

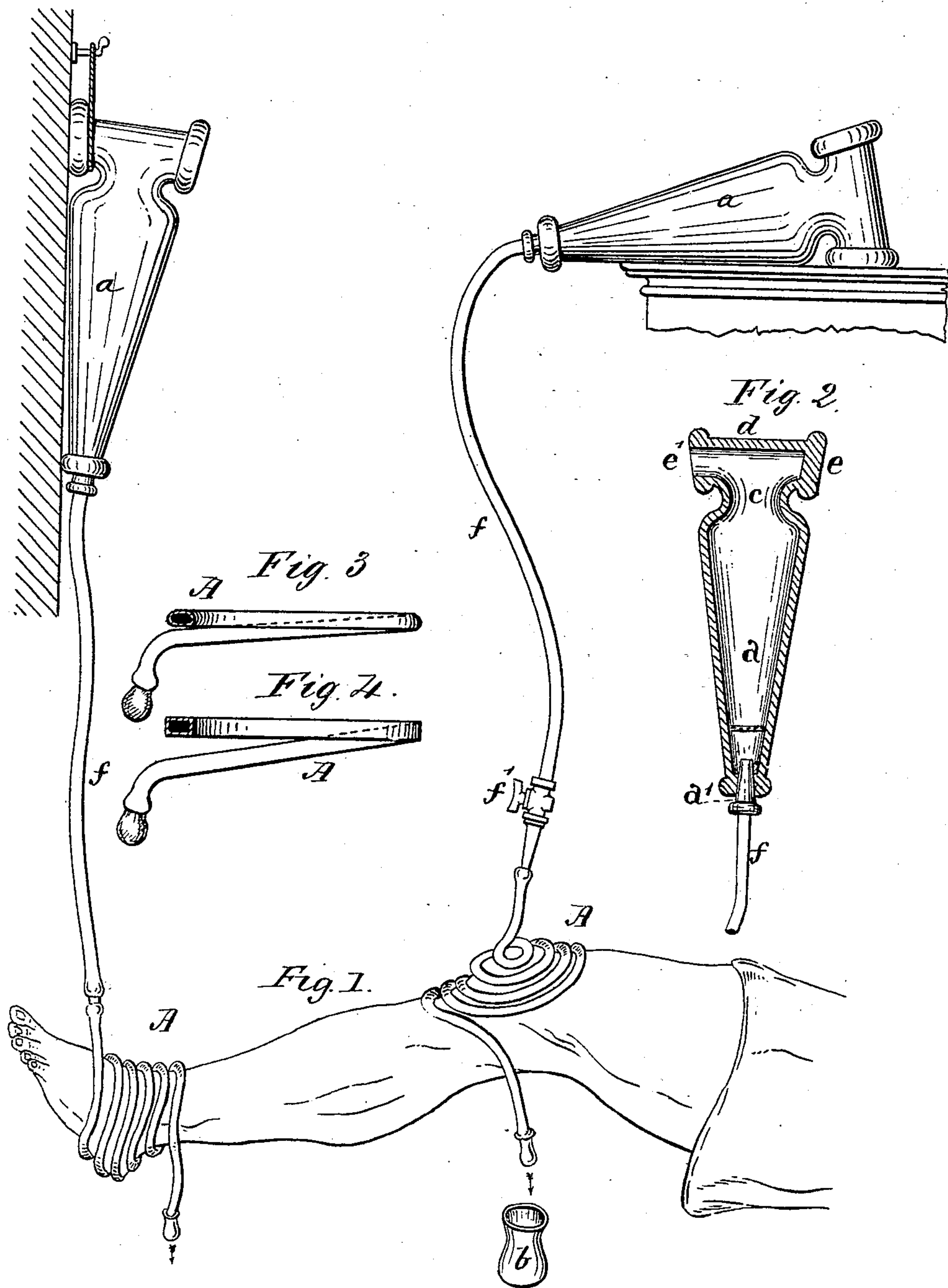
(No Model.)

J. LEITER.

FEEDING DEVICE FOR PIPES FOR COOLING AND WARMING THE BODY.

No. 267,435.

Patented Nov. 14, 1882.



Witnesses.
Wm. A. McElvick.
Wm. S. Gault.

Inventor:
Josef Leiter
per Henry Orth
att'y.

UNITED STATES PATENT OFFICE.

JOSEF LEITER, OF VIENNA, AUSTRIA-HUNGARY.

FEEDING DEVICE FOR PIPES FOR COOLING AND WARMING THE BODY.

SPECIFICATION forming part of Letters Patent No. 267,435, dated November 14, 1882.

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To all whom it may concern:

Be it known that I, JOSEF LEITER, a citizen of Austria-Hungary, residing at Vienna, in said Empire, have invented a new and useful improvement in appliances for feeding hot or cold liquids to pipes for cooling and warming parts of the human and animal body for medical or chirurgical purposes, of which the following is a specification.

My invention relates to means for feeding either hot or cold liquid to pipes adapted to be applied to the human or animal body for medical or chirurgical purposes; and it consists in the combination, with a flexible metallic tube, of a peculiarly-constructed reservoir or funnel for supplying the heat or cold producing agent to said tube and through the latter to the body to which the tube is applied, as hereinafter fully described.

Figure 1 illustrates the manner in which the hot or cold liquid is fed to the tube by means of which the heat or cold is transmitted to the body. Fig. 2 is a vertical longitudinal section of my improved funnel or feeding device, and Figs. 3 and 4 show section of the tubing used.

In the above figures of drawings like letters of reference indicate like parts.

A is a pipe made of tin, or coated with tin inside or outside, or both, and which may be cylindrical, flat, or oval in cross-section to better adapt it to certain parts of the body to which it is to be applied and upon which it is arranged in the form of a coil or spiral, (or around which it is wound,) as shown in Fig. 1, the heating or refrigerating medium passing from the pipe A into a suitable receiver, b. The flow of said heating or cooling medium may be accelerated or retarded. In the former case the feed-reservoir is elevated to increase the pressure within the pipe, and in the latter case the feed-reservoir is lowered and the outlet-orifice elevated to diminish the pressure within the pipe and retard the flow of the heating or cooling medium, and in this manner either heat or cold may be applied to any part of the human or animal body at a practically-

uniform temperature and for any length of time, or at a constantly increasing or decreasing temperature within certain limits, when this is required.

The improved feeding device above referred to consists of a funnel-shaped casing, a, having an aperture, a', for connecting it with the flexible pipe f, to which the pipe A is connected. It is further provided with a contracted neck, c, at its wider end, and a filling-tube, d, arranged at right angles to the body or case a, said tube being open at one end, as shown at e', and closed at the opposite end, e, which closed end is on a line with the outer face of the casing or body a.

The above construction of feeding device adapts the same to be held in the hand or to be suspended from a hook or staple or laid upon a table or shelf, respectively, and it may be readily filled, when empty, in any convenient manner, either by pouring the liquid in the aperture e', or it may be continuously fed thereto by means of a siphon.

This receiver may be made of any desired material, though I prefer to make it of glass, in order to enable the operator to observe the flow of the heating or cooling medium to the pipes A and f. By means of this construction the receiver may also be used as an injector for medicinal purposes, and when required it may be provided with a strainer, or a strainer and some other porous substance, for filtering the liquid to be injected through the pipe f, in which case a suitable nipple or nozzle is screwed thereto.

Having now described my invention, what I claim is—

The combination, with a flexible tube or pipe of the feeding device composed of a funnel-shaped casing, a, having the contracted neck c, and a filling-tube, d, arranged at right angles to the axis of the casing, substantially as described, for the purpose specified.

JOSEF LEITER.

Witnesses:

VICTOR KARMIN,
THEODOR EXTER.