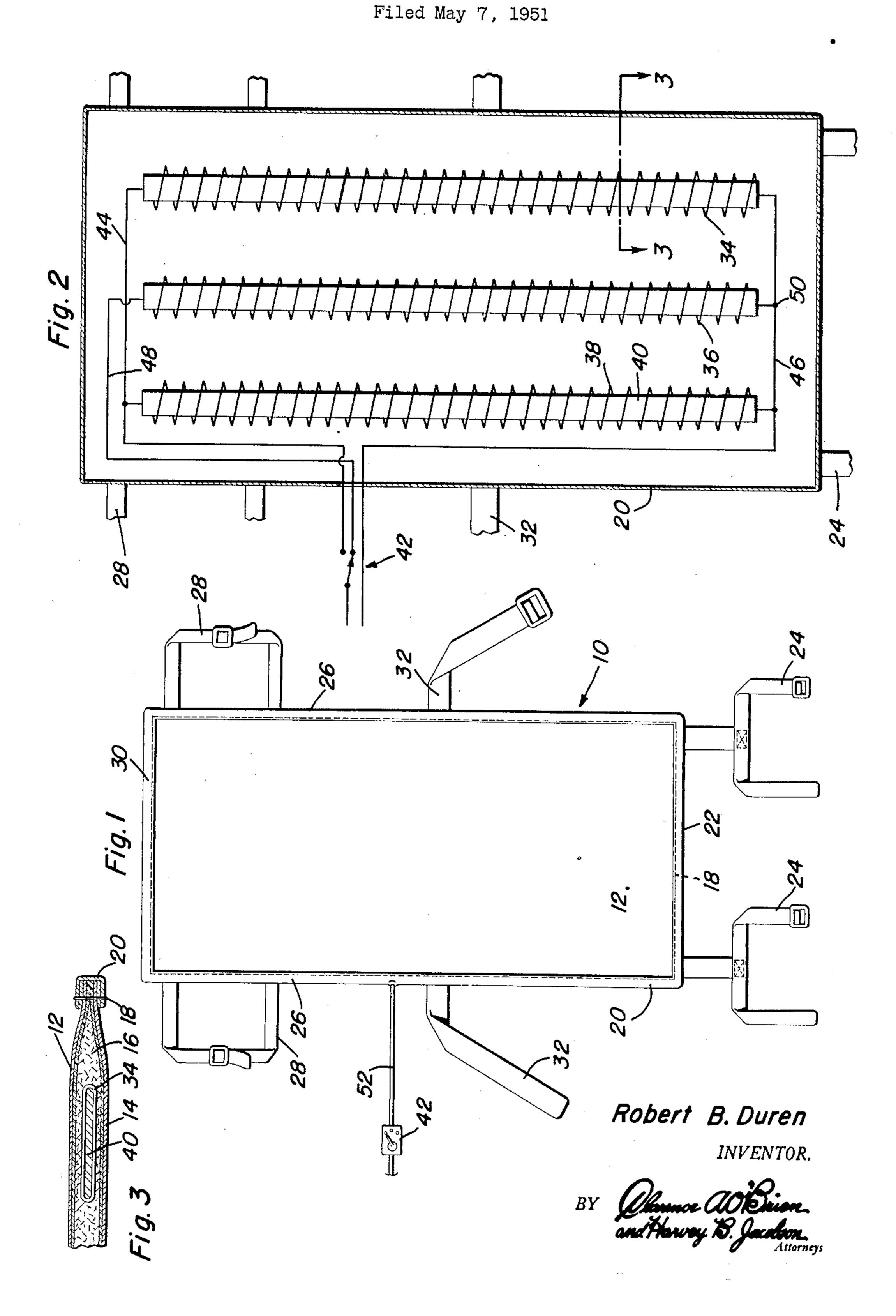
THERAPEUTIC HEATER



UNITED STATES PATENT OFFICE

2,627,018

THERAPEUTIC HEATER

Robert B. Duren, Oakland Park, Fla.

Application May 7, 1951, Serial No. 224,953

1 Claim. (Cl. 219—46)

This invention relates to a heating pad particularly designed to heat and warm the ligaments and muscles of the back and spinal region.

The primary object of the invention is to provide a pad which is simple, inexpensive, easy to 5 assemble upon the body, easy to operate and which is provided with heating coils in the pad and a switch means outside the pad so electrically connected as to permit the pad to be used selectively for generating two different degrees of heat, 10 low and high.

These, together with various ancillary objects and features of the invention which will later become apparent as the following description proceeds, are attained by the device, a preferred 15 embodiment of which has been illustrated by way of example only in the accompanying drawings, wherein:

Figure 1 is a plan view of the pad;

Figure 2 is a horizontal sectional view there- 20 through, some parts being shown in elevation; and

Figure 3 is a sectional view taken on the line 3-3 of Figure 2.

Specific reference is now made to the drawings. 25 In the several views of the accompanying drawings and in the following specification reference characters indicate corresponding elements throughout.

The device comprises a substantially rectangu- 30 lar elongated pad 10 fabricated of a suitable cloth or textile material, such as wool, cotton, synthetic fibers, etc., and includes an upper layer 12 and lower layer 14 filled with a padding 16, such as cotton batting. The peripheral or marginal edges 35 of the layers are secured together as at 18 by a channel shaped hem 20. The bottom edge 22 of the pad carries a pair of conventional buckle type straps 24 adapted to engage the thighs; the side edges 25 of the pad carry further buckle type straps 28 adjacent the upper edge 30 adapted to engage the shoulders and the side edges of the pad intermediate the upper and lower edges further carry a buckle type strap 32 adapted to embrace the torso so that the pad can be removably 45 positioned on the back of a person.

Positioned in the pad and extending longitudinally thereof are heating coils 34, 36 and 38 wound about insulating cores 40. A three way switch 42 is provided which is adapted to connect with 50 an electrical source such as a 6 volt battery, a 6 volt transformer, etc. and is operatively connected to the coils in a manner to be set forth hereinafter. The coils 34 and 38 are connected in parallel and include one conductive wire 44 con- 55

nected to one switch terminal and another conductive or ground wire 45 connected to another switch terminal.

The coils 34 and 38 together with the wires 44 and 46 constitute the high heat circuit which is closed when the switch bridges the gap between the terminals securing the wires 44 and 45. The coil 36 is the low heat coil which includes a conductive wire 48 secured to the remaining terminal of the switch, the other end of the coil being operatively connected as at 50 to the conductive wire 46. Thus when the switch closes the gap between the terminals securing the wires 46 and 48, the coil 36 only is energized to produce a degree of heat lower than that produced by the coils 34 and 38 in parallel. It will be understood that the ends of the wires 44, 45 and 43 may be contained in an insulating sheath or cable 52 extending through one side of the pad and the length thereof may be such as to allow the wearer of the pad to have easy access to the switch 42 at all times.

In view of the foregoing description taken in conjunction with the accompanying drawings, it is believed that a clear understanding of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention, the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and the scope of the appended claim.

Having described the invention, what is claimed as new is:

A body heating device comprising a substantially rectangular pad, a pair of spaced straps secured to each side of said pad adjacent the upper end thereof, the ends of each pair of straps being detachably secured together to provide shoulder engaging means, spaced straps secured to the lower end of said pad adjacent the corners thereof, means on said last-mentioned straps to engage the thighs, straps secured to the sides of said pad intermediate the ends thereof for embracing the torso, electrical heating means in said pad, said electrical heating means including coils in said pad and switch means operatively connected to said coils and to a source of current for selectively energizing said coils to produce low and high heat, said switch means being a threeway switch, said coils being three in number, two connected in parallel and including conductive wires secured to two switch terminals and constituting the high heat circuit while the other coil

10100	7	•		
3	· .	4		
includes a conductive wire secured to the remain-	UNITED STATES PATENTS			
ing terminal of said switch and a further conductive wire secured to one of the conductive wires	Number 1,447,031	Name Newell		
operatively connected to the other two coils and constituting the low heat circuit.	1,100,000	Donle Graham et al	Nov. 19, 1929	
ROBERT B. DUREN.	1,975,329 2,467,447	MacSweeney Strezoff	Apr. 19, 1949	
REFERENCES CITED	2,498,983 2,579,383	D'Albora Goudsmit	Dec. 18, 1951	
The following references are of record in the file of this patent:	Number	FOREIGN PATENT Country	'S Date	

Italy

365,103

Nov. 23, 1938