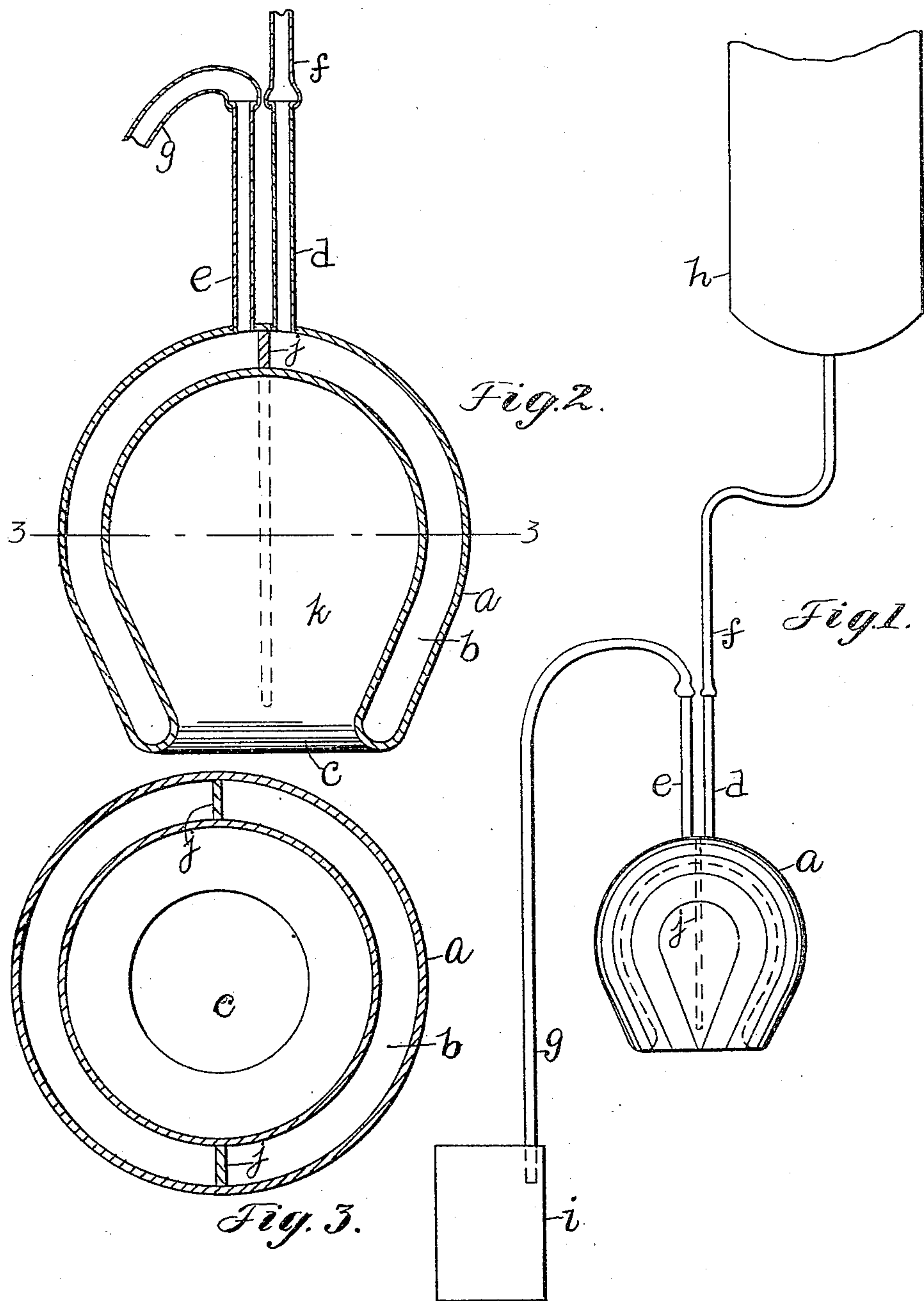


No. 816,746.

PATENTED APR. 3, 1906.

F. S. RUSSELL.
MEDICAL APPLIANCE.
APPLICATION FILED SEPT. 12, 1903.



Witnesses:
C. H. Lammert
J. Murphy.

Inventor:
Flora S. Russell
by Jas. H. Churchill
Atty.

UNITED STATES PATENT OFFICE.

FLORA S. RUSSELL, OF BOSTON, MASSACHUSETTS.

MEDICAL APPLIANCE.

No. 816,746.

Specification of Letters Patent.

Patented April 3, 1906.

Application filed September 12, 1903. Serial No. 172,878.

To all whom it may concern:

Be it known that I, FLORA S. RUSSELL, a citizen of the United States, residing in Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Medical Appliances, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to a device or appliance by means of which heat or cold may be applied in a substantially continuous manner to an affected part of the body of a person or patient, and has for its object to provide a simple, inexpensive, and highly efficient device for the purpose specified. For this purpose I employ a device comprising a body portion of suitable shape to be applied to the affected part and provided within it with a chamber or passage having an inlet and an outlet port, with which communicate tubes or pipes, through which hot or cold water or other fluid may be circulated through the said body portion, so as to heat or cool the affected part. The body portion of the device may be made in the form of a bulb, bell, or cup, which forms a receptacle or chamber provided with an open mouth and within which a suitable medicament may be placed, so that when the mouth of the receptacle is applied to the affected part of the person's body the said part is not only heated or cooled, but the medicament in a heated or cooled state is applied to the affected part. These and other features of this invention will be pointed out in the claims at the end of this specification.

Figure 1 represents in elevation one form of device or appliance embodying this invention and illustrating also one method of using the same; Fig. 2, a vertical section, on an enlarged scale, of the device or appliance shown in Fig. 1; and Fig. 3, a cross-section on the line 3 3, Fig. 2.

The device or appliance herein shown as embodying this invention consists of a body portion *a*, which is shaped like a bulb, bell, or cup, but which may be of any desired shape adapted to the particular part of the body of the person to which it is to be applied. The body portion *a* is provided with a chamber or passage *b* between the outer and inner walls of said body portion, which chamber or passage may and preferably will

extend to near the mouth *c* of the body portion, so as to bring the heat or cold as near as possible to the affected part of the person. The chamber or passage *b* is provided with an inlet and an outlet port, with which communicate tubes or pipes *d e*, which may be designated the "inlet" and "outlet" tubes, with which may be connected rubber or other tubes or pipes *f g*, connected, respectively, with the source of supply for hot or cold water or other fluid and a waste-receptacle. In the present instance the rubber tube *f* is represented as connected with a receptacle *h*, which may be a water-bag or the bag of a fountain-syringe or other reservoir, and the rubber tube *g* is represented as discharging into a pail or other vessel *i*.

The chamber *b* may be provided with a partition-wall *j*, located between the inlet and outlet ports of said chamber and extended down to near the mouth *c*, as represented by dotted lines in Figs. 1 and 2, so as to insure circulation of the fluid through the chamber *b*, and thereby insure the part of the body portion *a* which is brought in contact with the affected part of the person or patient being kept heated or cooled, as the case may demand.

If desired, the interior space or chamber *k* of the body portion *a* forms a receptacle having the open mouth *c* and which may be filled with absorbent cotton or other material (not shown) which may be saturated with a liquid medicament, so that the medicament may be applied to the affected part in a heated or cooled state and maintained in this condition by the water or other fluid circulating through the passage or chamber *b*.

The device or appliance herein shown may be used for treating a large variety of ailments, and is especially serviceable in treating abscesses, neuralgia, toothaches, and inflamed or affected parts of the person, and may be suitably shaped for external and internal use.

I have herein shown the device as connected with a bag as the source of supply of the fluid, and while in many cases this source of supply will be found most convenient I do not desire to limit my invention in this respect, as the device or appliance may be connected with a water-faucet or with any other source of supply for the water.

I may prefer to use the partition-wall *j*; but I do not desire to limit my invention in

this respect, as good results may be obtained with a body portion in which the partition-wall is omitted.

The body portion *a* may be made of hard rubber or other suitable rigid material.

I claim—

1. A device of the character described, comprising a body portion of rigid material having inner and outer walls separated to form a chamber between them, and having a receptacle formed by said inner wall which is provided with an open mouth, and rigid inlet and outlet tubes attached to the outer wall of said body portion to communicate with said chamber and located substantially in line with the mouth of the receptacle within said body portion, substantially as described.

2. A device of the character described, comprising a body portion having an open mouth and provided in its walls with a cham-

ber, an inlet and an outlet tube or pipe attached to said body portion and communicating with said chamber, and a partition-wall located in said chamber between said inlet and outlet tubes, substantially as described.

3. A device of the character described, comprising a substantially bulb-shaped body portion of rigid material having an open mouth, and provided with an inner and outer wall forming a chamber within said body portion, of rigid inlet and outlet tubes detachably attached to said body portion substantially in line with the mouth of the said body portion, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FLORA S. RUSSELL.

Witnesses:

JAS. H. CHURCHILL,

J. MURPHY.