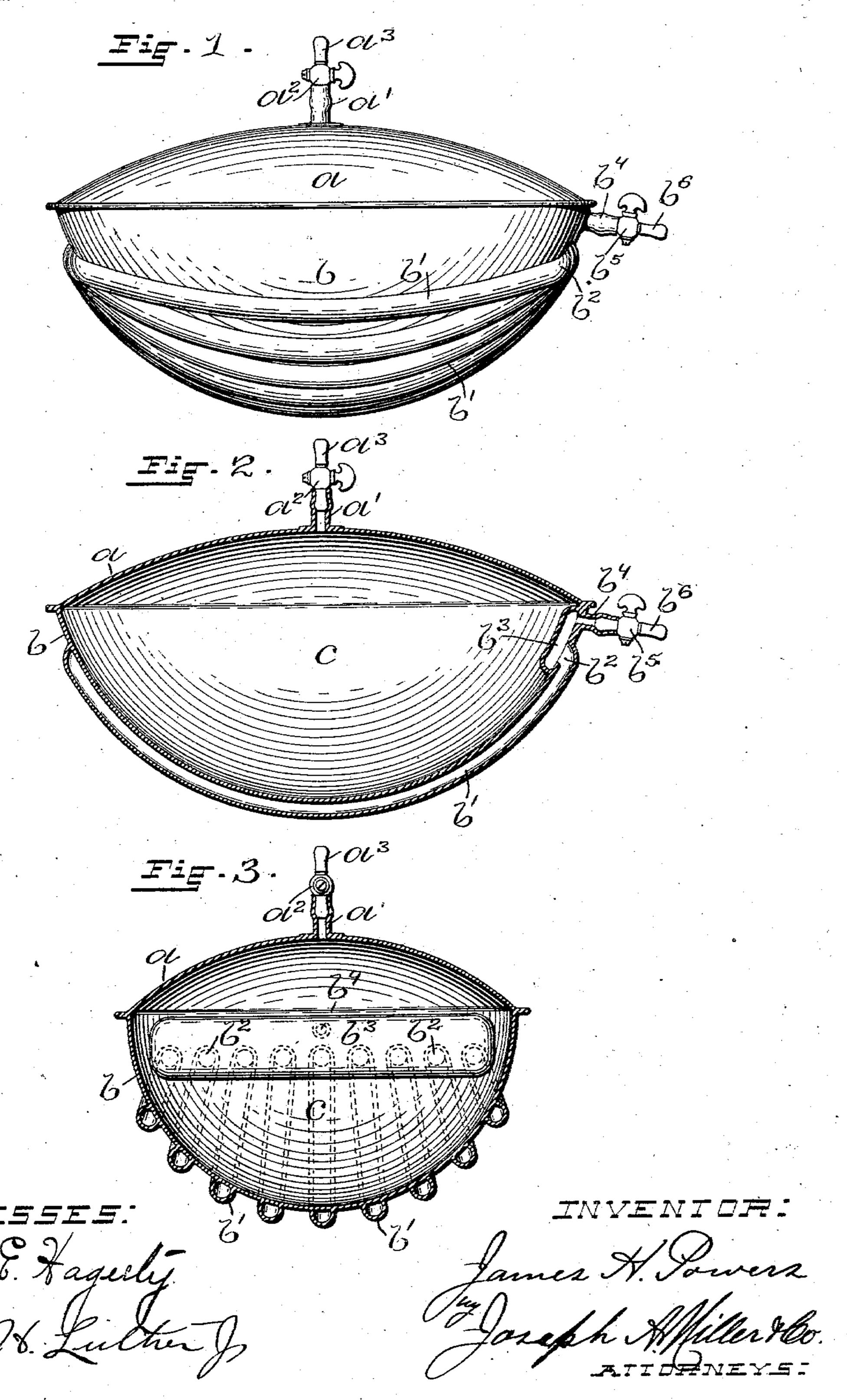
## J. H. POWERS. MASSAGE APPLIANCE. APPLICATION FILED FEB. 24, 1903.

NO MODEL.



## United States Patent Office.

JAMES H. POWERS, OF PROVIDENCE, RHODE ISLAND.

## MASSAGE APPLIANCE.

SPECIFICATION forming part of Letters Patent No. 730,569, dated June 9, 1903.

Application filed February 24, 1903. Serial No. 144,701. (No model.)

To all whom it may concern:

Be it known that I, James H. Powers, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Massage Appliances, of which the following is a specification.

This invention has reference to an improvement in appliances used in the treatment of ailments or diseases by massage, and more particularly to a massage - bag adapted to give the movements usually given by hand to the patient under treatment by the masseur.

In the treatment of certain ailments or diseases of the bowels the massage has here-tofore been done by hand, either by the masseur or by the patient himself by rubbing, kneading, or striking the abdomen.

The object of my invention is to provide a massage-bag to be used by the masseur or patient in place of the hands to give the different motions required on the patient in a more perfect manner and with less fatigue than by hand.

My invention consists in the peculiar and novel construction of an air-tight bag, with a plurality of ribs on the under side, made of any air-tight flexible material, preferably of fabric and rubber, and capable of being inflated to any degree of rigidity desired with means for inflating, as will be more fully set

forth hereinafter.

Figure 1 is a side view of my massage-bag, showing the bag and the ribs on the under side of the bag inflated. Fig. 2 is a sectional view taken lengthwise through the bag and central rib, showing the means for inflating the bag and hollow ribs; and Fig. 3 is a transverse sectional view through the center of the bag, showing the plurality of hollow ribs on the under side and the auxiliary chamber connecting the hollow ribs for inflating.

In the drawings, a represents the top, and b the under body, of my massage-bag, made of an air-tight flexible material, such as fabric and rubber, secured together in the usual way and shaped to form the main inflating-chamber c, the bag when inflated having a rectangular shape with rounded corners, a slightly-rounded top, and a half-spherical un-

der body. Extending upward from the top and connecting with the chamber c is the inlet-duct a', connecting with the valve  $a^2$ , having the mouthpiece  $a^3$  for inflating the bag. On the under body of the bag and forming a part of it are the hollow flexible ribs b' b', extending lengthwise of the bag. These ribs are closed at one end and have the open ends  $b^2b^2$  60 opening into the auxiliary chamber  $b^3$ , having the central inlet-duct  $b^4$ , connecting with the valve  $b^5$ , having the mouthpiece  $b^6$  for inflating the hollow flexible ribs. By this form of construction the bag and ribs are inflated 65 independent of each other to any degree of rigidity required.

It is evident that the auxiliary chamber  $b^3$ , with its inlet-duct  $b^4$ , could be dispensed with, if desired, without materially changing my invention. In this construction the open ends of the ribs would enter the main chamber c, and they would be inflated at the same time and with the same pressure as the main cham-

ber.

In the use of my massage-bag the ribbed part of the bag is used on that part of the patient requiring the massage treatment. The masseur rubs, presses, rolls, and strikes with the bag. By the novel construction of 80 the bag and ribs and by its pneumatic action a more beneficial result is obtained than has heretofore been possible. The action of inflating the bag and ribs by the user strengthens the lungs, and when not inflated the bag 85 may be flattened or rolled for storage or shipping purposes.

Having thus described my invention, I claim as new and desire to secure by Letters

Patent—

1. A massage-bag made of a flexible air-tight material, a plurality of ribs formed on the surface of the bag, and means for inflating the bag, for the purpose as described.

2. Amassage-bag made of a flexible air-tight 95 material, a plurality of hollow flexible ribs on the bag, means for inflating the bag, and means for inflating the ribs, for the purpose as described.

3. A massage-bag made of a flexible air-tight 100 material, a plurality of hollow flexible ribs forming a part of the bag, and means for inflating the bag and the ribs, for the purpose as described.

4. A massage-bag made of a flexible air-tight material, such as fabric and rubber, and forming a main air-chamber having an inlet-duct, a plurality of hollow flexible ribs forming a part of the bag, an auxiliary chamber connecting with the hollow ribs and having an inlet-duct, means for inflating the bag through the inlet-duct in the main chamber, and means for inflating the ribs through the inlet-duct in the auxiliary chamber, for the purpose as described.

5. In a massage-bag made of a flexible airtight material, such as fabric and rubber, the combination with the top a and the under body b forming the air-chamber c having the

inlet-duct a' connecting with the valve  $a^2$  having the mouthpiece  $a^3$  for inflating the bag, the hollow flexible ribs b' b' closed at one end and having the open ends  $b^2$   $b^2$  opening into the auxiliary chamber  $b^3$ , with the inlet-duct 20  $b^4$  connecting with the valve  $b^5$  having the mouthpiece  $b^6$  for inflating the ribs, all for the purpose as described.

In testimony whereof I have signed my name to this specification in the presence of 25

two subscribing witnesses.

JAMES H. POWERS.

Witnesses:

ADA E. HAGERTY, J. A. MILLER, Jr.