

(No Model.)

B. E. BAKER.  
ELECTRIC HEATER.

No. 572,467.

Patented Dec. 1, 1896.

Fig. 1.

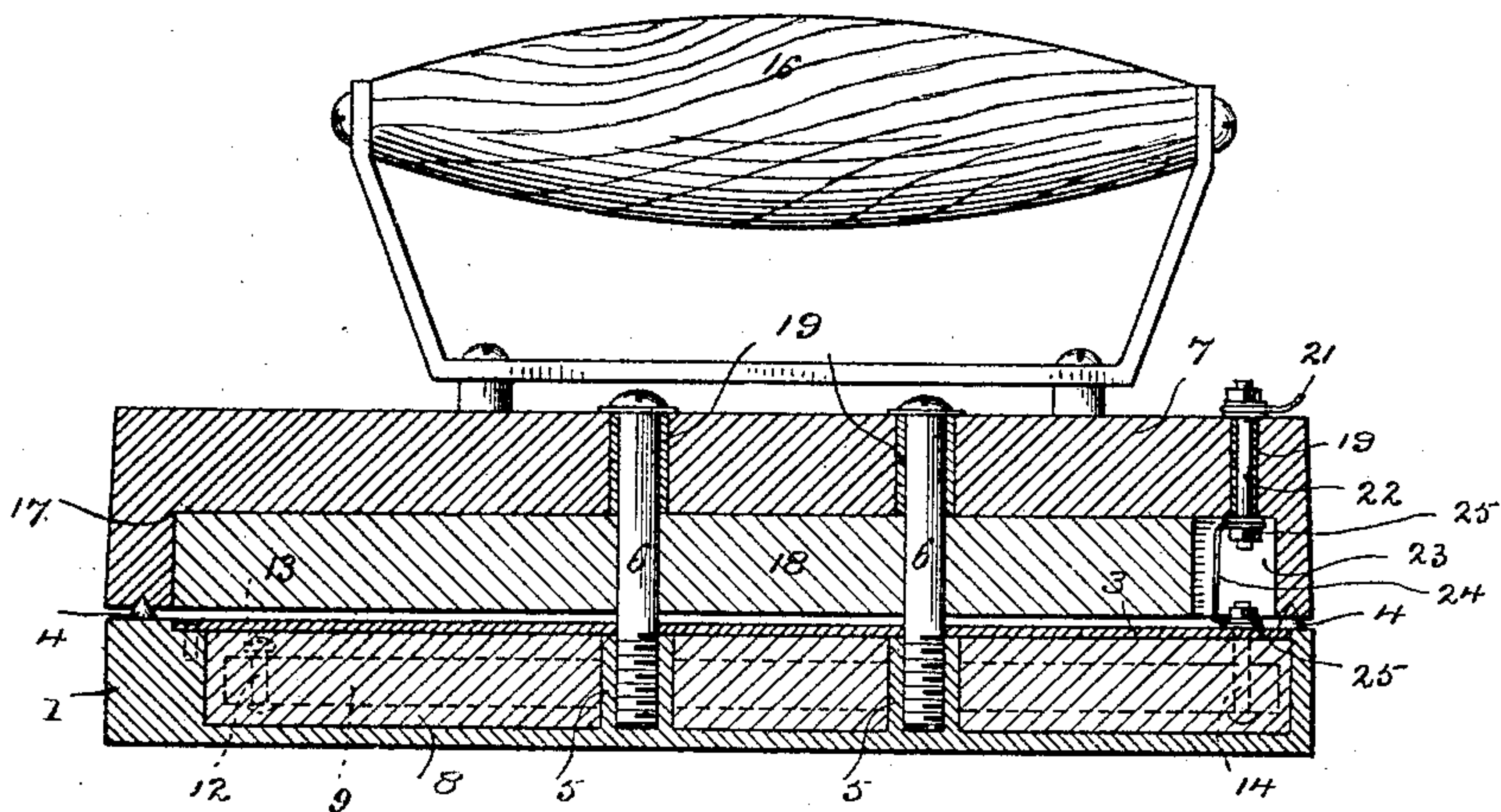


Fig. 2.

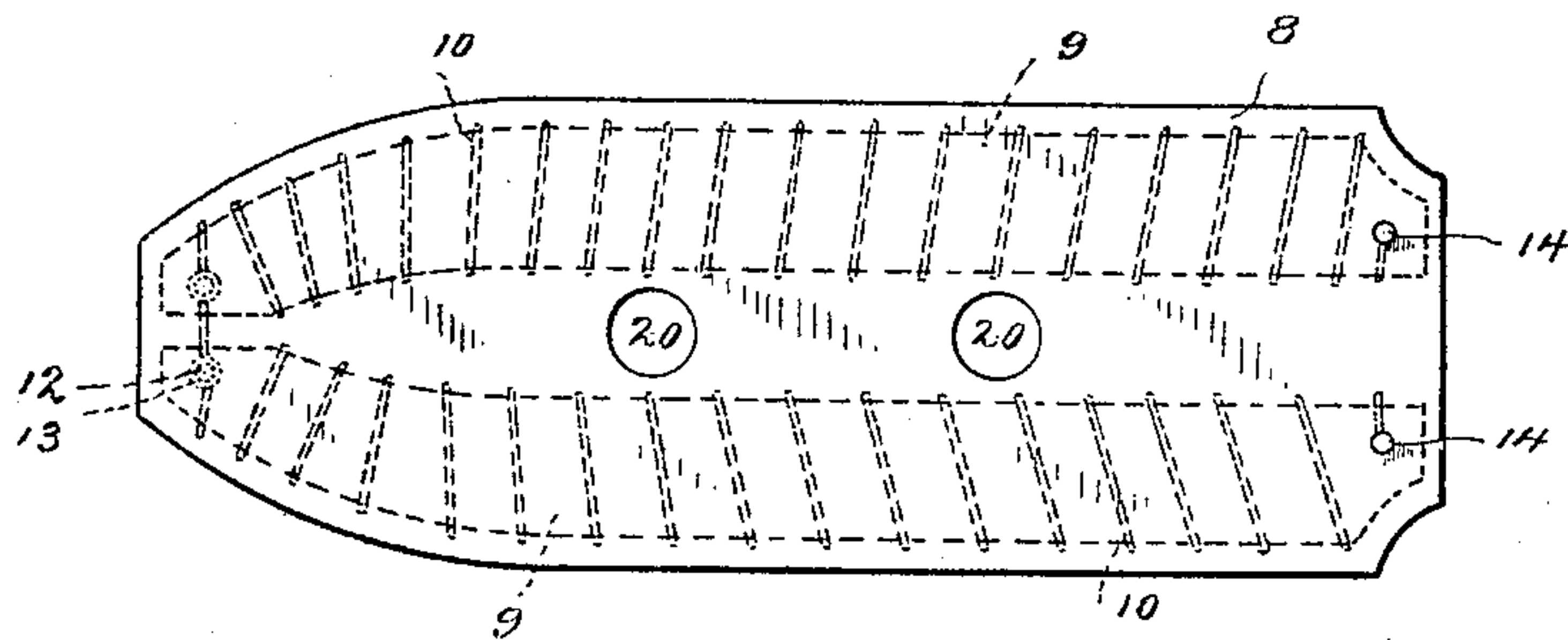
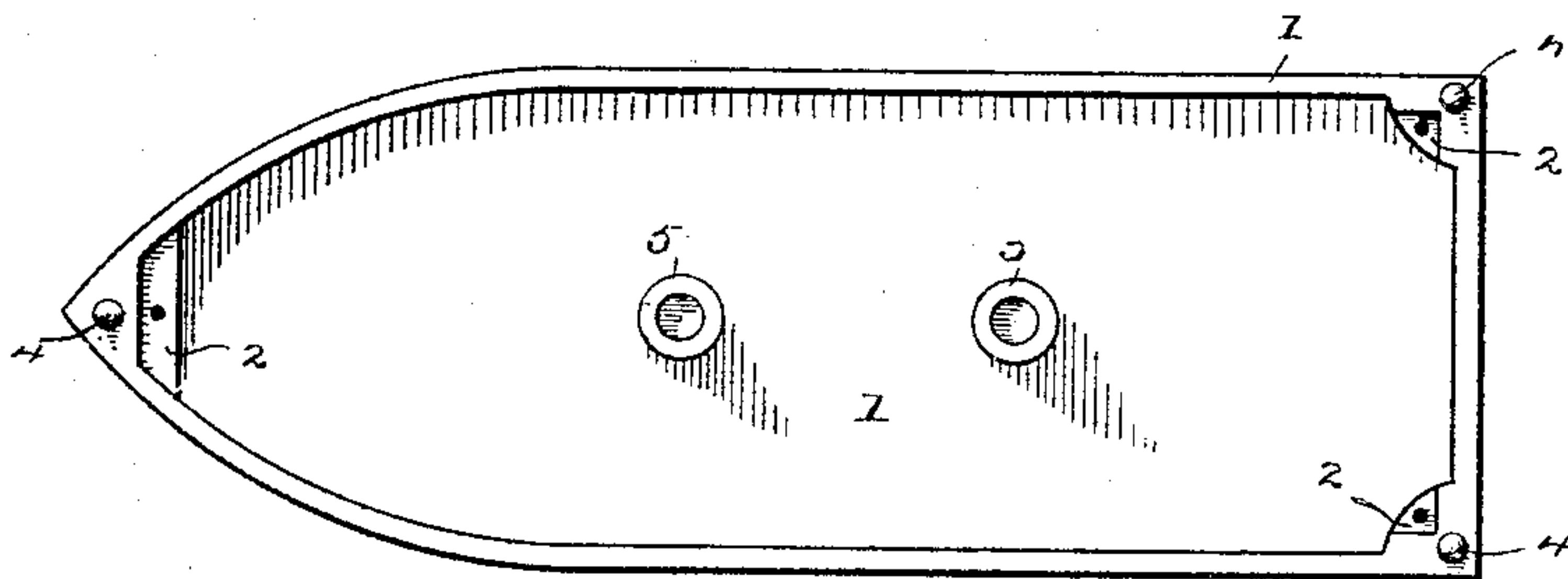


Fig. 3.



WITNESSES

H. A. Lamb  
S. V. Richardson.

INVENTOR

Burton E. Baker  
By  
J. M. Wooster  
Atty.



# UNITED STATES PATENT OFFICE.

BURTON E. BAKER, OF NEW BRITAIN, CONNECTICUT.

## ELECTRIC HEATER.

SPECIFICATION forming part of Letters Patent No. 572,467, dated December 1, 1896.

Application filed June 4, 1894. Serial No. 513,390. (No model.)

*To all whom it may concern:*

Be it known that I, BURTON E. BAKER, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Electric Heaters; 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.

My invention relates to electrical heaters, and has for its object to simplify and cheapen their construction and to improve their operation in use.

With these ends in view I have devised the novel construction of which the following description, in connection with the accompanying drawings, is a specification, numbers being used to designate the several parts.

Figure 1 is a longitudinal section illustrating the application of my invention to an electrical sad-iron; Fig. 2, a plan view of the resistance-block detached; Fig. 3, a plan view of the shell detached.

1 denotes the shell, which is provided with ledges 2, upon which the closing-plate 3 rests, and with lugs or teats 4, upon which the top plate rests, the lugs or teats engaging corresponding recesses in the bottom of the top plate, but acting to hold the latter out of contact with the closing-plate, as clearly shown in Fig. 1.

5 denotes stumps which are preferably cast integral with the shell and are internally threaded to receive screws 6, by which the top plate 7 is held in position.

Within the shell I place my novel resistance-block, which as a whole I designate as 8. This resistance-block consists of one or more cores 9, having a resistance-wire 10 wound around them, (see dotted lines, Fig. 2,) said cores and the resistance-wire being embedded in the block itself, which is molded from any suitable plastic material, for example the well-known plastic material known to electricians and to the trade generally as "lava," and described in reissued Letters Patent No. 10,344, dated June 19, 1893. In the form illustrated in Fig. 2 two cores are used, the resistance-wire passing from one core to the other, as shown at the left in Fig. 2, screws 12 being molded into the cores and the resistance-wire being retained in place by nuts 13 on said screws. At the opposite ends of the cores

are screws 14, which are molded into the cores and also into the blocks, and which are made long enough to extend up through the closing-plate, as clearly shown in Fig. 1. The resistance-wire is connected to screws 14 in any suitable manner, as by being passed around them, and then the cores, wires, and screws are embedded in the block.

7 (see Fig. 1) denotes the top plate of the sad-iron, to which a handle 16 is attached in any suitable manner, and which is provided in its under side with a recess 17, which receives a non-conducting packing 18, which is preferably a block or a series of layers of asbestos, and is retained in the recess in any suitable manner, ordinarily by glue. By using this asbestos packing I prevent the top plate and the handle from being heated to any appreciable extent in use. The top plate and the shell are secured together by screws 6, which pass through non-heat-conducting sleeves 19 in the top plate, through the asbestos packing, and the covering-plate, and engage stumps 5 within the shell, block 8 being provided with openings 20, through which the stumps pass.

21 denotes one of the lead-wires, which is connected to a screw 22, which passes through an insulating-sleeve 19 in the top plate. The inner ends of screws 22 (one only being shown) and screws 14 lie in recess 17, the packing being cut away, as at 23, to accommodate them.

24 denotes a connecting-wire, which is secured to the inner ends of these screws by nuts 25.

Having thus described my invention, I claim—

The combination with a shell having lugs 4, ledges 2 and stumps 5, of a resistance block and wire within the shell, screws 14 to which the ends of the resistance-wire are connected, a closing-plate 3 resting on the ledges 2 and the stumps 5, the said screws 14 passing through the closing-plate, the top plate 7 resting on the lugs 4 and having a recess in its under side, a non-conducting packing in said recess, and insulated screws which pass through the top plate the packing and the closing-plate and engage the stumps.

In testimony whereof I affix my signature in presence of two witnesses.

BURTON E. BAKER.

Witnesses:

A. M. WOOSTER,  
S. V. RICHARDSON.