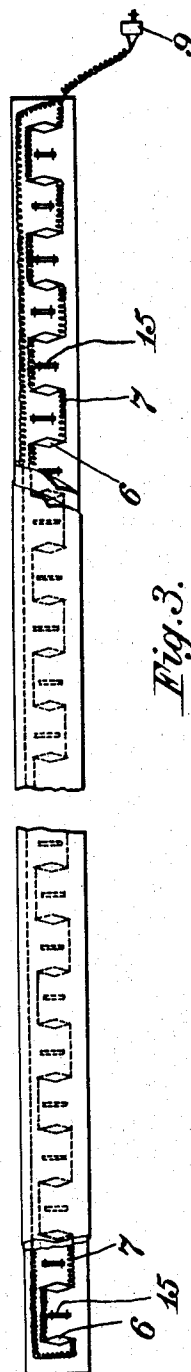
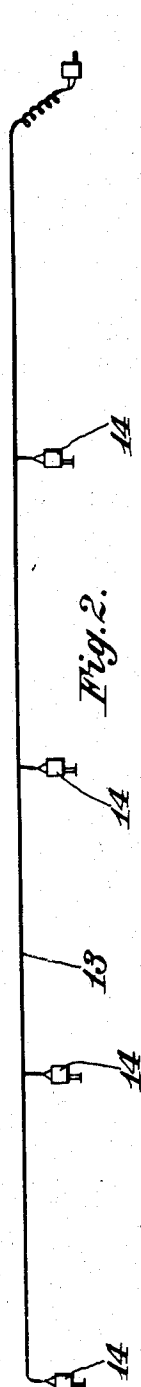
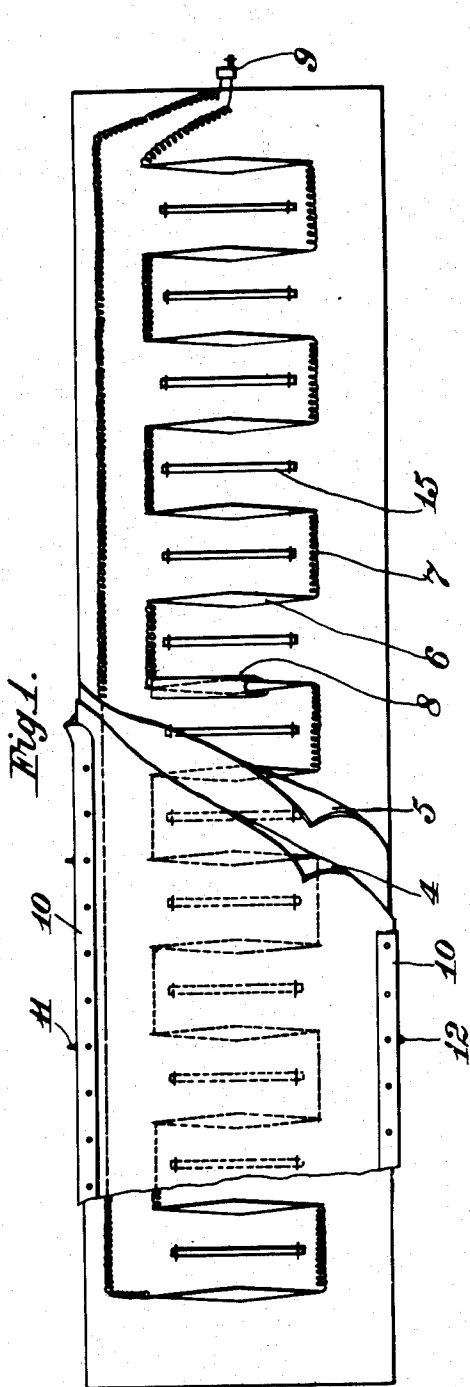


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FLEXIBLE ELECTRIC HEATER.

APPLICATION FILED NOV. 19, 1909. RENEWED OCT. 12, 1911.

1,027,763.

Patented May 28, 1912.



Witnesses
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UNITED STATES PATENT OFFICE.

LUTHER C. RHEA, OF COLUMBUS, OHIO.

FLEXIBLE ELECTRIC HEATER.

1,027,763.

Specification of Letters Patent.

Patented May 28, 1912.

Application filed November 19, 1909, Serial No. 528,878. Renewed October 12, 1911. Serial No. 654,463.

To all whom it may concern:

Be it known that I, LUTHER C. RHEA, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Flexible Electric Heaters, of which the following is a specification.

This invention relates to electrically heated appliances of the nature of a blanket, bandage, belt or pad designed to be applied to the human body or members thereof for warming them. In a general way such devices have been proposed before and my invention is embodied in particular improvements hereinafter set forth and pointed out in the claims.

In the accompanying drawing: Figure 1 illustrates in plan view one unit of a blanket, parts being broken out to show details of construction. Fig. 2 diagrammatically the scheme for supplying electric current to several of such units. Fig. 3 is a view like Fig. 1 illustrating the invention as embodied in a belt or bandage.

Referring to Fig. 1 the blanket comprises at each side an outer covering 4 as shown in Fig. 1 of suitable fire proof fabric such as is usually employed in blankets of the kind. These coverings are each lined with sheets of asbestos paper 5, and between these sheets of paper are secured the conductors of the electricity. The characters 6 designate the resistances or heaters which are preferably of German silver. These heaters are shown of diamond form and formed flat or uncoiled; and furthermore they are shown as arranged parallel to each other. The heaters 6 are arranged parallel to the ends of the blanket unit and their ends are connected at their ends in pairs, as shown, by coils of wrapped insulated copper wire 7 so as to include the heaters in a series electrically. Each of the heaters 6 is entirely incased in an asbestos case 8 which is shown as broken open in Fig. 1 so as to prevent scorching the bedding or burning the patient. The heaters at the ends of the unit are connected in series by suitable coiled wires with an ordinary circuit closing device—like a lamp socket—at 9. 15 designates stiffening strips of whalebone or other suitable elastic material secured to the blanket to stiffen the unit transversely along the line of the

heaters to prevent distortion of the heaters. Each section thus constructed is provided around its edges with a binding strip 10 of leatherette or other suitable strong material sewed to the unit, and the longer edges of the unit are provided with hooks 11 and eyes 12 to permit the connecting of the units to form a blanket of the desired dimensions. When several of the units are thus connected their several sockets, 9, are connected with an electric feeder cord or wire 13 having plugs 14 to enter the sockets and thus close the circuits. Fewer than all the units in a blanket can be heated by omitting connection of the feeder wire with them.

In operation the resistances 6 when subjected to the action of a suitable current of electricity provide the required heat.

In Fig. 3 where the invention is shown as embodied in a belt or bandage the construction is in all essential respects the same, the belt or bandage being merely narrower than a blanket unit. The edge binding and hooks and eyes of the blanket unit are not shown in the belt or bandage construction.

Because the conductor wires in my invention are in the form of coils the devices are very flexible and those wires are not liable to break and injure the patient. This is a serious trouble that I have noted with other blankets.

What I claim is:

1. A blanket or covering of the kind described, comprising, in combination, a plurality of separate uncoiled elongated resistance conductors arranged substantially parallel to each other and united at their ends in series by coiled conductors, said coiled conductors extending transversely to the direction of the resistance conductors, and flexible coverings for said resistances and conductors.

2. A blanket or covering of the kind described comprising, in combination, parallel separate uncoiled resistance conductors united by coiled conductors, elastic stiffening devices between the uncoiled conductors and flexible coverings for said parts, substantially as described.

LUTHER C. RHEA.

Witnesses:

BENJ. FINCKEL,
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