

ALIEN PROPERTY CUSTODIAN

THERMOPHORES

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in the Alien Property Custodian

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Known forms of rubber thermophores which when filled with hot water are used for warming up of human body, have the disadvantage that the water must be first tempered to the temperature which the patient can bear, because the heat penetrates very quickly through relatively thin rubber walls, and if this temperature is high, the heat may uncomfortably affect the skin of the patient under treatment. Further disadvantage comes from the fact that the water in the thermophore soon cools off to such a degree that it must be warmed up again. This is especially uncomfortable when using the thermophore at night, on travels or in such other occasions when there are no facilities for repeated warming up of water or when such heating of water results in extra expenses.

In order to attain a more uniform heating by means of such thermophore and to make its heat to last longer, it has been tried to wrap the thermophore in textile tissues or the like. The results were not satisfactory since the water cooled again rather quickly. The aim of this invention is to materially prolong the duration of each warming up period by means of such thermophore.

According to this invention the above disadvantages are overcome by providing in any desired or convenient manner cavities in the rubber walls of the thermophore whereby the transmission of heat therethrough from the inside of the thermophore to its outside is greatly reduced due to much slower rate of penetration of heat through the insulating air layer between the outer and inner walls. This insulating air layer can be obtained also by doubling the walls of the thermophore and one of these walls may be provided on its inner side with stay-off means such as beads, parallel or crossed ribs or a layer of

spongy rubber, or this intermediate layer may consist of any other suitable filling or packing material such as glass or slag wool, packed between these double walls of the thermophore in any desired or suitable manner. When the glass or slag wool is used for this heat insulating intermediate layer the advantage of much longer conservation of heat is secured and the rate of giving off of heat from the thermophore becomes appreciably more uniform and longer lasting.

The thermophore walls may be made of several sheets of rubber between which the glass or slag wool is packed in any desired or suitable manner and the whole is then vulcanised or cemented together, assuring thereby even more uniform heat transmission. Similarly, the walls of the thermophore may consist of glass or slag wool mixed in the rubber.

These intermediate layers of glass or slag wool may be made of dressed or undressed glass or slag wool, and in case of dressed wool the fibers of various lengths may be arranged in parallel or crossed arrangement or may be woven to form gauze like material.

When a thermophore with walls made in accordance with this invention is filled with hot water which may be boiling hot, the heat penetrates only very slowly through the air layer or through the intermediate layers of glass or slag wool interposed between the rubber walls of the thermophore, and thus cannot harm the skin of the user, and, what is very important, this heat transmission is maintained for five to ten times longer periods than it is possible with the ordinary thermophores, this feature being a considerable improvement over the known types as regards the efficiency of the thermophore.

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