United States Patent [19]

Nelson

[11] **3,924,284**

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[54] **THERMO-CLOUD ELECTRIC MATTRESS**

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[51] **Int. Cl.²** **A47C 27/08**

[58] **Field of Search**.... 5/82, 92, 284, 345 R, 347 R, 5/355, 361 R, 361 B

[56] **References Cited**

UNITED STATES PATENTS

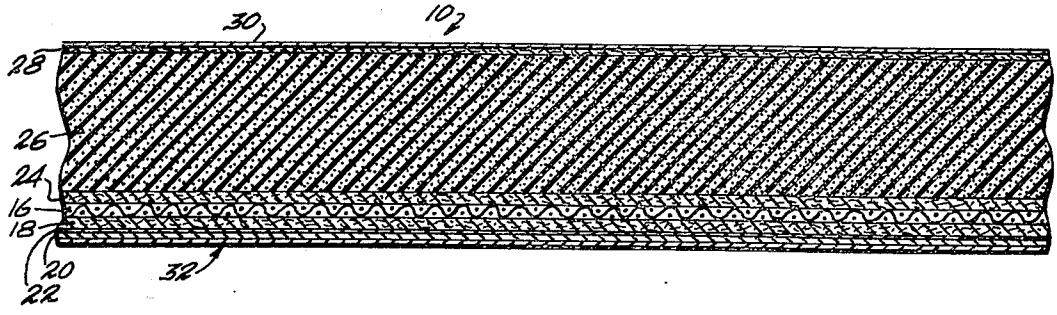
2,606,996	8/1952	Westerberg et al	5/347
2,688,070	8/1954	Freedlander	5/347
3,427,431	2/1969	Costanzo	5/347
3,671,983	6/1972	Bertolet	5/82

Primary Examiner—Casmir A. Nunberg

[57] **ABSTRACT**

A bed mattress comprised generally of a termostatically controlled heating element interposed between upper and lower protective pads, insulating means beneath the lower protective pad including means to radiate the heat upwardly, a relatively thick foam rubber pad disposed above the upper protective pad, a wool pad positioned above the foam rubber pad and a fabric cover disposed about the entire assembly to provide in effect a Thermo-Cloud Mattress.

1 Claim, 2 Drawing Figures



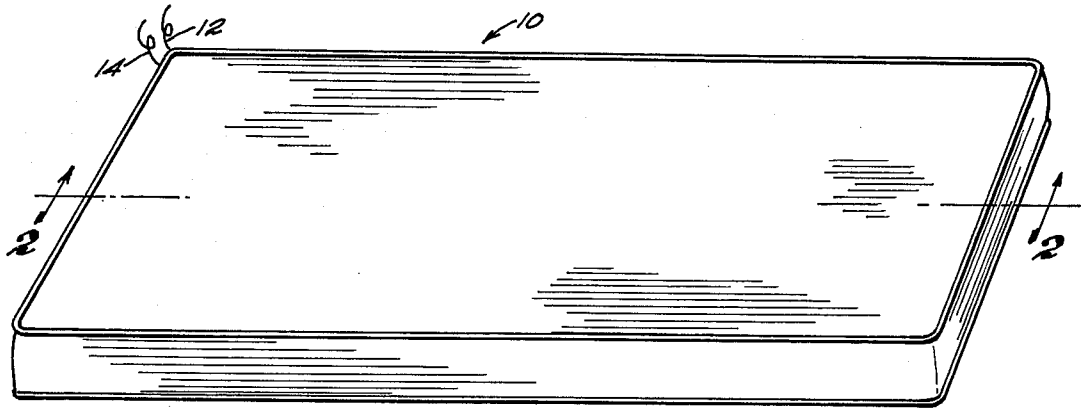


Fig. 1

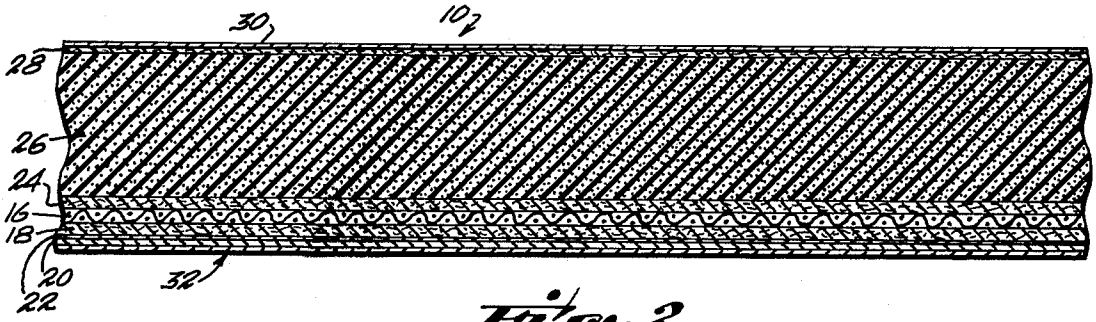


Fig. 2

THERMO-CLOUD ELECTRIC MATTRESS

OBJECTS AND ADVANTAGES OF THE PRESENT INVENTION

The present invention pertains to bed mattresses, including heating means embedded therein, to provide a very substantial degree of relief for people suffering from various forms of back ailments by stimulating blood circulation and relaxing the muscles.

In practice, the electric bed mattress of the present invention has proven its ability to reestablish a very substantial degree of mobility for persons having back ailments to a degree which seriously impared their ability to walk.

One of the principal objects of the present invention is to provide a thermostatically controlled heating element within a bed mattress to stimulate the blood circulation and to relax the muscles of a person sleeping thereon.

Another principal object of the instant invention is to provide a thermostatically controlled heating element within a bed mattress which is interposed between upper and lower protective pads in the bottom portion of the mattress.

A further object of this invention is to provide a relatively thick resilient pad, such as foam rubber, above the upper protective pad.

A still further object of the present invention is to provide insulation means beneath the lower protective pad including means, such as aluminum foil on the top side thereof to reflect the heat upwardly to the body of a person disposed on the mattress.

Yet another object of this invention is to provide a wool pad atop the foam rubber pad.

Another object of the instant invetion is to provide a fabric cover about the heating element, upper and lower protective pads, the relatively thick resilient pad, insulation means, and wool pad, said cover, for example, being formed of rayon damask.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a perspective view of a bed mattress in accordance with the present invention;

FIG. **2** is a fragmentary sectional view taken along the line **2—2** of FIG. **1.**

DETAILED DESCRIPTION OF THE INVENTION

With reference to the drawings in which like reference numerals designate like or corresponding elements throughout the various views, and with particular reference to FIG. **1,** the electric bed mattress of the present invention is indicated generally at **10** with electric leads **12** and **14** extending therefrom to a conventional thermostat control (not illustrated).

With reference to FIG. **2,** the mattress **10** provides a heating element **16** in the lower portion thereof which is controlled by the thermostat through the leads **12** and **14.** A lower pad **18,** formed, for example, of cotton protects the heating element from the stiffness of a lower insulating element **20** having means such as an aluminum foil upper side **22** to reflect the heat from the element **16** upwardly. An upper pad **24,** similar to the lower pad **18,** is disposed between the heating element **16** and a relatively thick resilient pad **26** formed, for example, of foam rubber. A wool pad **28** is preferably disposed atop the resilient pad between said resilient pad **28** and the top portion **30** of a fabric cover **32** surrounding the entire mattress structure. The cover **32** may, for example, be formed of a rayon-damask material.

The heat from the element **16** is radiated upwardly by the foil **22** through the upper pad **24,** resilient pad **26,** wool pad **28** and top **30** of the fabric cover **32** and provides a very beneficial effect to a person lying thereon in that it relaxes the nerves and stimulates the blood circulation to promote a more restful sleep.

The thermostat is preferably of a type which provides a substantial number of settings, nine, for example, to provide varied degrees of heat for the comfort of the individual user. Insulating element **20** is preferably formed of paper and prevents humidity, drafts and coldness from passing upwardly through the mattress. In practice the bed mattress of the present invention has proven to be invaluable in promoting a more restful sleep, thereby eliminating many nervous disorders as well as providing a substantial degree of relief for people with arthritic problems.

What is claimed is:

1. An electric bed mattress comprising:

a thermostatically controlled heating element interposed between upper and lower protective pads, fabricated of cotton;

insulating means disposed beneath said lower protective pad;

a relatively thick resilient pad formed of foam rubber positioned above said upper protective pad;

a fabric cover of a material such as rayon-damask fixed about the entire exterior of the mattress assembly;

a relatively thin wool pad interposed between the top surface of said resilient pad and the underside of the top portion of said fabric cover;

said insulating means comprising an insulated paper structure covered with foil on its top side to radiate the heat from said heating element upwardly through the mattress.

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