July 8, 1958 M. S. SCHWEBEL 2,842,655

HEATING PAD

Filed March 25, 1957 2 Sheets-Sheet 1

Fig. 3

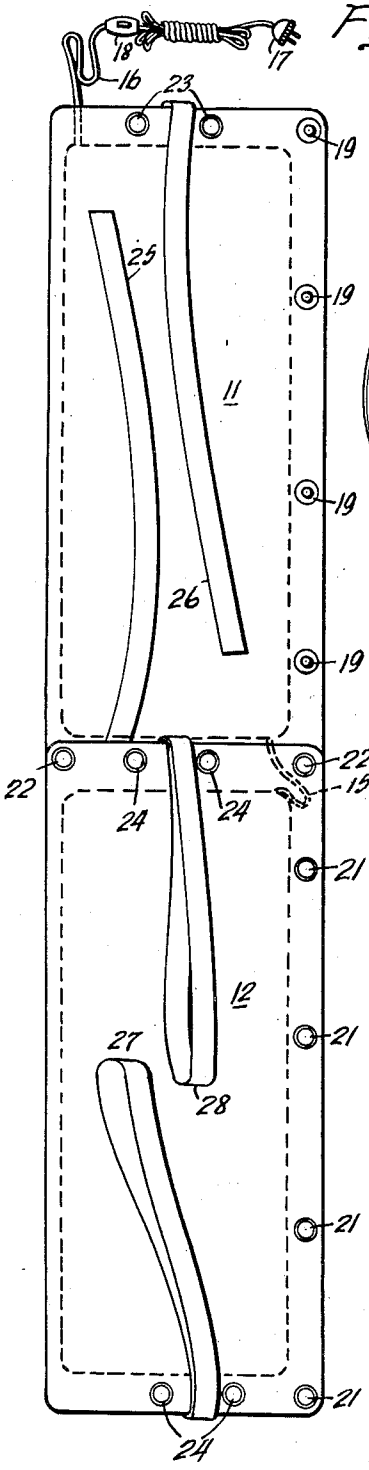


Fig. 2

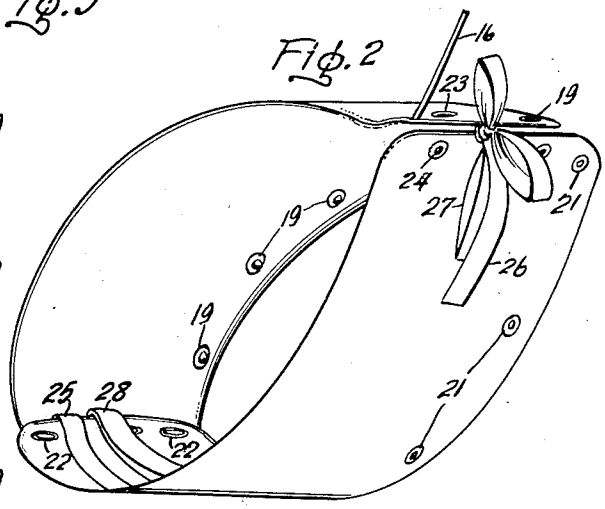
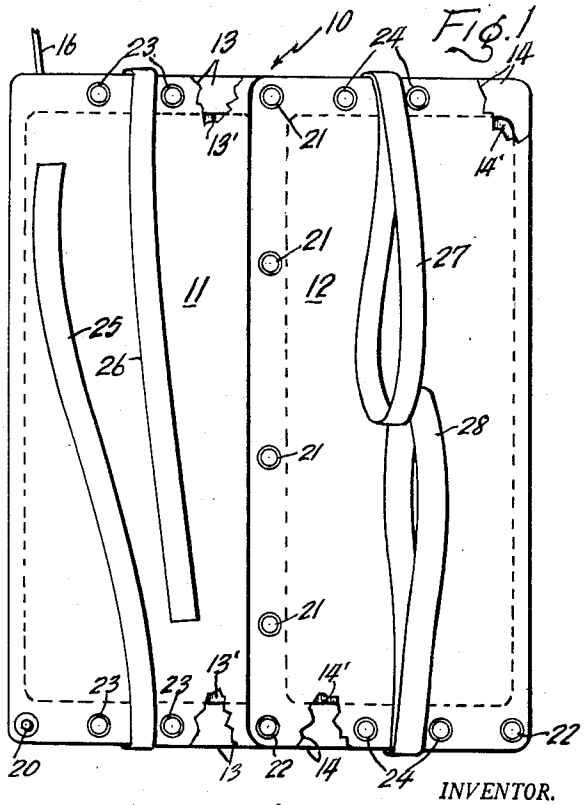


Fig. 1



INVENTOR.
Morris S. Schwebel
by Andros and Smith
His Attorneys

July 8, 1958 M. S. SCHWEBEL 2,842,655

HEATING PAD

Filed March 25, 1957 2 Sheets-Sheet 2

Fig. 4

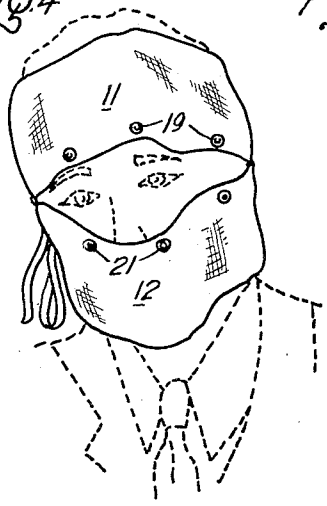


Fig. 7



Fig. 5

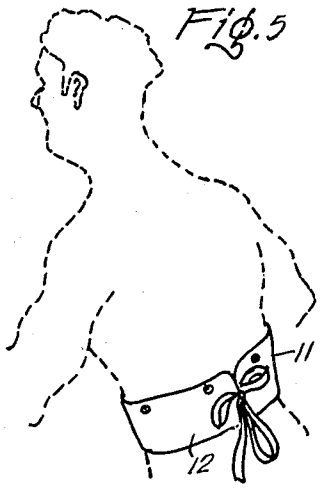


Fig. 10

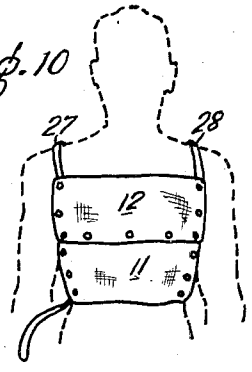
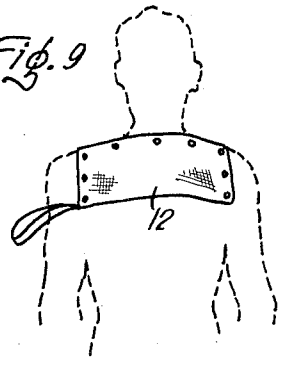


Fig. 9



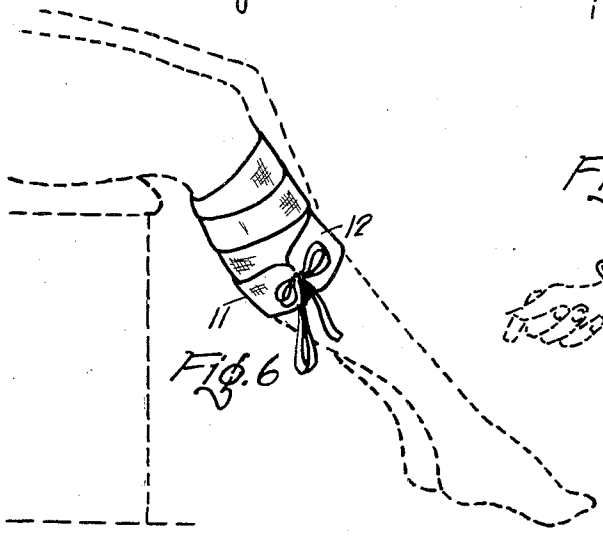
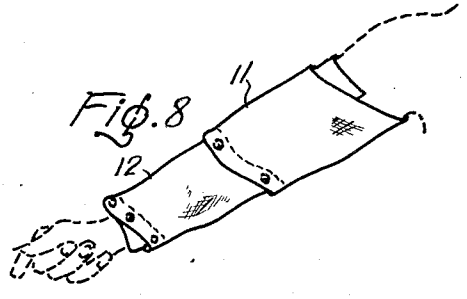


Fig. 6

Fig. 8



INVENTOR.
Morris S. Schwebel
by Andros and Smith
His Attorneys

United States Patent Office

2,842,655

Patented July 8, 1958

2,842,655

HEATING PAD

Morris S. Schwebel, Albany, N. Y.

Application March 25, 1957, Serial No. 648,239

3 Claims. (Cl. 219—46)

This invention relates to heating pads, having particular reference to a split electric heating pad of novel construction that has all of the utility of a conventional type of heating pad, and that additionally can be used in split-open form and affixed in position for certain specific uses, such as, a face warming mask, a chest and back heating pad, and joined together in sections to be used as a bandage-type of heating pad without heat loss between sections, and the provision of such an article of manufacture is a principal object of the invention.

Since ancient times, heat has been employed by man in his unceasing search for methods and means to alleviate the pain and discomfort associated with the many infirmities to which he constantly is being subjected. Down through the ages, such treatment agents as sunlight, hot water, steam, heated stones, bricks, salt, and various chemicals have been so employed in the treatment of pain. Conductive heat, as supplied by conventional electric heating pads, was finally accepted by both the medical profession and the layman as the ideal manner in which to obtain a constant controlled warmth for external application. However, the conventional type of heating pad is not readily adaptable to various parts of the anatomy and is, therefore, definitely limited in its usefulness. There has been a long felt want in the appliance industry to which such pads pertain for an improved type of heating pad which will bring about a solution to this problem and overcome this difficulty, as well as other disadvantages. This now has been accomplished by means of the present invention which, in its more specific aspects, provides a split electric heating pad that is a versatile aid in applying uniform heat to any part of the body by enabling it to function, not only as a conventional type of heating pad, but also as an electric face heating mask, an electric heating pad for front and back portions of the torso, as well as an electric heating bandage, with means for holding the same in such positions.

Generally, therefore, in addition to overcoming the shortcomings of conventional heating pads, it is an object of the invention to provide such an article that is economic of manufacture, simple, yet sturdy and durable of construction, which readily can be changed to various forms for different uses, and which is otherwise well suited to the purposes for which it is intended.

More specifically, it is an object of the invention to provide a rectangularly-shaped split heating pad which comprises a first section having a plurality of securing means in spaced aligned relation along at least one longitudinal marginal edge, and securing means along a transverse edge, with a second section having a plurality of complementary securing means along an adjacent longitudinal edge to cooperate with the longitudinally arranged securing means to fasten the pad sections in abutting or overlapping, but split, marginal relation, and complementary securing means along a transverse edge in alignment with the transverse securing means of the first section to cooperate therewith to transform the pad into a bandage when the longitudinal securing means are disengaged.

Another specific object of the invention is the provision of such a pad which, when fully opened, can be made to function specifically as an electric bandage to be wrapped around the arm or leg to supply a constant warmth in cases, such as, for example, arthritis, sprains, muscular aches, bursitis, contusions, neuritis, rheumatism, peripheral vascular diseases, contracture associated with limited joint movement, and the like.

Another specific object of the invention is to provide a face mask that longitudinally can be split open while still being held secure at opposite ends for use in the treatment of sinusitis, whereby one section is applicable to the maxillary sinus in the area of the cheek bones, and the other section is applicable to the frontal sinus in the region of the forehead, the adjustable feature of the pad allowing for the application of the same simultaneously to the lateral sinus and the paranasal sinus, thus permitting the patient to see while the pad is being used as such a warming mask; or which can be slipped over the head and around the neck to be across the chest and the back in the area of the shoulder blades.

Another specific object of the invention is to provide such a pad with means whereby it can be "worn" by a user in a manner such that it will extend either from across the chest to and including the stomach; or from across the broad part of the back and shoulders to and including the small of the back.

Other objects of the invention will in part be obvious and will in part appear hereinafter.

The invention accordingly comprises an article of manufacture possessing the features, properties, and the relation of elements which will be exemplified in the article hereinafter described and the scope of the application of which will be indicated in the claims.

For a fuller understanding of the nature and objects of the invention reference should be had to the following detailed description and taken in connection with the accompanying drawings, in which:

Fig. 1 is a plan view of a pad embodied by the invention;

Fig. 2 is a perspective view of the pad of Fig. 1 opened up and rearranged to be used, for example, as a face, head, or body mask;

Fig. 3 is a plan view of the pad of Fig. 1 opened and secured together in end-to-end sectional form whereby the pad can be utilized as a bandage;

Fig. 4 is a view illustrating the pad being used as a face or head mask;

Figs. 5, 6. 7 and 8 are further illustrative views of the pad when used as a bandage or wrap-around device for various parts of the body;

Fig. 9 is a view showing how the pad can be worn across the chest and back; and

Fig. 10 is a view showing how the pad can be worn across the chest and stomach; or across the back and shoulders, and small of the back.

Referring now more particularly to the drawings, there is indicated generally at **10** a pad embodied by the invention which, as shown in Fig. 1, may be used as a conventional heating pad but which has many more novel uses as will appear more fully hereinafter.

The pad comprises two separable sections **11** and **12**. Each section comprises an open-ended sleeve **13** and **14**, respectively, to provide a removable, washable outer section.

Inside of each sleeve is a rubberized inner cover or envelope **13'** and **14'** which encases a tortuously wound resistance wire constituting the heating element for the pad. This wire passes from one section to the other at

a properly insulated portion indicated at **15** in Fig. 1 and terminates in an extension cord **16** having a male plug **17** adapting it to be plugged into an outlet receptacle. In the cord is an automatic thermo three-way control switch **18**. Such a pad is moisture and perspiration resistant.

Along one marginal edge of the section **13** are a plurality of aligned, spaced-apart male snap-fastener members **19**. Along a transverse edge are smaller male snap-fasteners **20**, one of which is shown in Fig. 1. Section **14** is provided with a plurality of female snap-fastener members **21** along an adjacent lonigtudinal edge to receive the male members **19**, as shown in Fig. 1, so that the marginal edges of the pad, when used in this form, are overlapped thus bringing the tortuously wound resistance wire within the rubberized envelopes **13'** and **14'** in closely spaced relation so that there is no heat loss therebetween. This is to say, there is no cold spot through the longitudinal center of the pad and the heat is equally distributed throughout.

Female snap-fastener members **22** also appear along a transverse edge of the section **14** to be received by the male members **20** when the snap-fasteners **19** and **21** are disengaged and the two sections **13** and **14** arranged in end-to-end, overlapped relation, as shown in Fig. 3. Here again, the overlapping and fastening together of the pad in this manner brings the tortuously wound resistance wires inside the envelopes **13'** and **14'** into close proximity thereby avoiding cold spots at this juncture.

It will be observed that the sleeves **11** and **12** are each provided at opposite ends with snap-fastener members **23** and **24**, respectively. These are merely for the purpose of closing the ends of the sleeves to hold the rubberized envelopes **13'** and **14'** concealed in proper position within the sleeves. When the members **23** and **24** are unsnapped they can completely be removed for replacement or for washing as above indicated.

Connected to the rubberized envelope **13'** of section **11** are two tie-tapes **25** and **26** which extend from opposite ends beyond the edges of the sleeve between the snap-fastener members **23**. Likewise, extending from opposite ends of the rubberized envelope **14'** are two loop tapes **27** and **28** that extend from between the sleeve **14** between the snap-fasteners **24**.

When the device is used as other than a conventional heating pad, the tie-tapes **25** and **26**, the loops **27** and **28** and the snap-fasteners **19**, **20**, **21** and **22** become important. For example, it it is desired to convert the pad of Fig. 1 into a face mask it is but necessary to unsnap the central fastener members **19** and **21**, place the same around the face as shown in Fig. 4 and tie the tapes **25** and **26** and loops **27** and **28**, if desired, to hold the mask in position.

When it is desired to wrap the pad around various parts of the body, such as those shown in Figs. 5, 6, 7 and 8, the pad of Fig. 1 is readily converted for the purpose. In such case the centrally located snap-fastener members **19** and **21** are disengaged and the two sections connected in end-to-end, overlapping position by closing the snap-fastener members **20** and **22**, as shown in Fig. 3.

If it is decided to cover the chest and back portion across the shoulders, the pad is prepared for the purpose by unfastening the central snap-fastener members **19** and **21** in the same manner above described in connection with Fig. 4 in converting the same to a face mask and the same provides an opening large enough to slip the device over the user's head and around the neck to lie in the position indicated in Fig. 9.

In using the pad of Fig. 1 to protect or apply heat simultaneously to the chest and stomach, or across the broad part of the back across the shoulders and the small of the back, the pad is permitted to remain as shown in Fig. 1 and the tape loops **27** and **28** are used as shoulder straps in which the user merely needs to slip his arms through the loops so that the pad is located as shown in Fig. 10.

Such a convertible type of dual heating pad is adapted to fit comfortably any part of the anatomy for the relief of pain due to arthritis, sprains, muscular aches, sinus condition, bursitis, neuritis, rheumatism, and the like, where dry heat is recommended.

It will thus be seen that the objects hereinbefore set forth may readily and efficiently be attained, and since certain changes may be made in the above article and different embodiments of the invention could be had without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the following claims are intended to cover all of the generic and specific features of the invention herein described, and all statements of the scope of the invention which, as a matter of language, might be said to fall therebetween.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:

1. An article of manufacture constituting an elongated, rectangularly-shaped, longitudinally split convertible electric heating pad for human use; which pad comprises a first section having several male snap-fastener members secured in spaced aligned relation along one longitudinal marginal edge, at least two similar aligned members along a transverse edge, and tie-tapes extending from opposite edges; a second section having several female snap-fastener members along an adjacent longitudinal edge to receive said longitudinally aligned male members and secure said pad sections in overlapped, but split, marginal relation, to provide an opening to transform said pad into a head, chest and shoulder pad when the intermediate longitudinally aligned members are disengaged, at least two female snap-fastener members along a transverse edge in alignment with said aligned transverse male members to receive the same to transform said pad into a bandage when said longitudinally aligned members are disengaged, loop-tapes forming shoulder straps on opposite ends of said second section to provide a shoulder and back, as well as a stomach and chest pad; a tortuously arranged resistance wire in each section connected together between the juncture of said fastener members; and means at one end of said wire for connecting said article to a source of electric current; said pad, when temporarily fastened in overlapped position along its longitudinal sectional edges, having its adjacent resistance wire sections disposed in said split area in a manner such that their heat distributing capacities are equally divided and effective, with equivalent areas in each section of the pad, and more effective than they would otherwise be if said pad were not secured in said overlapped position.

2. An article of manufacture constituting an elongated, rectangularly-shaped, longitudinally split convertible electric heating pad; which pad comprises a first section having several securing elements in spaced aligned relation along one longitudinal marginal edge, at least two securing elements along a transverse edge, and tie-tapes on opposite edges; a second section having several complementary securing elements along an adjacent longitudinal edge to cooperate with said longitudinally arranged securing elements and to secure said pad sections in overlapped, but split, marginal relation, to provide an opening to transform said pad into a head, chest and shoulder pad when the intermediate longitudinal elements are disengaged, at least two complementary securing elements along a transverse edge in alignment with the transverse securing elements of said first section to cooperate therewith to transform said pad into a bandage when said longitudinal securing elements are disengaged, loop-tapes forming shoulder straps on opposite ends of said second section to provide a shoulder and back, as well as a

stomach and chest pad; a tortuously arranged resistance wire in each section connected together between the juncture of said securing means; and means at one end of said wire for connecting said article to a source of electric current; said pad, when temporarily fastened in overlapped position along its longitudinal sectional edges, having its adjacent resistance wire sections disposed in said split area in a manner such that their heat distributing capacities are equally divided and effective, with equivalent areas in each section of the pad, and more effective than they would otherwise be if said pad were not secured in said overlapped position.

3. In an article of manufacture constituting a rectangularly-shaped split convertible heating pad; the improvement which comprises a first section having several securing members in spaced aligned relation along one longitudinal marginal edge, and at least two securing members along a transverse edge with section closure elements therebetween; and a second section having several complementary securing members along an adjacent longitudinal edge to cooperate with said longitudinally arranged securing members to fasten said pad sections in abutting, but split, marginal relation, to provide an opening to transform said pad into a head, chest and shoulder pad when the intermediate longitudinally aligned members are disengaged, at least two complementary securing members along a transverse edge, with section closure elements therebetween, in alignment with the transverse securing members of said first section to cooperate therewith to transform said pad into a bandage

when said longitudinal securing members are disengaged; loop-tapes forming shoulder straps on opposite ends of said second section to provide a shoulder and back, as well as a stomach and chest pad, a tortuously arranged resistance wire in each section connected together between the juncture of said securing means; and means at one end of said wire for connecting said article to a source of electric current; said pad, when temporarily fastened in overlapped position along its longitudinal sectional edges, having its adjacent resistance wire sections disposed in said split area in a manner such that their heat distributing capacities are equally divided and effective, with equivalent areas in each section of the pad, and more effective than they would otherwise be if said pad were not secured in said overlapped position; each wire in each section being enclosed in an envelope of insulating material within each section, and each said section comprising an open-ended sleeve removably enclosing each said envelope by means of said intermediate closure elements therebetween.

References Cited in the file of this patent

UNITED STATES PATENTS

718,896	Ames et al.	Jan. 20, 1903
1,361,533	Newell	Dec. 7, 1920
2,318,109	Schultz	May 4, 1943
2,339,409	Joy et al.	Jan. 18, 1944
2,432,159	Hyre	Dec. 9, 1947
2,712,591	Rogell	July 5, 1955