E. W. BUNCE.

DENTAL WATER HEATER.

APPLICATION FILED MAY 22, 1919.

1,373,116. Patented Mar. 29, 1921.

Fig. 1.

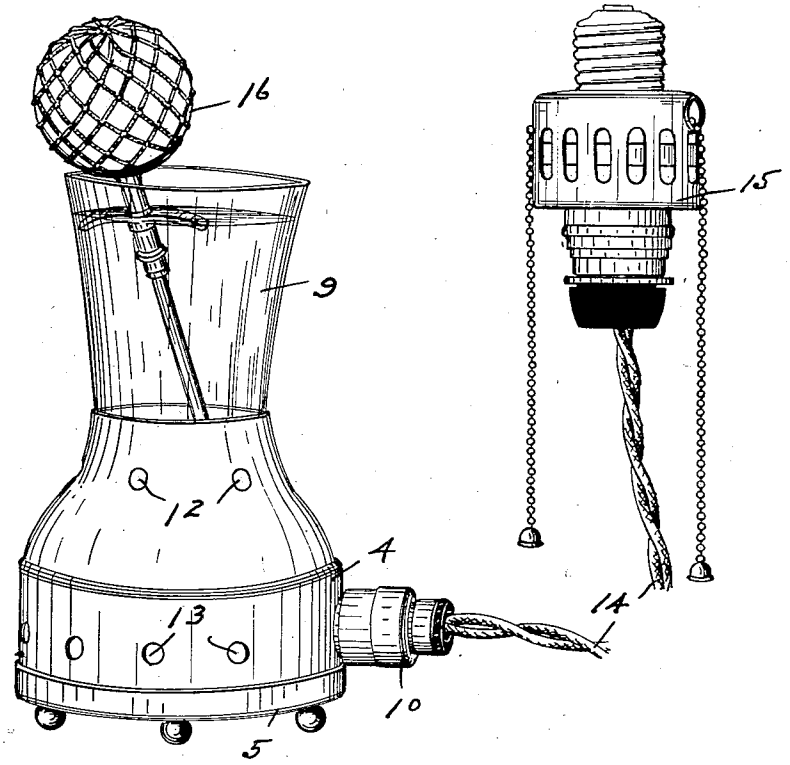


Fig. 2

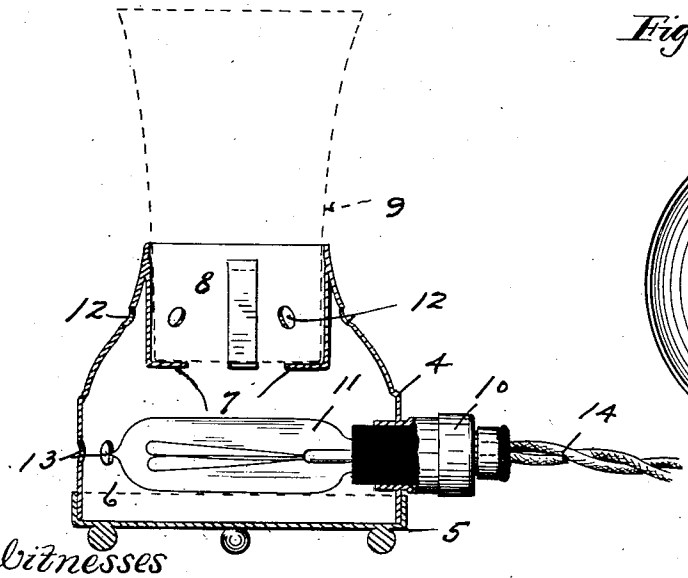
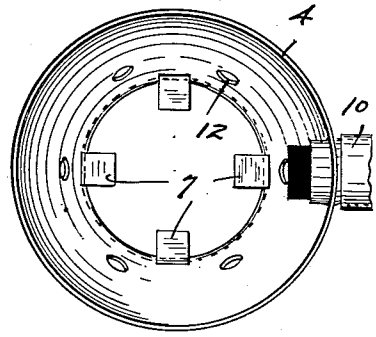


Fig. 3



Witnesses
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UNITED STATES PATENT OFFICE.

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DENTAL WATER-HEATER.

1,373,116. Specification of Letters Patent. Patented Mar. 29, 1921.

Application filed May 22, 1919. Serial No. 298,824.

To all whom it may concern:

Be it known that I, ELMER W. BUNCE, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Dental Water-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 has for its object to provide an extremely simple and highly efficient dental water heater; and to this end, generally stated, it consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

In the accompanying drawings, which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings:

Figure 1 is a view of the dental water heater, partly in perspective and partly in side elevation, with some parts broken away;

Fig. 2 is a view, partly in elevation and partly in central vertical section, with some parts illustrated by means of broken lines; and

Fig. 3 is a bottom plan view of the shell, with the bottom thereof removed.

The numeral 4 indicates a cylindrical shell having a removable foot-equipped bottom 5, with a marginal flange which caps said shell under frictional engagement. The lower portion of the shell 4 affords a heating chamber 6, and the upper portion thereof is contracted, and, together with a plurality of brackets 7, afford an open bottom socket 8, for loosely holding a glass 9 or other receptacle. This socket 8, except for the portion thereof formed by the shell 4, is spaced apart from the internal wall of said shell to permit a free circulation of heat therearound. The brackets 7 are of L-shape, and suspended from the upper edge of said shell, to which they are soldered or otherwise rigidly secured.

Rigidly secured to the shell 4, and extending into the heating chamber 6, is a radially projecting lamp socket 10, of standard construction, for holding within said heating chamber, a horizontally disposed electric lamp 11. This lamp 11, in the present form of the invention, affords the heating element therefor, and is located directly below the bottom of the glass 9. Formed in the shell 4 is a multiplicity of upper and lower circumferentially spaced air circulating ports 12 and 13, respectively. The ports 12 are located substantially midway between the top and bottom of the socket 8, and the ports 13 are located in the plane of the longitudinal axis of the heating element 10. These air circulating ports 12 and 13 cause an even distribution of the heat around the portion of the glass 9 held within the socket 8, thus preventing the glass from overheating or cracking.

A duplex lamp cord 14 connects the terminals of the lamp socket 10 with the terminals of a dimmer 15, of standard construction, adapted to be screwed into a lamp socket or wall receptacle. In place of the dimmer 15, any other suitable rheostat may be used for controlling the heat introduced into the heating chamber 6, or the cord 14 may be attached directly to a standard dental switch board.

While the water heater is especially adapted for keeping a mouth-wash, contained in the glass 9, at a constant temperature, it can, of course, be used for heating water for other purposes. Obviously, by adjusting the dimmer 15 to brighten or dim the light, the temperature in the heating chamber 6 may be varied at will. Supported in the glass 9 is a standard water syringe 16, provided for introducing the contents in the glass into the mouth of the patient. By keeping this syringe 16 in the glass 9, the same is kept at substantially the same temperature as the mouth-wash, and, therefore, will not chill the same when drawn therein.

The above described invention, while extremely simple, has, in actual usage, proven highly efficient for the purpose had in view. Access may be had to the heating chamber 6 by removing the bottom 5, for the purpose of applying or removing the lamp 11 to the socket 10.

What I claim is:

1. A dental water heater comprising a shell affording a heating chamber and an open bottom glass holding socket, said shell

having a removable bottom, a lamp socket secured to the shell above said bottom, and an electric lamp mounted in said socket and extending into the heating chamber.

2. A dental water heater comprising a cylindrical shell affording a heating chamber having a contracted upper end and a removable bottom, a receptacle supporting bracket in the contracted end of the shell, and an electric heating element in the heating chamber.

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

ELMER W. BUNCE.

Witnesses:
CLARA DEMAREST,
HARRY D. KILGORE.