R. MEYER.

THERMOMETER ATTACHMENT FOR WATER BAGS. APPLICATION FILED SEPT. 13, 1904.

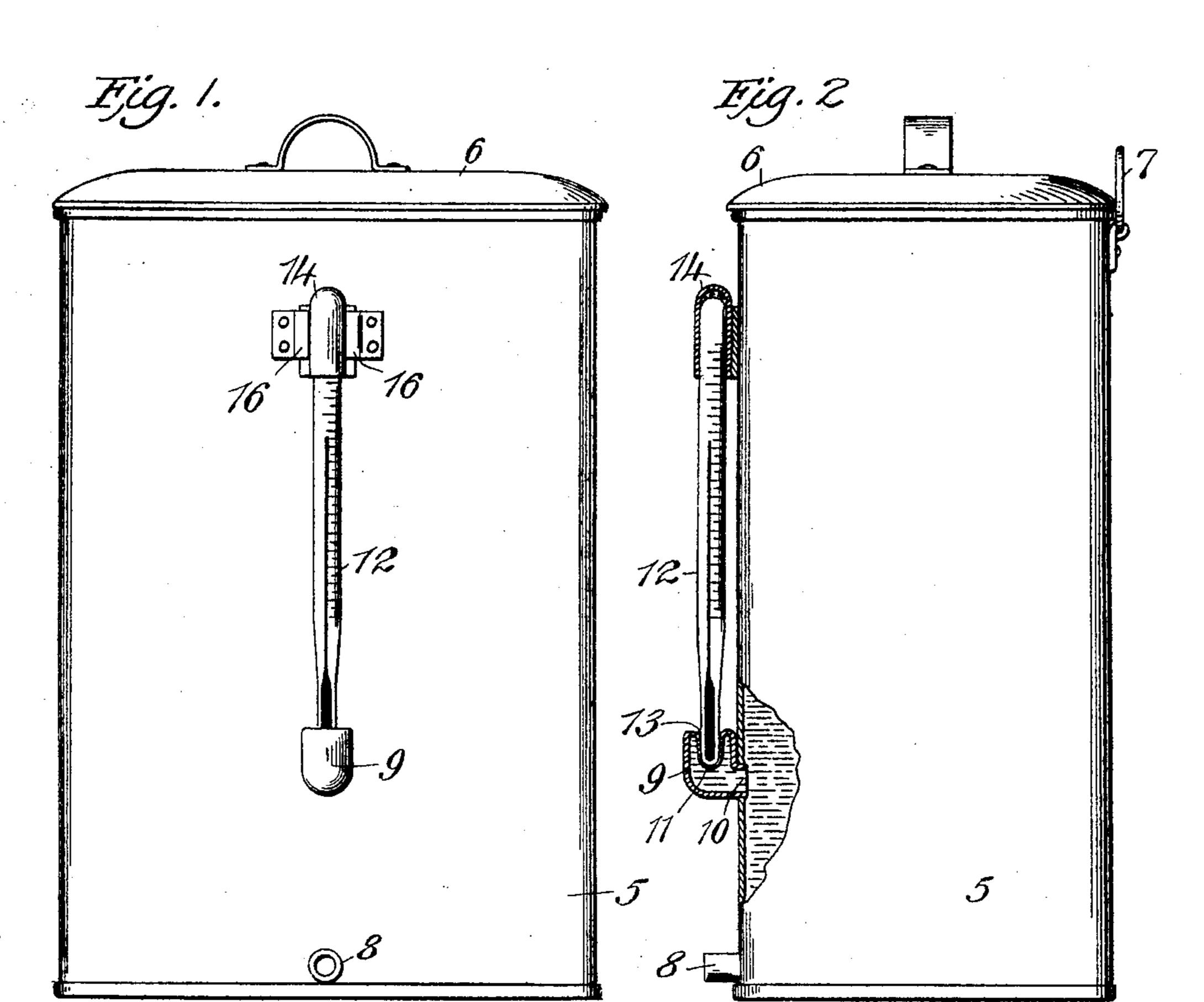


Fig. 3.

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Witnesses Lillian Buten Leving B. Muyer Rachel Meyer Inventor

UNITED STATES PATENT OFFICE.

RACHEL MEYER, OF NEW YORK, N. Y.

THERMOMETER ATTACHMENT FOR WATER-BAGS.

No. 803,352.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, RACHEL MEYER, a citizen of the United States of America, and a resident of the city and State of New York, 5 have invented certain new and useful Improvements in Thermometer Attachments for Water-Bags, of which the following is a specification.

My invention relates to vessels, such as wa-10 ter-bags or similar articles used in medical or surgical practice; and the object of the invention is to provide improved means for determining the temperature of the contents of such a vessel.

A special object has been to improve the accuracy of the thermometric reading without introducing the thermometer or its bulb into the interior of the vessel.

These and other objects and details of con-20 struction are more fully described in the following specification and set forth in the appended claims.

In the drawings accompanying this specification and forming a part thereof like refer-25 ence characters are used to designate like parts.

Figure 1 is a front elevation of a metallic water-bag, showing a thermometer secured thereto by my improved means. Fig. 2 is a 30 side elevation of the same. Fig. 3 is a plan view of the thimble and its guideways. Fig. 4 is an enlarged detail of the bulb-socket.

The water-bag 5 may be of any desired shape, size, or material, but for convenience of con-35 struction it is shown as a rectangular vessel with a top 6, a loop 7 to hang it against the wall or at an elevation, and an outlet-nipple 8 to have secured to it a tube to carry the water out of the bag for use. A handle or bail 40 may also be provided, if found necessary, and various other features and details may be used.

I provide means for securing a thermometer to the bag in such a manner as to readily and effectually detect the temperature of the 45 water in the vessel without removing the top itself, and for this purpose I provide the side of the vessel with a pocket 9 of thin metal, preferably having a horizontal opening 10, 50 which affords access for the water from the vessel to the interior of the pocket. This horizontal portion of the pocket is secured to the wall of the vessel by screw-thread, soldering, or any desired means by which a water-tight 55 joint may be secured, and the vertical mem-

ber is formed with a depression 11. terial is preferably very thin at this point and the depression adapts the pocket to receive the lower end or what is technically known as the "bulb" of a thermometer 12. Thus a free 60 communication of heat from the vessel's contents is afforded. The pocket 9 is made of a highly heat-conductive metal, and as the depression 11 is very thin the bulb 13 receives a temperature where it comes in contact with 65 the walls of the depression about equal to that of the liquid in the vessel. The upper end of the thermometer 12 is preferably received within a thimble 14, which is provided with a rubber or felt packing in its upper end 70 to afford a gentle vertical pressure on the thermometer to hold the bulb in contact with the depression of the pocket. This thimble 14 is secured to a plate 15, which slides in guideways 16, riveted or otherwise secured 75 to the outer wall of the vessel and may afford such friction on the plate as to hold it and the thimble at any desired point.

It is evident that when constructed of a highly-conductive material the pocket 9 will 80 impart to the bulb a temperature equal to the liquid in the vessel and is a far more reliable means of obtaining the exact temperature than now commonly employed and where a test is impossible without adverse influences, such 85 as the temperature from the hand of the person handling the instrument, the opening and closing of the top of the vessel, and evaporation. The means here afforded overcomes all these objections and permits of the ready 90 reading of the temperature while the water is being heated or cooled.

I do not confine myself to the use of this device for water-bags alone, as the same means may be used to find the temperature 95 of any vessels used to heat or cool liquids and where the application of a thermometer into the vessel or liquid may be found dangerous or undesirable.

It is obvious that various details of con- 100 nor immersing the instrument in the water | struction may suggest themselves in the use of this device without departing from the spirit of the invention as set forth in the following claims.

Having thus described my invention, what 105 I claim as new, and desire to secure by Letters Patent, is—

1. A vessel for liquids, in combination with a hollow pocket of heat-conducting material, the interior whereof communicates with the 110

interior of the said vessel, said pocket having a depression adapted to receive the bulb of a thermometer.

2. A vessel of the class described, in combination with a projection extending laterally from the wall thereof, said projection being of heat-conducting material and having means for engaging the bulb of a theremometer, and means for retaining said thermometer upon

ro said projection.

3. A vessel of the class described, in combination with a hollow pocket projecting laterally from the wall thereof, the interior of said pocket being in communication with the interior of said vessel, said pocket having a depression in the wall thereof adapted to receive the bulb of a thermometer, and a thimble adapted to attach to the wall of said vessel and adapted to engage the upper portion of the thermometer.

4. A vessel of the class described, having a hollow projection from the wall thereof,

said projection having a depression adapted to receive the bulb of a theremomter, and a sliding thimble adapted to seat over the up- 25 per extremity of said thermometer.

5. A vessel in combination with a laterally-disposed elbow of heat-conducting material, the interior whereof communicates with the interior of said vessel, said elbow having a 3° depression in the wall thereof to receive the bulb of a thermometer, a sliding thimble receiving the upper end of said thermometer, and guideways secured to said vessel and retaining said thimble.

Signed at New York, this 6th day of Sep-

tember, 1904.

RACHEL MEYER.

Witnesses:

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