Feb. 3, 1925. 1,525,168

J. H. DAVIDSON

HEAT GENERATING BAG

Filed Oct. 12, 1923

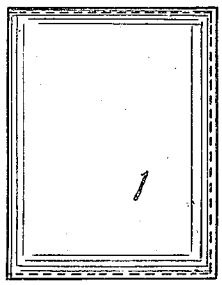


Fig. 1.

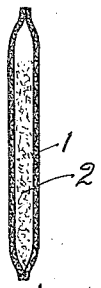


Fig. 4.

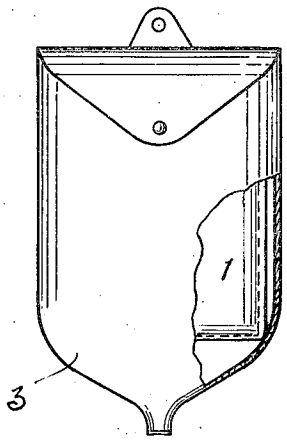


Fig. 2

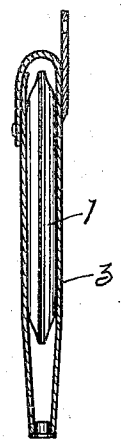


Fig 3

Inventor
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Patented Feb. 3, 1925.

1,525,168

UNITED STATES PATENT OFFICE.

JASPER HENRY DAVIDSON, OF HOUSTON, TEXAS, ASSIGNOR OF THREE-FOURTHS TO E. MARVIN BAILEY, OF HARRIS COUNTY, TEXAS.

HEAT-GENERATING BAG.

Application filed October 12, 1923. Serial No. 668,106.

To all whom it may concern:

Be it known that JASPER HENRY DAVIDSON, a citizen of the United States, residing at Houston, in the county of Harris and State of Texas, has invented certain new and useful Improvements in a Heat-Generating Bag, of which the following is a specification.

This invention relates to new and useful improvements in a heat generating pad.

One object of the invention is to provide a pad containing a heat generating mixture and designed to take the place of the ordinary hot water bottle.

In use, if desired, the pad may be inserted in a suitable covering, and for this purpose an ordinary wall syringe may be utilized, as a convenient covering to receive and protect the pad.

With the above and other objects in view, this invention has particular relation to certain novel features of construction and use, an example of which is given in this specification, and illustrated in the accompanying drawings, wherein:—

Figure 1 shows a plan view of the heat generating pad.

Figure 2 shows a plan view of a wall syringe, partly broken away.

Figure 3 shows a vertical sectional view thereof, and

Figure 4 is a vertical sectional view of the generating pad.

In the drawings the numeral 1 designates a sack, preferably of fabric. This sack is first sewed along the sides and one end, leaving the other end open for filling the sack, and when the same is filled, this end may then be sewed up.

The sack is filled with a mixture 2, consisting of powdered willow charcoal, salt, sodium carbonate, sal ammoniac, and iron oxide. The proportions of the ingredients named are approximately four grains of charcoal, six grains of salt, eight grains of sodium carbonate, one-fourth ounce of sal ammoniac, and fourteen and one-half ounces of iron oxide.

For a sack, or pad, of ordinary size, about fifteen ounces of the mixture is sufficient to generate the required heat. The mixture is put into the sack, as above explained, when it is desired to use the same, but before closing said open end, about one-half ounce of water should be added to the chemicals, and the pad thoroughly shaken to distribute the moisture and obtain the desired degree of heat. When the pad begins to cool, the temperature may be again raised by shaking the pad, provided it still contains moisture. If it contains no moisture, one end of the pad may be opened and more water added, and said end again closed, and the pad again shaken to distribute the moisture. When water is added, the second time more of it is required, for the reason that the chemicals have expanded and consequently require more moisture. An ordinary rubber hot water bottle may be substituted instead of the fabric sack, if desired, and the chemicals and water added as above stated.

If desired, the pad containing the heat generating mixture may be fitted into an ordinary wall syringe 3, as indicated in Figures 2 and 3, and the pad will thus be inclosed and protected, and prevented from becoming soiled or worn.

What I claim is:

A heat generating mixture consisting of approximately four grains of powdered willow charcoal, six grains of salt, eight grains of sodium carbonate, one-fourth ounce of sal ammoniac, and fourteen and one-half ounces of iron oxide.

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

JASPER HENRY DAVIDSON.

Witnesses:

Dr. M. D. BAILEY,

WM. A. CATHEY.