A. C. HOFFMAN.

ELECTRIC HEATER FOR THAWING PIPES.

APPLICATION FILED MAR. 5, 1921.

1,408,196. Patented Feb. 28, 1922.

FIG-1-

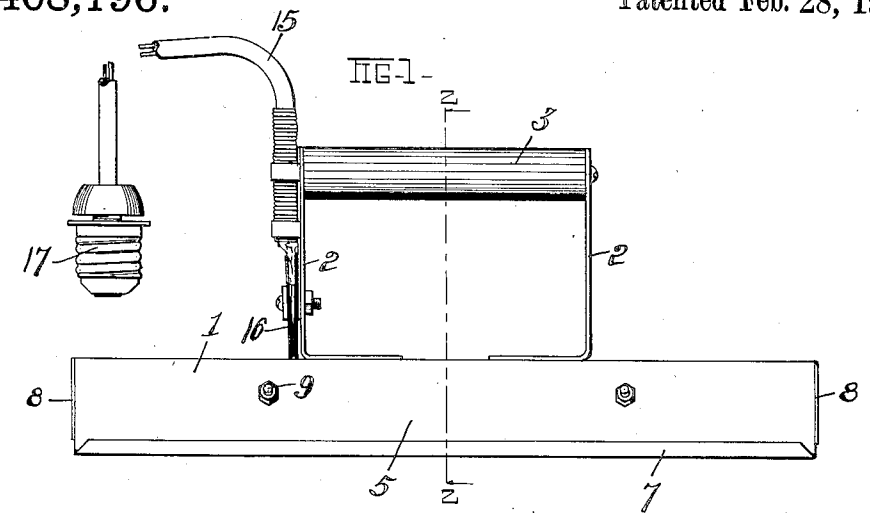
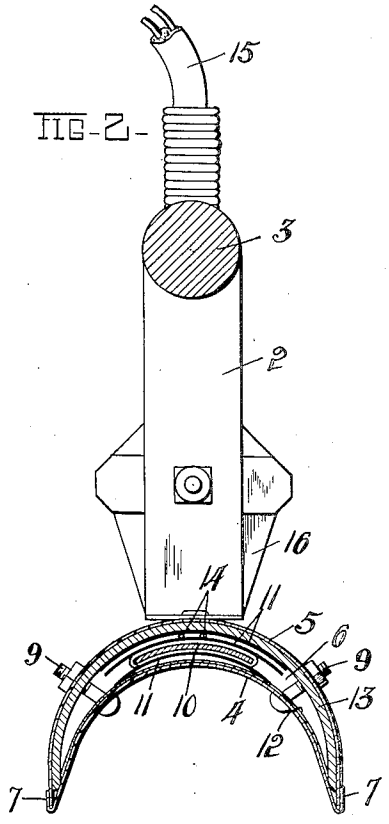


FIG-2-



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ELECTRIC HEATER FOR THAWING PIPES.

1,408,196. Specification of Letters Patent. Patented Feb. 28, 1922.

Application filed March 5, 1921. Serial No. 449,772.

To all whom it may concern:

Be it known that I, ALBERT C. HOFFMAN, a citizen of the United States, and a resident of Huntington, in the county of Huntington and State of Indiana, have made an invention appertaining to Electric Heaters for Thawing Pipes; 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, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this specification.

This invention relates to electric heaters and particularly to a portable heater of this class adapted for thawing out water pipes or the like.

The object of the invention is the provision of a heater of the character described which is simple and inexpensive in its construction and capable of being used to effect an easy and rapid thawing of frozen pipes, elbows, etc.

The invention is fully described in the following specification, and while, in its broader aspect, it is capable of embodiment in numerous forms, a preferred embodiment thereof is illustrated in the accompanying drawings, in which,—

Figure 1 is a side elevation of a heater embodying the invention, and Fig. 2 is an enlarged vertical cross-section thereof on the line 2—2 in Fig. 1.

Referring to the drawings, 1 designates the body of a device embodying the invention, which body is of elongated form and substantially semi-circular or U-shape in cross-section to adapt it to fit partially around a pipe to be heated. The back or convex side of the body 1 has two standards 2, fixedly rising therefrom in spaced relation longitudinally thereof and connected at their outer ends by a handle 3.

The heater body 1 in its preferred construction comprises inner and outer elongated U-shaped members 4 and 5, respectively, of sheet metal, set one within the other to cooperate to form a chamber 6 therebetween of crescent form in cross-section. The inner member 4 has its side edges provided with upturned flanges 7 to form edge troughs for receiving the side edges of the member 5, and the member 4 also has end flanges 8 projecting outward therefrom to close the ends of the chamber. The two members are separately secured together by bolts 9.

An electric heating element 10 of any suitable form and construction is disposed within the chamber 6, extending substantially throughout its length and being suitably insulated at top and bottom by mica strips 11. It is preferable to face the member 4 at its inner side with a thin asbestos strip 12 and to face the member 5 at its inner side with a heavy asbestos strip 13, which latter tends to heat insulate the handle standards from the heating element.

The leads 14 from the heating element 10 extend out through the top of the body 1 and connect with the lead wires of a flexible cord 15 within a suitable clamping means 16 disposed at the outer side of one of the handle uprights 2. In the present instance, the cord 15 is shown as being permanently attached to the lead wires through the medium of the clamp 16, but it is apparent that a separable plug and socket connection of any suitable type may be employed if desired. The cord 15 may have a plug 17 at the outer end thereof for insertion into an electric socket.

It is evident that I have provided a simple and efficient form of electric heater, which is particularly adapted for use in partially enclosing pipes or elongated circular objects to heat the same and to thaw them out when frozen. It is also evident that the parts of the body 1 of the device may be easily and quickly separated for the purpose of inspection or repair of the heating element or for replacement of any of the parts of the heater.

I wish it understood that my invention is not limited to any specific construction, arrangement or form of the parts, as it is capable of numerous modifications and changes without departing from the spirit of the claim.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is,—

1. In a heater of the class described, an elongated body of U-form in cross-section comprising inner and outer U-shaped members fitting one within the other to cooperate to form a chamber therebetween, one member having its side edges turned to form troughs for receiving the side edges of the outer member, and one member having end flanges

extending outward to close the ends of the chamber, means releasably securing the body member together, an electric heating element disposed within the body chamber and insulated from the body members, and a handle carried by the outer body member.

2. In a heater of the class described, an elongated body of U-form in cross-section comprising inner and outer U-shaped members fitting one within the other to cooperate to form a chamber therebetween, the inner member having its side edges turned up to form troughs for receiving the side edges of the outer member and also having end flanges extending outward to close the ends of the chamber, means releasably securing the body members together, an electric heating element disposed within the body chamber and insulated from the body members, and a handle carried by the outer body member.

3. In a heater of the class described, an elongated body of U-form in cross section comprising inner and outer U-shaped members fitting one within the other to cooperate to form a chamber therebetween, the inner member having its side edges turned up to form troughs for receiving the side edges of the outer member and also having end flanges extending outward to close the ends of the chamber, means releasably securing the body members together, an electric heating element disposed within the body chamber, mica strips disposed at opposite sides of the element, asbestos facing strips on the inner sides of the body members with the one on the outer member of considerable thickness to heat insulate the outer member from the heating element, and a handle carried by the outer body member.

In testimony whereof I have hereunto signed my name to this specification.

ALBERT C. HOFFMAN.