March 9, 1926. 1,576,488

H. E. HODGSON

ICE BAG

Filed Feb. 2, 1924

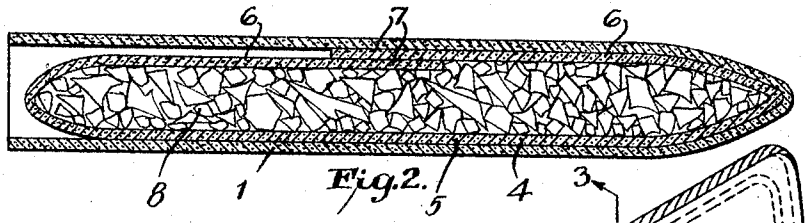


Fig.2.

Fig.3.

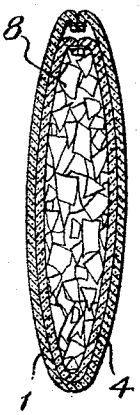


Fig.1.

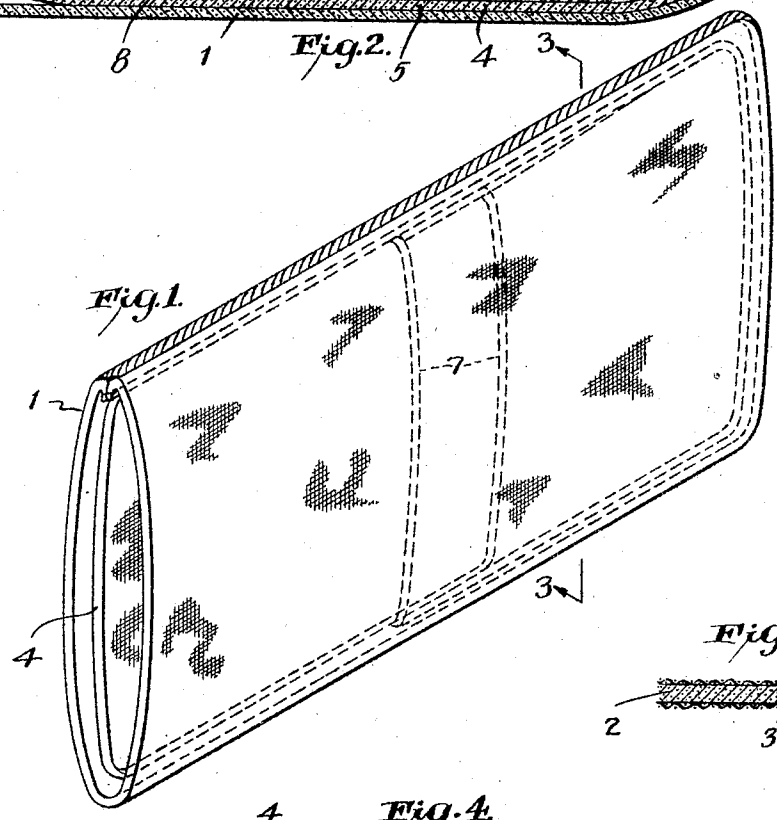
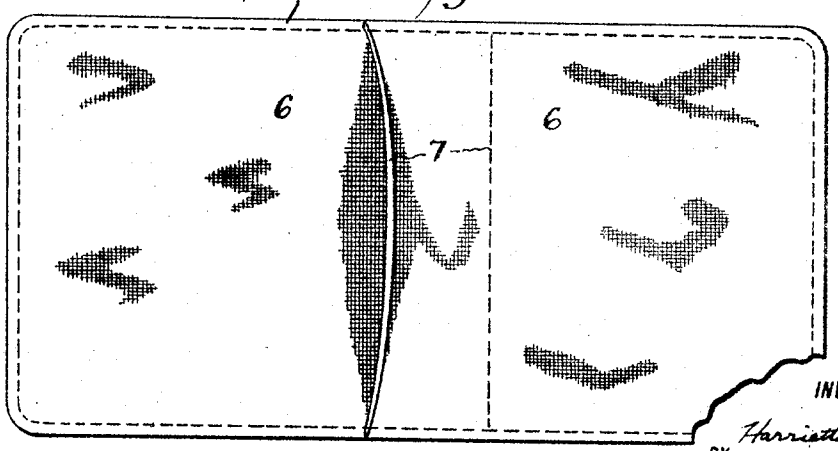


Fig.5.

Fig.4.



INVENTOR

Harriette E. Hodgson

BY

ATTORNEY

Patented Mar. 9, 1926. 1,576,488

UNITED STATES PATENT OFFICE.

HARRIETTE E. HODGSON, OF NEW YORK, N. Y.

ICE BAG.

Application filed February 2, 1924. Serial No. 690,137.

To all whom it may concern:

Be it known that I, HARRIETTE E. HODGSON, a citizen of the United States, and a resident of New York city, in the county and State of New York, have invented a new and useful Ice Bag, of which the following is a specification.

This invention relates to my ice-bag of cellular absorbent fibrous material, calculated to furnish moisture to the skin without flooding on the one hand or clamminess on the other, and with a degree of cooling and at a slow rate of melting governed by the heat-insulating properties of the material, all as covered in Patent No. 1,441,282, granted to me January 9, 1923. The material found especially suitable for the purpose is the material known as sheet lint, composed of layers of loosely-laid and loosely woven cotton fiber, but other equivalent fluffy absorbent fabrics affording walls of substantial thickness enclosing air containing interstices may be used, as set forth in my said patent.

The present invention provides a form, or forms, of the bag, particularly suited for certain purposes, and furnishing a means for conveniently adjusting the absorption, insulation (relative) and moistening powers of the device. I provide two bags of the characterized material, one to receive the ice and to be slipped into the other. This affords a plurality of layers and a simple way of retaining the ice, and for cases where a more rapid action is desired the inner bag can be used alone and can be of special construction.

In the accompanying drawings illustrating the improvements:

Fig. 1 is a perspective view showing two bags, one within the other;

Fig. 2 is a longitudinal section;

Fig. 3 is a transverse section;

Fig. 4 is a face view of the inner bag, which may also be used by itself; and

Fig. 5 is an enlarged section through the fabric.

The outer bag 1 is a simple flat, oblong bag, open at one end or side edge and closed at the others, like a pillow case. It is made of sheet lint, consisting of a layer, moderately thick, of fluffy cotton fiber 2, on a layer, or between layers, of loosely woven cotton fiber 3 serving as a retainer for the laid fiber and as a useful element in the plan of regulation of cooling, melting, and water-retention.

In some cases the outer bag can be made of two complete layers of sheet-lint, or it may have an additional layer or layers on one side.

The inner bag 4, which is or may also be a complete bag, is preferably made with a continuous wall 5, which may be termed a back wall, and a front wall which is composed of two halves 6, 6, the inner portions of which overlap each other at 7, 7, at the middle of the bag. These halves are sewed or united to the back wall all around the edges of the bag, and are free only at their inner overlapped edges. A wide guarded entrance is thus provided through which the ice 8 may be introduced, and from which it will not drop out.

This bag may be used alone as stated, and the overlapping portions will afford extra thickness which may be applied over the center of the affected region if desired, or the bag may be placed with its back wall against the skin if less of a barrier to the transfer of heat and moisture is desired.

When the inner bag is used inside the outer bag, the greatest degree of retention and the lowest melting can be realized, and the ice is surely enclosed, as the wall of the outer bag covers the wide mouth of the inner bag. The function of the air-containing interstices within the cellular absorbent walls is to control the transfer of heat in one direction, and the passage of moisture resulting from the absorption of heat, in the opposite direction, so that there may be a desired balance between cooling and evaporative effects. The air space between walls also contributes to this end, giving better control with less thickness; and the combination of a plurality of the bags inserted one within another, besides providing these advantages, enables the control to be adjusted to the condition by combining heavier or lighter bags or by omitting the outer bag entirely.

By these means any desired skin refrigeration can be induced.

What I claim as new is:

1. An ice-bag for medical and surgical

use, having walls of cellular absorbent fibrous fabric characterized by one wall of the bag being composed of two sections overlapping intermediate the ends of the bag to afford a guarded entrance and a double thickness of the cellular absorbent fibrous fabric.

2. An ice bag for medical and surgical use, having walls of cellular absorbent fibrous material, characterized by the combination of two such bags slipping one within the other, the inner bag having one wall composed of two sections overlapping intermediate the ends of the bag.

HARRIETTE E. HODGSON.