

C. B. WANAMAKER.
DRUM HEATER.
APPLICATION FILED MAY 11, 1911.

1,020,378.

Patented Mar. 12, 1912.

Fig. 1.

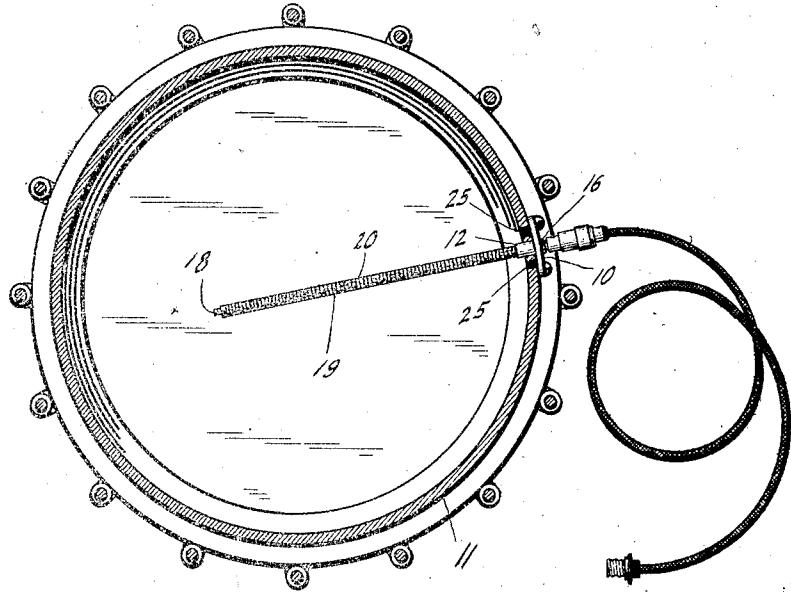
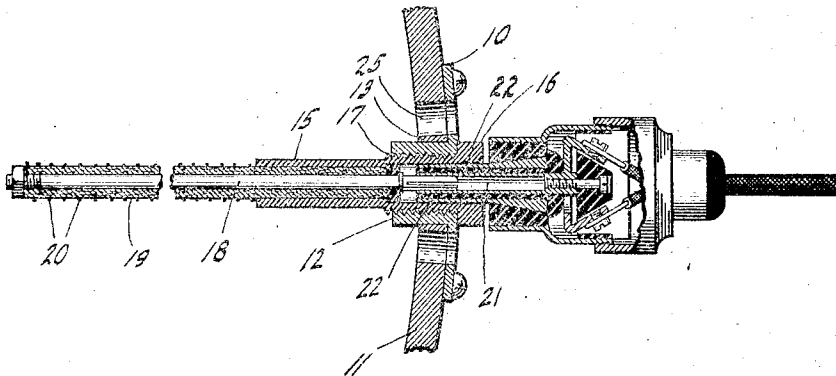


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES B. WANAMAKER, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO LEEDY MANUFACTURING COMPANY, OF INDIANAPOLIS, INDIANA, A CORPORATION OF INDIANA.

DRUM-HEATER.

1,020,378.

Specification of Letters Patent.

Patented Mar. 12, 1912.

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To all whom it may concern:

Be it known that I, CHARLES B. WANAMAKER, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Drum-Heater, of which the following is a specification.

In the ordinary use of that type of musical instruments known as drums, it is found that moisture accumulates in the interior of the drum and the object of my invention is to produce a convenient electric heater which may be readily associated with any such drum, the construction being of such character that the heating element may be readily withdrawn from the instrument or, if desired, may be left in the instrument without danger of deterioration or without spoiling the tone of the instrument.

The accompanying drawings illustrate my invention as applied to an ordinary snare drum.

Figure 1 is a transverse section of the drum and applied heater; Fig. 2 a partial axial section of the heater element, the fitting by means of which it may be attached to a drum, and the connecting member by means of which the heating element may be connected to an electric circuit.

In the drawings, 10 indicates a fitting or plate adapted to be secured to the exterior of the main shell 11 of the drum, and this plate carries a sleeve 12 which is internally threaded and has an external diameter such that it may be readily inserted into the ordinary vent opening 13 (or a slight enlargement thereof) of the main body of the drum.

The heater element comprises a main body 15 having a knurled head 16 by means of which it may be operated, and a threaded portion 17 adapted to fit the threads of the sleeve 12. Carried by the body 15 but insulated therefrom is a central core 18 which passes through an insulating sleeve 19. A heating coil 20 is wrapped around this insulating sleeve and is connected at one end to the central core and at the opposite end to the main body.

The fitting for connection to an electric circuit comprises an inner tube 21 adapted to receive the core of the heating element and an outer tube 22 fitting nicely into the receiving end of the main body 15, the bore of the main body being slightly tapered and

the sleeve 22 correspondingly tapered. The end of the core 18 may be split so as to form a pair of spring tongues in an ordinary manner so as to insure good electrical connection when the connecting fitting is shoved endwise into the main body 15.

When the heating element is in place within a drum, it is, of course, necessary to provide means for exhaust of the heated air from the interior of the drum and for this purpose I perforate the plate 10 at one or more points 25 and registering perforations will be made through the body of the drum, the plate 10, however, forming a neat external finish for these perforations.

It will be noted that the heating element may be readily placed and withdrawn, and because of the threaded connection with the supporting plate, it may be left in place without danger of rattling during manipulation of the instrument. The character of the heating element is also such that the vibrations due to the use of the instrument will not cause deterioration of the heating element.

I claim as my invention:

1. A heating attachment for drums comprising a fitting plate adapted to be secured to the main body of the drum and having a threaded perforation and a vent perforation registering with a corresponding perforation in the body of the drum, and an electrical heating element carried by said fitting plate, said heating element having terminals for connection with an electric circuit and a threaded main body adapted to engage with the threaded portion of the fitting.

2. A heating attachment for drums comprising a fitting plate having a vented flange for attachment to the main body of the drum, and an electrical heating element carried by said fitting plate, said heating element having terminals for connection with an electric circuit.

3. A heating attachment for drums comprising a fitting plate having a flange for removable attachment to the body of the drum and a socket for holding a heating element, one end of said socket being unflanged to permit its insertion into and removal from the drum body, and an electrical heating element removably mounted in said socket.

4. The combination with a drum having a perforated portion, of a heating attachment

comprising a fitting plate having a vented flange covering said perforated portion and attached to the drum and a socket extending through said perforated portion, and an electrical heating element removably mounted in said socket.

5. The combination with a drum having a plurality of openings, of a heating attachment comprising a fitting plate having a perforated flange covering said openings and attached to the drum and a socket extending into one of said openings, another

of said openings registering with a perforation in said flange, and an electrical heating element removably mounted in said socket. 5

In witness whereof, I, have hereunto set my hand and seal at Indianapolis, Indiana, this 15 day of April, A. D. one thousand nine hundred and eleven.

CHARLES B. WANAMAKER. [L. S.]

Witnesses:

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