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1,622,244

W. R. BECKLEY

ELECTRIC AUTO CONDENSATION PAD

Filed Dec. 24, 1925

Fig. 1.

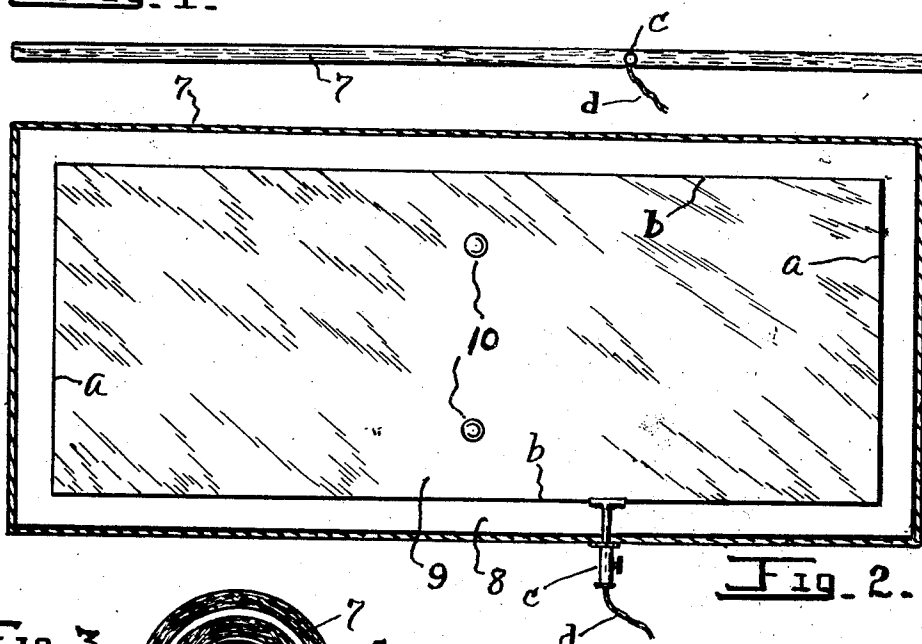


Fig. 2.

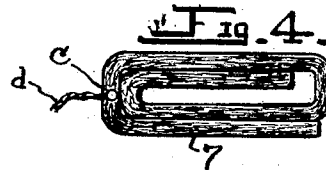


Fig. 3.

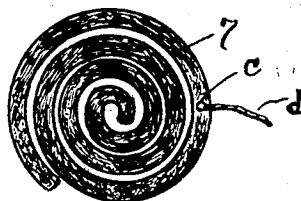


Fig. 5.

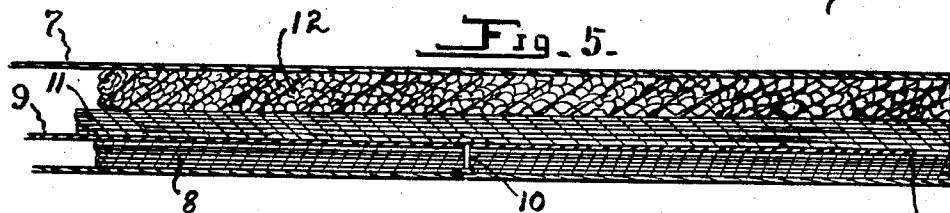
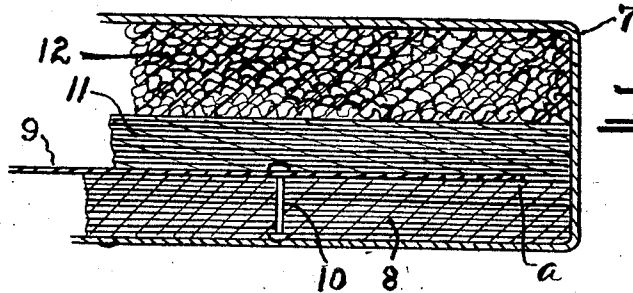


Fig. 6.



Inventor

William R. Beckley,

By

Wiram A. Sturges

Attorney

UNITED STATES PATENT OFFICE.

WILLIAM R. BECKLEY, OF OMAHA, NEBRASKA, ASSIGNOR TO ETHEL POPE BECKLEY,
OF OMAHA, NEBRASKA.

ELECTRIC AUTOCONDENSATION PAD.

Application filed December 24, 1925. Serial No. 77,426.

This invention relates to an electric auto-condensation pad for use of physicians in administering electro-therapeutic treatments, and has for its object to provide a pad for
5 this purpose which will consist of few and simple parts so that it may be manufactured conveniently and at a limited expense, will be effective in operation and will be convenient in use. One of the specific objects in
10 view is to provide a pad of this class which may be rolled or folded to form a compact package, this being a feature relating to portability and convenience in use. The invention includes a single, attenuated, metallic sheet disposed within and maintained
15 in separated relation from its flexible container or jacket.

With the foregoing objects in view and others to be mentioned hereinafter the invention presents a novel and useful construction, combination and arrangement of parts as described herein and claimed, and as illustrated in the accompanying drawing, wherein,—

25 Fig. 1 is a view of the pad in side elevation. Fig. 2 is a plan view, the upper part of the pad being removed to show the single metallic sheet or electrode maintained inwardly of and adjacent to the side and end
30 walls of the container or jacket. Figs. 3 and 4 show end views of the pad when rolled or folded to form a portable package. Fig. 5 is a view in longitudinal section showing a part of the pad. Fig. 6 is a view similar to
35 that shown in Fig. 5, the scale being enlarged.

It is understood, of course, that electric pads have heretofore been used upon which patients might recline for treatments, these
40 pads being provided with a plurality of metallic plates or electrodes electrically charged, said pads generally consisting of hingeably connected sections and each section being provided with a rigid frame for
45 containing an electrically charged metallic plate or electrode, but I am not aware that a single, flexible, elastic sheet has heretofore been used having such a degree of tenuity that the pad, together with said metallic
50 sheet, may be rolled or folded to occupy a limited space, and which, on account of the resiliency of the electrode or sheet will normally assume a rectilinear shape, when unrolled or unfolded.

55 In order that the objects first mentioned

may be attained I provide a flexible container or jacket 7 preferably of rectangular form in plan and elevation and constructed of leather, leatherette or similar material. Numeral 8 indicates a flexible spacing-member or buffer conforming to the area in plan
60 of and disposed in the container or jacket, preferably on the bottom thereof. Numeral 9 indicates a flexible, attenuated, elastic, metallic sheet disposed on the buffer or
65 spacing-member and secured in stationary relation therewith by means of a pair of keepers or rivets 10.

The buffer or spacing-member preferably consists of a plurality of paper sheets conforming in size to the area of the jacket and of such consistency that they will resist buckling from effects of end thrusts, but will permit bending, and since the ends and side
70 edges engage the respective ends and sides of the container or jacket there will be no sliding movement of the spacing member therein.

The ends and side edges of the electrode or sheet 9 are indicated respectively at *a* and
80 *b*, and this electrode has such proportions that its ends and side edges terminate inwardly of the respective ends and side edges of the spacing-member or buffer; and on account of the keepers or rivets 10 the electrode will have no swinging or sliding movements relative to said member 9, and therefore the sheet 9 will be prevented from
85 incising or injuring the container or jacket, it being understood that the degree of attenuation of the sheet 9 is very great and would readily cause incisions in the flexible jacket if not maintained inwardly of the ends and side edges of said member 8, and in spaced
90 relation with reference to the jacket.

Numeral 11 indicates a plurality of flexible layers preferably consisting of paper sheets which are disposed above the electrode to operate as a stiffener for reinforcing the spacing-member 10, and any soft filler
100 12, preferably consisting of felt or cotton is disposed between the top of the pad and the paper sheets 11. At *c* is indicated a socket for a mounting of the electrical conductor *d* for electrically charging the electrode 9.

It will be appreciated that any physical contact of a patient with the electrically charged electrode must be avoided, and therefore it is important that the electrode
110

or sheet 9 shall be completely covered and housed and prevented from cutting through the jacket.

Among some of the advantages to be derived by use of the invention is the simple construction mentioned, the use of a flexible buffer or spacing-plate, the simple and practical means for maintaining the electrode inwardly of all of the edges of the spacing-member, and the use of a single attenuated elastic electrode whereby the pad may be rolled or folded as shown in Figs. 3 and 4 of the drawing, and on account of the tenuity and elasticity of the metallic sheet and use of a flexible spacing-member or buffer, the pad will normally assume a rectilinear form as shown in Fig. 1 of the drawing, when unrolled or unfolded.

In the use of pads of the class described it is often desirable to use them at residences of patients or at places remote from a physician's office. The pad is of light weight, comparatively, and when rolled may be conveniently carried, and any rough usage of the device during transportation will not result in injury of the jacket by the electrode since the latter is maintained in separated relation therefrom as described.

While I have shown and described specific details of construction I do not wish to be understood as limiting myself in this respect, and changes in form, size, proportion and minor details may be made as found to be of advantage, said changes being determined by the scope of the invention as claimed.

I claim as my invention,—

1. In a pad of the class described, a flexible container, a flexible spacing-member disposed within with its sides and ends engaging the container, an attenuated, metallic sheet disposed upon and having a lesser area in plan than the spacing-member, a plurality of paper sheets disposed on the metallic sheet with their edges engaging the container, a yielding filler-member on the paper sheets, keepers traversing the spacing-member and metallic sheet for maintaining said metallic sheet with its edges disposed inwardly of the sides and ends of the spacing-member, said attenuated sheet being elastic to normally cause the pad to assume a rectilinear position but permitting the pad to be rolled into bundle form.

2. In a pad of the class described, a flexible container, a flexible spacing-member disposed within with its sides and ends engaging the container, an attenuated, metallic sheet disposed upon and having a lesser area in plan than the spacing-member, a yielding filler-member above the attenuated metallic sheet within the container, said metallic sheet being secured to the spacing-member with its edges disposed inwardly of the sides and ends thereof, said attenuated, metallic sheet being elastic to normally cause the pad to assume a rectilinear form, but permitting the pad to be rolled into bundle form.

In testimony whereof, I have affixed my signature.

WILLIAM R. BECKLEY.