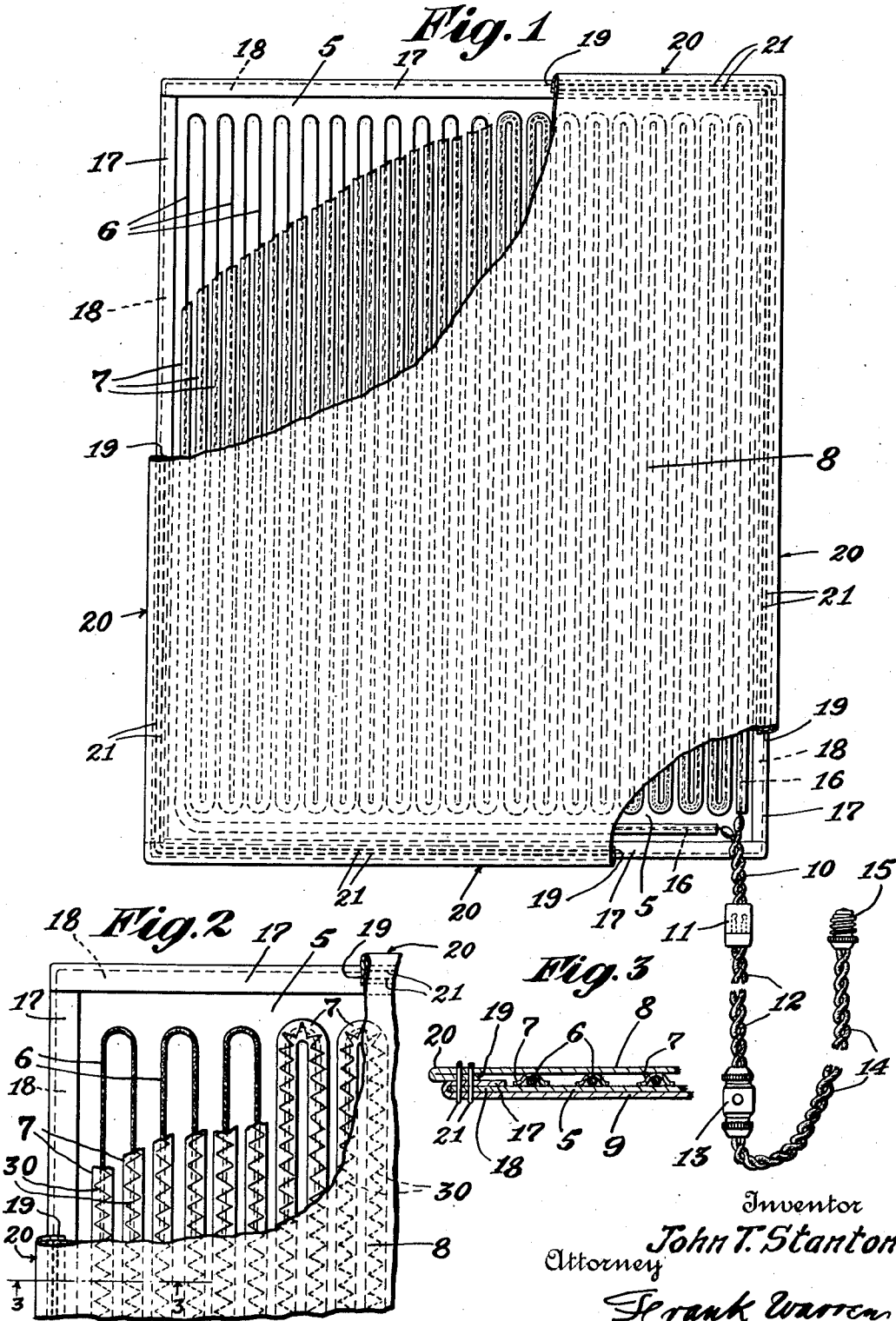


J. T. STANTON.
ELECTRICAL APPLIANCE.
APPLICATION FILED JUNE 1, 1920.

1,375,863.

Patented Apr. 26, 1921.



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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN T. STANTON, a citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Electrical Appliances, of which the following is a specification.

My invention relates to improvements in electrical appliances and in the method of making the same, and the object of my invention is to provide an electro-therapeutic blanket that is adapted for use for imparting electrical heat and radiation to the human body for remedial purposes.

Another object is to provide an electro-therapeutic blanket manufactured from material that has been suitably treated to render it stiff and to make it fireproof and a non-conductor of electricity.

A further object is to provide an electro-therapeutic blanket embodying novel means for attaching the heating unit to the lining of said blanket to prevent the heating unit from short circuiting.

A still further object is to provide an electro-therapeutic blanket that combines strength and durability with lightness of weight, simplicity and economy in construction, that is sanitary in use, that can be folded into a very compact form when not in use, and that will not readily get out of order.

With the above and other objects in view which will appear as the description proceeds, my invention resides in the novel construction, combination, adaptation and arrangement of parts hereinafter described and claimed.

I accomplish these objects by devices illustrated in the accompanying drawings, wherein—

Figure 1 is a plan view of an electro-therapeutic blanket embodying my invention, parts being broken away;

Fig. 2 is an enlarged fragmentary view of the same, parts being broken away to disclose other parts; and

Fig. 3 is a fragmentary view in transverse section of the same taken on broken line 3, 3 of Fig. 2 showing more clearly the relative position of the elements comprising my blanket.

Referring to the drawings, throughout which like reference numerals indicate like parts, the numeral 5 designates sheet of textile fabric which may be made of any suitable material, as crinoline or stiffened muslin, cut in the desired length and width which sheet of material is then stiffened by immersing in a solution of starch or glue and is also immersed in a solution of magnesite to provide a fabric that is fire proof and a non-conductor of electricity whereupon it is allowed to dry.

The narrow strip of tape 7 may be made of cotton or other suitable material and is stiffened, fire proofed and made a non-conductor of electricity and allowed to dry in the identical same manner as the sheet of textile fabric 5.

The insulated copper wire 6 is laid on the surface of the sheet 5 with the narrow strip of tape 7 superimposed thereon, the said wire 6 and tape 7 being disposed in rows running longitudinally or transversely of the sheet 5 as desired, the said rows being arranged in spaced apart relation as shown in the drawings, the ends of the rows of wire 6 and tape 7 being looped or bent at a point adjacent the edges of the sheet 5 to form a continuous electrical circuit throughout the structure.

The wire 6 and tape 7 is then stitched with a zig zag stitch, as at 30, to the sheet 5 by using a zig zag sewing machine in a well known manner. It will be obvious that the tape when so stitched forms a fireproof and insulated pocket for the insulated wire 6 thus preventing any tendency or danger of short circuiting the circuit of said wire 6.

The terminals 16 of the wire 6 are connected in any known manner to the insulated cord 10 at or near one corner of the blanket, the said cord 10 emerging from the blanket and projecting a suitable distance therefrom and having its outer ends attached to the cord connector 11. The extension cord 12 connects the cord connector 11 with the snap switch 13, the said cord 12 being of sufficient length to bring the switch 13 within easy reach of the user of said blanket. The extension cord 14 connects the switch 13 with the electric light socket plug 15 and may be of any suitable length.

The upper sheet of textile fabric 8 and the lower sheet of textile fabric 9 form the outer covering or quilt of the blanket and may be made of selected printed cotton material or other suitable textile fabric that may be found to best serve as a covering for the said blanket.

The sheets 8 and 9 are cut slightly longer and wider than the inner sheet 5 in order to provide sufficient material to finish the edges of the blanket as shown more clearly in Fig. 3.

The operation of stitching the wire 6 and tape 7 having been completed the inner sheet 5 is then laid upon the lower sheet 9 and the edges 17 of which are turned upwardly and inwardly so that the edges 17 will overlap the edges 18 of the inner sheet 5, as shown in Fig. 3. The upper sheet 8 is then superposed upon the inner sheet 5 and its edges 19 are turned downwardly and inwardly so that they will lie substantially on the edges 17 of the sheet 9, which edges 19 are folded in such manner as to leave a portion or border 20 projecting beyond the folded edge of the lower sheet 9 around the blanket to give said blanket a finished appearance when the same is completed. The edges having been folded in the above described manner are then sewed with a double stitch 21 around the perimeter of the blanket and as close to the folded edges as possible.

It will be obvious by referring to Fig. 3 that the edges 18 of the inner sheet 5 are caught in the stitches 21 thus preventing the said sheet from crumpling up within the outer sheets.

I have found in practice and after exhaustive experiments that by using a specific amount of fine copper wire that sufficient resistance is set up to produce approximately 100 degrees Fahrenheit of heat and creating a definite magnetic field within the blanket when applied to the human body has a material beneficial effect. My blanket also is very useful for imparting electrical heat and radiation to the human body for the purpose of inducing profuse perspiration and consequently the elimination of the waste products therefrom.

I have also found in practice that the principle of my electrical appliance is readily adaptable for use in heating rooms. I construct the appliance for this purpose in the same manner as hereinbefore described substituting a good grade of burlap for the crinoline material forming the inner sheet of the appliance, the burlap being treated for stiffening, fire proofing and making the same a non-conductor of electricity substantially as described for the muslin or crinoline.

It will be obvious that the principles of my electrical appliance are readily adaptable and applicable to an extensive variety of heating devices such as clothing for aviators, automobile robes, heating pads for beds, shoes, gauntlets and the like.

From the foregoing description taken in connection with the accompanying drawing, the advantages of the construction and of the method of operation will be readily apparent

to those skilled in the art to which the invention pertains, and while I have described the principle of operation of the invention, together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative and that such changes may be made when desired as are within the scope of the following claims.

What I claim is:

1. The method of fabricating an electrotherapeutic blanket which consists in cutting a sheet of textile fabric of the desired size and treating the same with a suitable solution to stiffen it then treating it in a solution to make it fireproof and a non-conductor of electricity, then taking a strip of tape and treating it in the same manner as said sheet of textile fabric, then drying said sheet of fabric and said tape, then taking insulated wire and laying it on said sheet of textile fabric and superposing the said strip of tape on said wire and stitching both to said sheet, then cutting two sheets of textile fabric to form the upper and lower covering for said blanket, then laying the first named sheet with its associated wiring and tape on the lower covering sheet, then turning the edges of said lower covering upwardly and inwardly so that said edges overlap the edges of the first named sheet, then superposing the upper covering on the first named sheet and turning its edges downwardly and inwardly so that the last named folded edges will lie substantially on the folded edges of the said lower covering, the edges of said upper covering being folded in such manner as to leave a portion of the same projecting beyond the folded edges of the lower covering and stitching the edges of all the sheets together.

2. The method of constructing an electrotherapeutic blanket which consists in cutting a sheet of fabric of the desired size, then treating the same in a glutinous solution to stiffen it, then treating it in a solution of magnesite to make it fire proof and a non-conductor of electricity, then taking a narrow strip of cotton tape and treating it in a glutinous solution to stiffen it, then treating it in a solution of magnesite to make it fire proof and a non-conductor of electricity, then drying said sheet and said tape, then taking insulated copper wire and laying it in parallel rows on said sheet and superposing the said tape on said wire and stitching said wire and said tape to said sheet, then cutting two sheets of fabric of a slightly larger size than the first named sheet to form the upper and lower covering of said blanket, then laying the first named sheet with its associated wiring and tape on the lower sheet, then folding the edges of the lower sheet upwardly and inwardly so that said edges overlap the edges of the first

named sheet, then superposing the upper sheet on the first named sheet and folding its edges downwardly and inwardly so that the last named folded edges will lie substantially
5 on the folded edges of the lower sheet, the edges of said upper sheet being folded in such manner as to leave a portion of the same projecting beyond the folded edges of said lower sheet and double stitching the edges of all the sheets together. 10

In witness whereof, I hereunto subscribe my name this 21st day of May A. D. 1920.

JOHN T. STANTON.