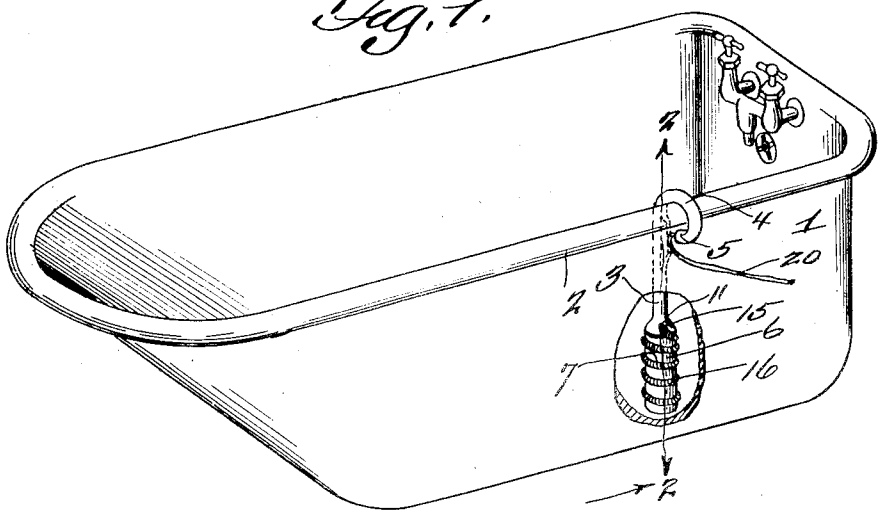
J. W. PURNELL.

ELECTRIC BATH TUB HEATER.

APPLICATION FILED MAY 3, 1916.

1,222,669. Patented Apr. 17, 1917.

Fig. 1.



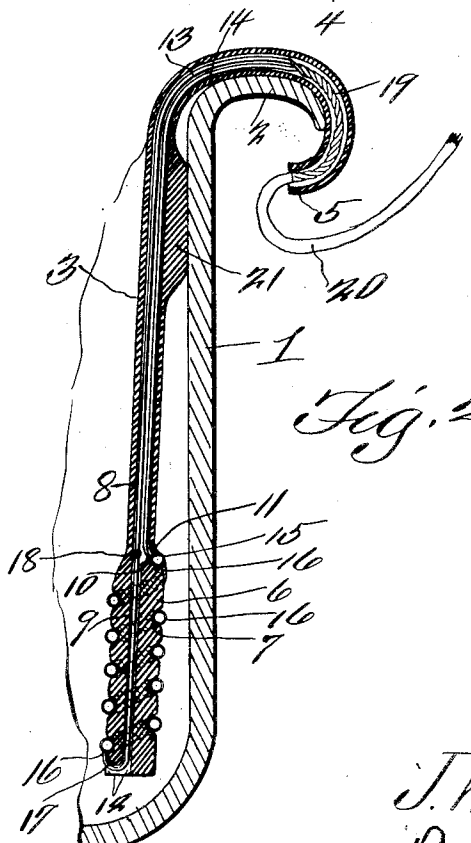


Fig. 2.

Witnesses

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JOHN W. PURNELL, OF MORRISTOWN, TENNESSEE.

ELECTRIC BATH-TUB HEATER.

1,222,669. Specification of Letters Patent. Patented Apr. 17, 1917.

Application filed May 3, 1916. Serial No. 95,202.

To all whom it may concern:

Be it known that I, JOHN W. PURNELL, a citizen of the United States, residing at Morristown, in the county of Hamblin, State of Tennessee, have invented a new and useful Electric Bath-Tub Heater; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improved electric water heater for bath tubs, and an object of the invention is to provide a device of this kind, which is simple, efficient and practical in construction, and which may be carried in a dress suit case of a person when traveling, and designed mainly for use for heating water from a source of electrical supply, for use in homes, hotels, traveling conveyances, such as railway cars, boats and the like.

Another object of the invention is to provide a heating appliance of this kind having a hooked handle to engage the edge portion of a bath tub, to suspend the heater on the interior of the tub, to heat the water.

Another object of the invention is to provide means to hold the heater or the heating coil from contact with the inner face of the side of the tub, thereby preventing the heating coil from being short circuited.

Another object of the invention is the provision of means on the hooked end, to prevent the hooked end from disengaging the upper edge portion of the bath tub.

In practical fields the details of construction may necessitate alterations falling within the scope of what is claimed.

The invention comprises further features and combination of parts as hereinafter set forth, shown in the drawings and claimed.

In the drawings:—

Figure 1 is a perspective view of a bath tub, showing the improved heater as applied thereto and constructed in accordance with the invention.

Fig. 2 is a sectional view on line 2—2 of Fig. 1.

Referring more especially to the drawings, 1 designates a bath tub which is of the usual construction, and which is provided at its upper portion with a partial outwardly rolled flange 2. The entire heater comprises a tubular member 3, which is constructed of any suitable non-conducting or insulating material such as porcelain, wood or the like. The upper part of the tubular member terminates in a hook portion 4, which is of a shape substantially corresponding to the contour of the outwardly rolled flange of the bath tub. This hooked portion 4 terminates in an under hook part 5, which extends a little below and under the edge part of the flange 2, so that should the member 3 be accidentally moved upwardly, without tilting the lower end of the member inwardly and upwardly, the hook part 5 will contact with the under edge of the flange 2 and prevent disconnection of the member 3. The member 3 at its lower portion terminates in an enlargement 6, which is provided with a spirally arranged groove 7. The hollow portion 8 of the tubular member 3 terminates in a restricted part 9, which is a length substantially equal to the length of the enlargement 6 and extends entirely through said enlargement. The hollow 8 adjacent the upper part of the enlargement 6 branches or merges off into a passage 10, which opens at 11 into the upper end of the spiral groove 7. The lower end of the restricted portion 9 of the hollow terminates in a lateral passage 12 at the lower extremity of the enlargement 6, which passage 12 merges upwardly and into the lower end of the spiral groove 7. The usual leads or wires 13 and 14 extend through the hollow 8 of the member 3, and the lower part of the wire 14 is connected at 15 to the upper end of a heating coil 16 (the wire of which may be any suitable length, any where from three to ten yards more or less) arranged in the spiral groove 7. The lower end of the heating coil 16 has an extension 17 which extends through the passage 12, and through the contracted part 9 of the hollow 8, and is connected to the wire or lead 13, as shown at 18. The two wires or leads 13 and 14 just before leaving the hook 5, are coiled together as shown at 19, and beyond the hook 5 these two wires 13 and 14 are provided with an insulating covering 20. These two wires are designed to be connected to any suitable source of electrical supply (not shown) to furnish electrical current to the heating coil. In order to prevent the heating coil from contacting with the metal of the bath tub, the tubular member 3 is provided with a lateral enlargement 21 adjacent the hook 4, to engage the inner face of one side of the bath tub to

hold the enlargement 6 spaced from the inner face of the side of the bath tub.

The invention having been set forth, what is claimed as new and useful is:

In an electric water heater, the combination with a tubular supporting member having a spiral groove at its lower end and provided with a hook at its upper end for attaching the member to the flanged upper edge of a tub, the end of the hook being extended transversely toward the body of the support to form means serving to prevent accidental upward displacement of the support from the flange of the bath tub, of an electric heating coil in said groove having wires for connection to a source of supply extending through the member, said tubular member having a lateral elongated lug to engage the inner face of the side of the bath tub to hold the heating coil at the lower end of said member out of contact with the inner face of the side of the tub.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN W. PURNELL.

Witnesses:
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