer may provide heat to the neck area, and by attaching the nape pad **32**, and connecting it to a source of electrical power, using the electrical plug provided on the vest, the nape area may be provided with heat.

It is of course to be understood that the sufferer will use those portions of the invention which, in combination, provide the greatest amount of relief, and will adjust the rheostats provided, to attain the best relief from the ailment, thus aiding in the treatment and cure of the ailment.

While the drawings show and there is herein described a specific embodiment of the invention, it may readily be understood that various modifications and variations in the invention may be attained without departing from the spirit and scope of the novel concepts thereof, as defined by the claims appended hereto. I claim:

1. A heatable flexible slip-over vest provided with controllable electrical heating elements adapted to uniformly heat the interior surfaces of the vest, which vest is intended to be worn by a person, said vest having a back portion which extends downwardly to the region of the lower back of the wearer, a front portion which extends downwardly to the stomach region of the wearer, and said vest being provided with a plurality of adjustable straps adapted to hold the front portion and the back portion in place, the front portion and the back portion being separated from each other below the shoulder area of the wearer except at those locations where the straps are located, the heatable flexible slip-over vest being provided with an electrically heatable neck collar which is detachably fastened to the vest, said neck collar having a plurality of upwardly extending protrusions which extend to the region behind the ears of the wearer, said vest being further provided with an electrically heatable nape pad which is detachably fastened to the neck collar and is adapted to provide heat to the rear skull area of the wearer.

2. A heatable flexible slip-over vest as claimed in claim 1 wherein there is provided a detachable inner liner made of absorbent material which is fastened to the interior of the vest and conforms to the interior shape thereof, which liner is adapted to absorb perspiration.

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