March 6, 1934. A. O. SAMUELS 1,950,124

WETPROOF HEATING PAD CONSTRUCTION

Filed July 22, 1931 2 Sheets-Sheet 1

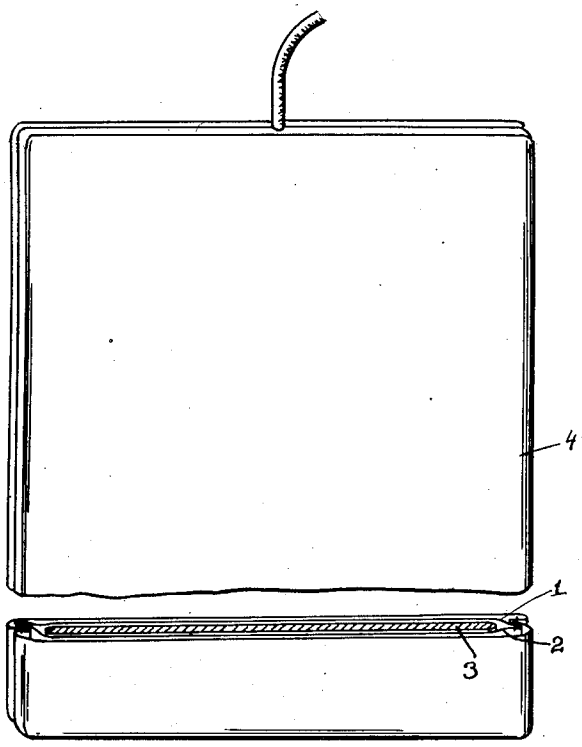


FIG. 1.

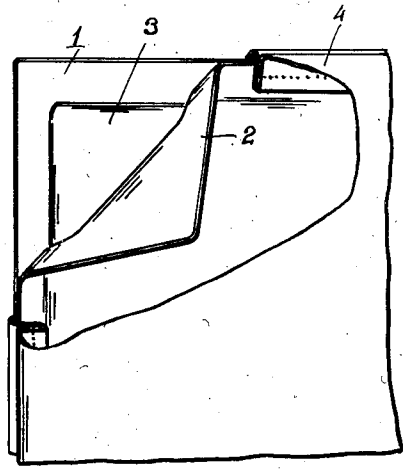


FIG. 2.

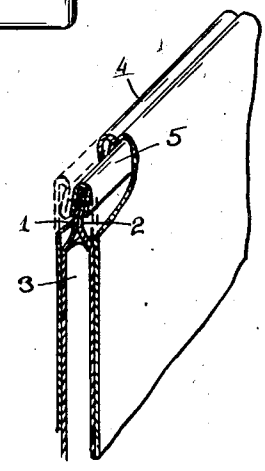


FIG. 3.

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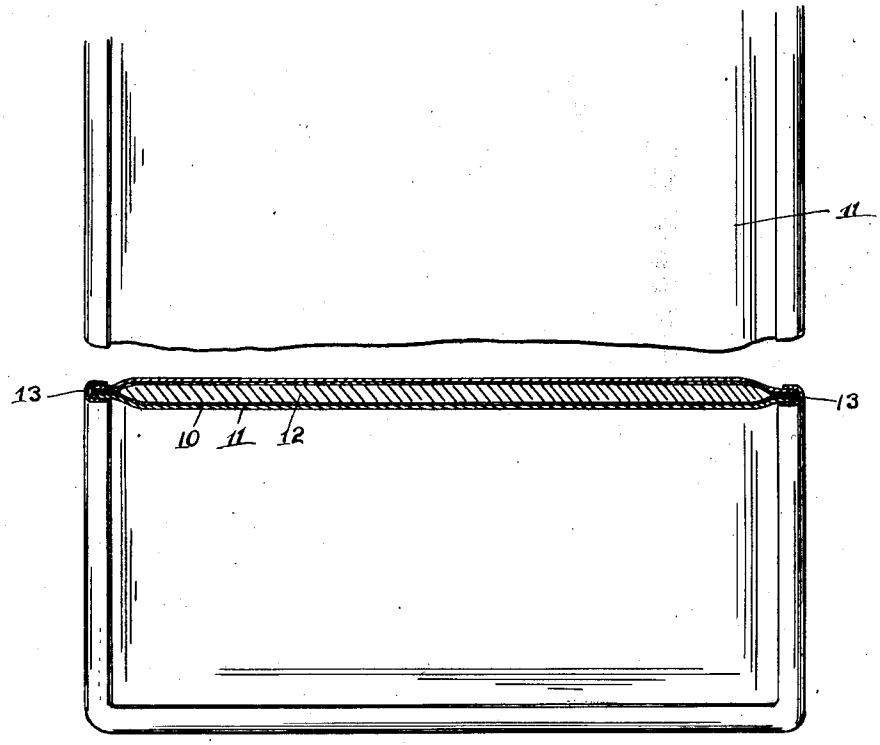


FIG. 4.

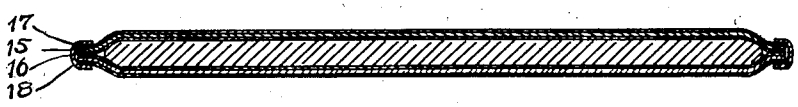


FIG. 5

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Patented Mar. 6, 1934

1,950,124

UNITED STATES PATENT OFFICE

1,950,124

WETPROOF HEATING PAD CONSTRUCTION

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Application July 22, 1931, Serial No. 552,466

2 Claims. (Cl. 219—46)

This invention relates to electric heating pads and has for its object to provide a construction for such pads which make them absolutely moisture proof.

This and other objects and attendant advantages will become apparent from the detailed description of the invention, reference being had to the accompanying drawings in which

Figure 1 is a perspective view of a heating pad constructed in accordance with my invention, the pad being partly broken away to illustrate the construction of it.

Figure 2 is a perspective view of a corner of the heating pad illustrating one method of fastening together the lining and cover with the heating unit hermetically sealed and surrounded by the lining.

Figure 3 is a partial sectional and perspective view of a portion of the heating pad illustrating another method of sealing and lining the heating pad to make it moisture proof.

Figure 4 is a detail perspective and sectional view of a portion of the heating pad illustrating another method of sealing and lining the heating element within the heating pad.

Figure 5 is a horizontal sectional view of another modified form of construction of the heating pad.

In the several figures of the drawings like reference numerals indicate like parts.

The heating pad construction forming the subject matter of my present invention is adapted to make such pads absolutely moisture proof so that the danger of short circuiting the electric circuit of the pad is entirely eliminated.

This is accomplished by the use of an interlining which is used either separately or as a part of the cover for the pad and serves to make the pad water repellent over its entire surface including the seams. The water repellent surface is provided by a triple rubber coating which is applied to the surface of the fabric used for the lining or the fabric forming the cover, thereby eliminating the interlining. In the application of the rubber coating, the rubber material is applied to the fabric first in one direction, then at right angles thereto across the first coating for the second coating and for the third coating the rubber material is applied at right angles to the second coating or parallel with the first coating. This triple coating provides an absolutely water proof and water repellent surface for the material to which it is applied.

In the construction of the pad illustrated in Figures 1 and 2 the water proof and water repellent coating is applied to an interlining which is made up of two sheets 1 and 2. These two sheets are placed one on each side of the heating unit 3 with their coating on the outside and are slightly larger than the heating pad so that the edges of the sheets overhang the pad. These overhanging edges of both sheets forming the lining are then cemented together around the outside of the heating pad with a water proof or water repellent cement, thus hermetically sealing the heating unit within the interlining.

The interlining is then surrounded by the cover proper 4 which preferably consists of a high grade flannel material such as angorine chinchilla elderdown. This material is folded over the interlining in such a manner that a seam is formed around the edges of the pad and this seam is sewed to the sealed and cemented edges of the interlining surrounding the heating unit.

In Figure 3 I have illustrated a slightly modified method of sealing the edges of the sheets forming the interlining. In this method a sealing strip 5 is folded over the overhanging edges of the sheets forming the interlining and is then cemented thereto. This fastens the two sides of the lining together as well as seals the heating unit within the lining.

The heating pad illustrated in Figure 4 is of a simplified construction in which the water proof or water repellant coating 10 is directly applied to the inside of the cover proper 11. The water proof or water repellant coating of the cover is cemented directly to the outside of the heating element 12 while the edges of the cover are cemented together and then fastened together by the piping 13 overlapping the cemented edges and surrounding the cover.

In Figure 5 I have shown another modified construction of the heating pad. In this construction the cover 15 is provided with an adhesive coating 16 on the inside and a water repellant or water-proof coating 17 on the outside. With the adhesive coating the over is cemented to the surface of the heating element and a suitable sealing strip 18 is fastened around the edges of the cover to seal the heating element within the cover after it is cemented thereto.

I claim:

1. A flexible heating pad having a flexible electric heating element, a water repellent interlining cover surrounding said heating element with an overhanging seam around the edges of said interlining cover, a cloth cover encasing said heating element with its water repellent cover, a seam formed around the edges of said cloth

cover and projecting inwardly thereof and means for fastening the seam of said cloth cover to the seam of said water repellent cover to hold said covers in fixed relation to each other and said heating element and provide a uniformly flexible and smooth pad.

2. A flexible heating pad having a flexible electric heating element, a pair of water repellent interlining covers one on each side of said heating element, an inverted U-shaped sealing strip engaging over the edges of said covers to seal said heating element between them, a cloth cover encasing said heating element with its water repellent covers, a seam formed on the inside of said cloth cover at the edge thereof and means for fastening said seam of said cloth cover to said sealing strip.

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