May 15, 1923.

1,455,287

I. L. HADLEY

ELECTRIC HEATER

Filed Aug. 23, 1922

Fig. 1.

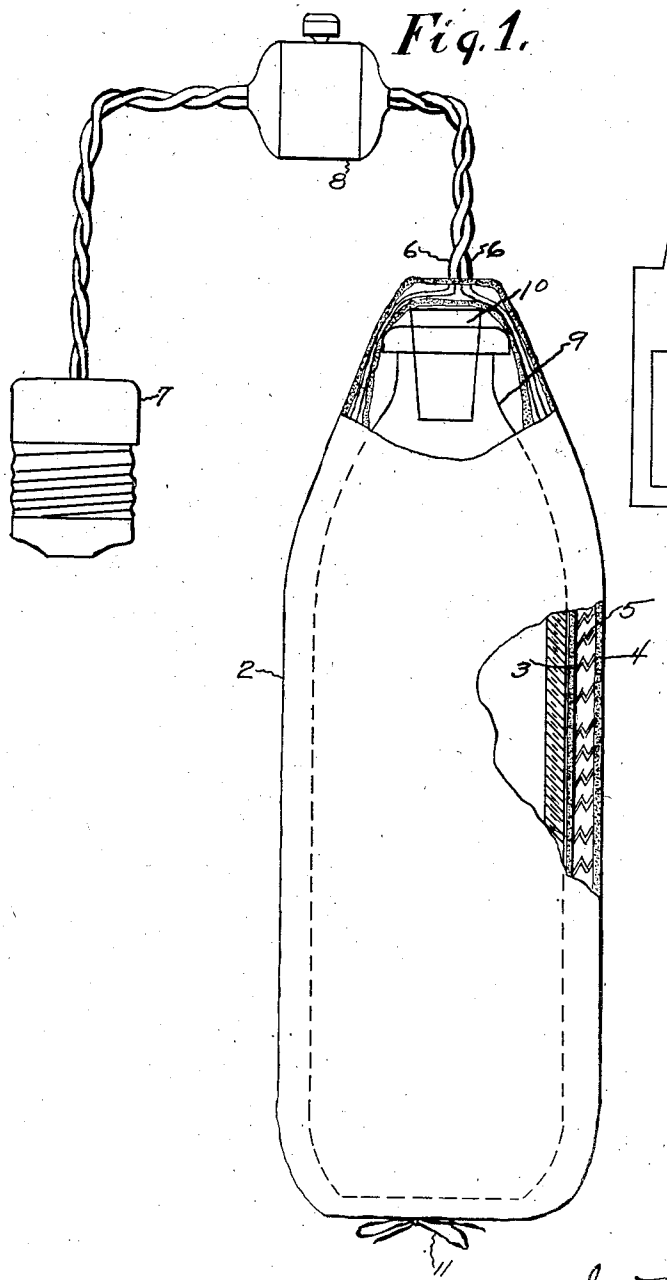
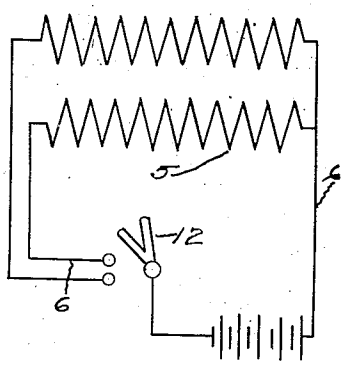


Fig. 2.



INVENTOR.

I. L. Hadley

BY

Hunt Lothrop

ATTORNEY.

Patented May 15, 1923. 1,455,287

UNITED STATES PATENT OFFICE.

IDALE L. HADLEY, OF HARTFORD, CONNECTICUT.

ELECTRIC HEATER.

Application filed August 23, 1922. Serial No. 583,705.

To all whom it may concern:

Be it known that I, IDALE L. HADLEY, citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Electric Heaters, of which the following is a specification.

This invention relates to electric heaters. While an electric heater involving my invention, is capable of general use, it has been found of particular utility when employed for warming substances contained within bottles and especially milk as used for feeding babies. It is a matter of fact, that when a mother is travelling with a young child who requires milk for its sustenance, the milk to prevent souring or decomposition, must be kept in a cool condition. When it becomes necessary to heat the milk for consumption by the infant, it, as a rule, is impossible to accomplish the desire. I provide a structure which is exceedingly simple, compact and light, yet possessing the necessary strength and which will readily receive a milk or other bottle and which has facilities for heating the liquid in the bottle, or performing a like office, the article having as an accessory thereof, a plug which can be instantly connected with a standard socket so that when the current is led into the resistance element of the device, the same will be heated by radiation to heat the contents of the bottle within the receptacle.

In the drawing accompanying and forming part of the present specification, I have shown in detail one of the several forms of embodiment of the invention, which to enable those skilled in the art to practice the same, will be set forth fully in the following description. Obviously I am not restricted to such disclosure. I may depart therefrom in a number of particulars within the scope of the invention defined by the claims following said description.

Referring to the drawing:

Figure 1 is an elevation of an electric heater involving the invention.

Fig. 2 is a diagram, showing certain circuit connections.

Like characters refer to like parts in both views.

The device desirably involves in its structure a flexible container or bag such as 2 which is of a size to compartively freely receive a standard milk bottle. This container or bag generally comprises inner and outer layers 3 and 4 between which is incorporated a resistance element or resistance coil as 5 to which the leads 6 are connected. These leads extend from a connecting plug as 7 which is of screw form and which is intended to be removably fitted in the standard Edison socket, (not shown).

By throwing the switch 8, current will be caused to traverse the resistance element 5 so as to heat the resistance element, and the latter by radiation heating whatever may be inclosed in the bag or container 2.

The bag or container 2 may freely receive a bottle as 9, having a stopper, or cork 10, removably fitted in its neck as is quite common and which when closed is intended to abut against the top or closed end of the flexible container or bag. The lower closed end of said flexible bag or container is held closed when desired by draw strings as 11.

In action, the draw strings 11 will be loosened and opened following which the container or bag 2 will also be opened so that the closed and filled bottle 9 can be inserted into the opened bag until the stopper 10 abuts against the closed upper end of the bag at which time the draw strings 11 will be pulled and tied to each other to close tightly the lower end of the bag. When this is done, the plug 7 will be connected to an Edison socket and the switch 8 will then be closed, so that the current from the prime source will traverse the resistance element or heating element 5 to heat it and thus cause the contents of the bottle 9 to be heated. When the liquid in the bottle is sufficiently warm, the switch 8 will be moved to "off" relation and the plug 7 can be unscrewed from the socket, the draw strings 11 opened and the bottle 9 removed.

The heater involves in its make-up a container and although this container is shown as being in the form of a flexible bag, I am not restricted in this regard, because the container in question may be of any other proper character.

What I claim is:

1. An article of the class described comprising a container to contain a bottle, a resistance element incorporated in the stock of the container, leads connected to the resistance element, and a plug electrically connected with the leads.

2. An article of the class described, comprising a container in layers, to contain

bottle, a resistance element between the layers of the container, leads electrically connected to the resistance element, and a plug electrically connected with the leads.

3. An article of the class described, comprising a flexible bag in layers, to contain a bottle, a resistance element between the layers of the bag, leads electrically connected to the resistance element, and a plug electrically connected with the leads, the cork of said bottle being adapted to abut against the upper end of the inner layer of the bag.

4. An article of the class described, comprising a flexible bag in layers, to contain a bottle, a resistance element incorporated between the layers of the bag, leads electrically connected to the resistance element, and a plug electrically connected with the leads, the cork of said bottle being adapted to abut against the upper end of the inner layer of the bag, the bag having draw strings at its lower end by which it can be closed.

In testimony whereof I hereby affix my signature.

IDALE L. HADLEY.

Witnesses:
HEATH SUTHERLAND,
C. L. ROBINSON.