

A. C. STUBLING & F. C. GIBSON.
ELECTRIC GARMENT.
APPLICATION FILED JAN. 30, 1911.

1,006,415.

Patented Oct. 17, 1911.

Fig. 1.

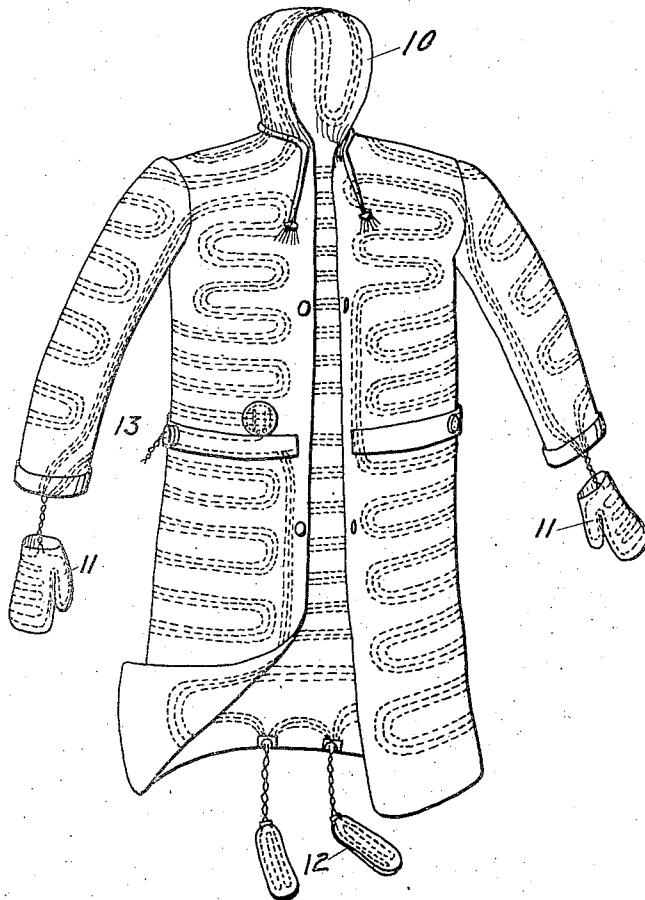


Fig. 2.

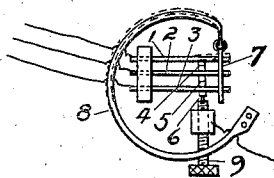
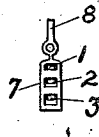


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

ARTHUR C. STUBLING AND FOSTER C. GIBSON, OF PORTLAND, OREGON.

ELECTRIC GARMENT.

1,006,415.

Specification of Letters Patent.

Patented Oct. 17, 1911.

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To all whom it may concern:

Be it known that we, ARTHUR C. STUBLING and FOSTER C. GIBSON, citizens of the United States, residing in the city of Portland, county of Multnomah, and State of Oregon, have invented certain new and useful Improvements in Electric Garments, of which the following is a specification.

This invention relates to electric garments, and more particularly to certain improvements in the manufacture thereof, whereby to greatly increase the efficiency and usefulness of the garment, and also to extend the life thereof. To this end we provide a garment with a plurality of heating coils or circuits, one or all of which may be automatically cut out of use, in case the garment gets too hot. We provide a garment in which the electric wiring is placed circumferentially around the garment and so as to encircle the body of the wearer, rather than up and down or lengthwise thereof, thereby producing an electrical effect upon the body of the wearer occupying the electric field created within the coils. We also provide in connection with such coils or circuits, means for automatically cutting out one or more of said coils or circuits when the temperature of the garment gets too high. We have also provided, as a part of said garment, a hood or cap, by means of which the head can be treated for aches and pains therein; also mittens and insoles, all connected or adapted to be connected in circuit with the wiring of the garment proper, whereby the entire body can be treated from one connection.

The invention will be readily understood from the following description, reference being had to the accompanying drawings, in which,—

Figure 1 is a view showing a garment embodying our invention, the wiring being indicated in dotted lines; Fig. 2 is an enlarged detail view, showing a form of thermostat for automatically cutting out the different circuits when the garment gets too hot; and Fig. 3 is a detail view of the operating member of the thermostat.

Referring to the drawings, the garment which I have shown for illustrating the invention, is provided with a triplicate winding; that is, three circuits or coils running around the garment as indicated by the dotted lines, parallel with each other, and so distributed throughout the fabric of the

garment that all parts of the garment are heated by all three circuits, when all three are connected up. These three circuits or windings are arranged to terminate at one end in contact members, as 1, 2 and 3, having contact points at 4, 5 and 6, with their ends projected, as shown, and extended through different sized openings in a breaking member 7, mounted upon the end of a coil or thermostat member 8, adapted to expand under heat. The contact member 1 projects through the top or smaller opening in the member 7, which said member 7 is made of any suitable non-conducting material. The contact member 2 projects through the middle opening in said member 7, which said opening is somewhat longer than the top opening; while contact member 3 projects through the lower opening in said member 7, which lower opening is longer than either of the others. The contact points 4, 5 and 6 engage each other and contact with a contact screw 9, which is connected with the main circuit of the garment, as indicated. All of said thermostat mechanism may be inclosed in a suitable casing and placed in the garment where the temperature of the garment will cause it to operate. As the temperature of the garment rises, the thermostat member 8 tends to expand or straighten out, and in so doing draws the breaking member 7, and thereby drawing the contact bar 1 away from contact bar 2, and thereby cutting out its circuit. Further expansion of the thermostat member 8 operates to move the contact bar 2 away from contact point at 5 and thereby cuts out its circuit. If the temperature of the garment continues to increase and to cause further expansion of the member 8, it will operate to move the contact member 3 away from the contact point 6, thereby cutting the last circuit and causing the temperature of the garment to lower, and again permitting the circuits to be connected. By this means, the temperature of the garment is automatically regulated. By providing a plurality of circuits, all capable of being cut out, should one circuit become broken in any manner, the other two are not thereby affected. Two of the circuits can be broken and disabled without interfering with the third, although the efficiency is reduced and the one circuit is required to do what all three did.

An important feature of the invention is the manner in which the winding is placed

in the garment; that is, we so wrap the winding in the fabric of the garment that the coils or circuits encircle the body of the wearer and each coil when charged develops a certain electric field around the body of the wearer, which electric effect is an improvement over other garments we have made in which the winding is up and down, or longitudinally of the garment. We have also provided as a part of this garment, a hood also provided with heating circuits for treatment of pains or ailments in the head. This hood can be turned back on the shoulders, if it is not desired to apply the treatment to the head. We have also provided mittens, as 11, and insoles as 12, all connected up in the circuits of the garment and adapted to be heated therefrom. The insoles 12 are adapted to be placed within the regular shoes of the wearer. The garment is intended to be connected with the usual electric light circuit, now common in homes and offices, by means of any suitable and convenient attaching plug or means, which is preferably mounted upon the belt portion of the garment, as at 13. It will be understood, of course, that the garment may be connected up to a storage battery, if desired, and thus be made useful for drivers of automobiles, cars, or other vehicles in very cold climates.

Our invention, however, is to provide a winding for a garment which encircles the body of the wearer and thereby creates an electric field about the body of the wearer when the current of electricity is turned on. Also, we are the first, so far as we are aware, to provide a plurality winding, whereby parallel circuits may be used together, or

separately, and one can be used though the others may be out of commission. This extends the life of the garment without repair and though one or two circuits may be broken, the other will heat the garment. We have provided a complete garment, so constructed that the best results in treatments may be secured.

We are aware that slight modifications can be made without departing from the spirit of our invention, and we do not, therefore, limit the invention to the embodiment shown, but refer to the claim hereunto attached as setting forth broadly our invention.

We claim:

In an electric coat having a body and sleeves, means for heating said garment and creating therein an electric field, said means comprising a series of heating coils of insulated wire woven in the fabric so as to extend around the body of the garment in horizontal planes and around the sleeves in the same manner, means for connecting a source of electricity thereto whereby to create within said series of coils an electric field for treatment of the body within the coat, and means for cutting off the supply of electricity from a portion of said coils whereby to decrease the electric effect, substantially as and for the purpose described.

Signed at Portland, Oregon, this 19th day of January, 1911.

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FOSTER C. GIBSON.

Witnesses:

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