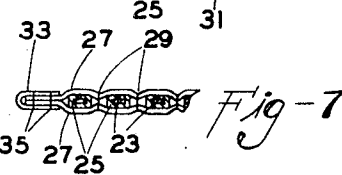
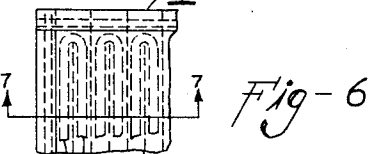
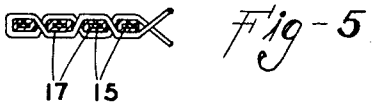
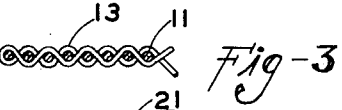
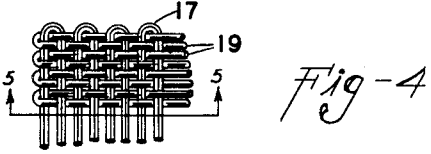
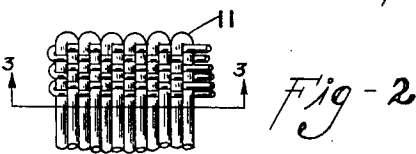
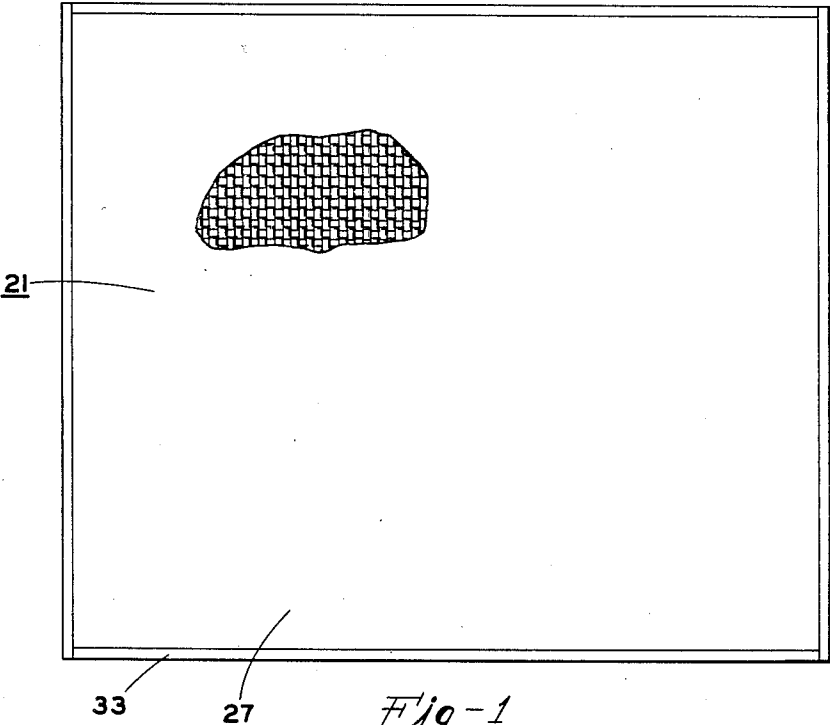


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C. M. OSTERHELD
ROOM HEATER

2,511,540

Filed Aug. 24, 1946



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UNITED STATES PATENT OFFICE

2,511,540

ROOM HEATER

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Application August 24, 1946, Serial No. 692,903

2 Claims. (Cl. 219-46)

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My invention relates to electric room heaters and particularly to floor-type room heaters.

One object of my invention is to provide an electrically-heated rug.

Another object of my invention is to provide a novel construction for an electrically-heated floor rug.

Other objects of my invention will either be apparent from a description of several modifications of devices embodying my invention or will be pointed out in the course of such description and be set forth more particularly in the appended claims:

In the drawings,

Figure 1 is a top plan view of a floor rug embodying my invention having a part of the covering thereof cut away,

Fig. 2 is a fragmentary top plan view showing one form of construction embodying my invention,

Fig. 3 is a fragmentary view in lateral section therethrough taken on the line 3-3 of Fig. 2,

Fig. 4 is fragmentary top plan view showing another form of device embodying my invention,

Fig. 5 is a fragmentary view in lateral section taken on the line 5-5 of Fig. 4,

Fig. 6 is a fragmentary top plan view of another form of device embodying my invention, and,

Fig. 7 is a fragmentary view in lateral section therethrough taken on the line 7-7 of Fig. 6.

Referring first of all to Figs. 2 and 3, I have there illustrated one form of device and method for building up an electrically-heated floor rug. In this form a conductor member 11 constitutes preferably the warp threads of a rug and I provide also a weft 13 which may be made of any suitable electric-insulating material such as glass fibers. The outer surface of resistance conductor 11 is covered with an anodic coating of integral, inorganic, heat-conducting, high-temperature-resisting and electric-insulating coating, the thickness of which is preferably on the order of .001".

While I do not desire to be limited thereto, resistance conductor 11 may preferably be made of an aluminum resistance conductor and the anodic coating may be made thereon according to the teachings of U. S. Patent No. 1,526,127. I may, however, use an ordinary metallic resistance conductor instead of the aluminum resistance conductor.

Referring now to Figs. 4 and 5 of the drawings, I have there illustrated a somewhat different form of construction embodying my invention. This construction embodies a strip 15 of

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a resistance conductor such as aluminum, which resistance conductor strip is substantially covered over its entire surface by a member 17 which is of channel shape in lateral section with inturned side edges. The combination of resistance conductor 15 and of its cover 17 constitutes the warp of the rug and I provide a weft 19 which may preferably be made of fiber glass although any other suitable electric-insulating material able to withstand the rather heavy wear to which a rug is subjected may be used.

The outer surface of the resistance conductor 15 is provided with an anodic coating thereon, said coating having a thickness on the order of .001" and if desired I may also provide such a coating over either the entire inner surface of channel member 17 or over the entire surface of channel member 17 although this is not necessary. I may also provide the entire inner surface of channel member 17 with such an anodic coating and may not provide the outer surface of resistance conductor with an anodic coating.

Referring now to Figs. 6 and 7 I have there illustrated a slightly different form of rug 21 shown in lateral section in Fig. 7 of the drawings. A resistance strip 23 preferably made of aluminum is totally enclosed in a channel member 25 preferably also of aluminum and I provide an outer electric-insulating cloth 27 on both sides of the channel member 25 and the enclosed resistor strip 23 therein. The cloth 27 may be made of glass fiber. I have shown only one corner of the rug 21 and wish to here point out that the resistance conductor and its enclosing channel member 25 have substantially the same shape as the warp 11 or 17 except that the two outer coverings 27 are sewed together as by a plurality of seams 29 which extend parallel to the warp 25 as well as between the adjacent threads, these seams being indicated by numeral 31. I provide a member 33 which also may be made of glass fiber cloth and bend it to substantially U-shape before holding it on each edge of the rug by a plurality of seams 35.

The floor rug embodying my heater has been shown without terminals, it being understood that a pair of terminals or perhaps several pairs are brought out at one of the corners or some other place on the edge of the rug.

The device embodying my invention thus provides a relatively thin rug cloth comprising a warp of resistance material having on its outer surface a relatively very thin electric-insulating coating and a weft of electric-insulating material

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and of a suitable kind to withstand the rough wear of many people passing over the rug.

Various modifications may be made in the device embodying my invention without departing from the spirit and scope thereof and all such modifications clearly coming within the scope of the appended claims shall be considered as part of my invention.

I claim as my invention:

1. A room heater rug comprising a flat metallic resistance conductor member and a flattened metallic sheath member therearound, one of said members containing aluminum and that surface thereof engaging the other member having thereon an integral, inorganic, heat-conducting, high-temperature-resisting and electric-insulating coating, comprising oxidation products of aluminum, and fibrous material binding convolutions of said sheathed conductor into a flexible mat-like structure wherein said conductor lies flat so that its thinnest dimension coincides with the thinnest dimension of the rug.

2. A room heater rug comprising an elongated, convoluted electric conductor of flattened cross section and binding material woven with said conductor into a flexible mat-like structure

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wherein said conductor is laid flat so that its thinnest dimension coincides with the thinnest dimension of the mat-like structure.

CLARK M. OSTERHELD.

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