

UNITED STATES PATENT OFFICE.

JOSEPH SAMPSON GAMGEE, OF 22 BROAD STREET, BIRMINGHAM, COUNTY OF WARWICK, ENGLAND, ASSIGNOR TO SILAS MAINEVILLE BURROUGHS, AND HENRY SOLOMON WELLCOME, BOTH OF LONDON, ENGLAND.

MEDICATED SPONGE SUBSTITUTE.

SPECIFICATION forming part of Letters Patent No. 301,443, dated July 1, 1884.

Application filed April 10, 1884. (No specimens.) Patented in England August 24, 1883, No. 4,107; in Belgium April 5, 1884, No. 61,743, and in Canada April 23, 1884, No. 19,169.

To all whom it may concern:

Be it known that I, JOSEPH SAMPSON GAMGEE, (commonly known as "SAMPSON GAMGEE,") a subject of Her Majesty the Queen of Great Britain, residing at 22 Broad Street, Birmingham, in the county of Warwick, England, consulting surgeon, have invented a certain new and useful Improved Substitute for Sponges, especially applicable for medical purposes, but adapted also for ordinary use, of which the following is a specification.

This invention has mainly for its object to provide medicated sponges for hospital use, and generally for use in medical and surgical cases, or cases of illness of any kind, and for the preservation of health. For this purpose I form an absorbent elastic ball or pad from fiber and cotton wool, and place in the center thereof a capsule containing a salt or powder or other medical or antiseptic substance, capable of being broken, or dissolving or otherwise permeating the ball or pad when being used, the whole being inclosed in a bag of woven gauze or other open-work fabric. The inner layer or center of the ball or pad, which contains the capsule or other medical or antiseptic substance, is preferably of cotton-wool, and this is surrounded by a coarser fiber—for example, coarse cocoanut fiber—around this a layer or layers of cotton-wool, or finer fiber or fine threads cut from wood; then, again, a layer of cotton-wool, and outside this a layer of finer wood fiber, hemp, or other elastic substances, and an outermost layer of cotton-wool, the whole inclosed and secured in a bag of gauze or such like open-work fabric. The cotton-wool used should be cotton-wool free from grease, so that it may readily absorb liquid and be quite pure. It will be quite evident that the number of concentric layers may be varied to meet the size or purpose for which the ball or pad is to be employed, as by experiment I have found that good results are obtained from a center of cotton-wool surrounded by a layer of coarse cocoa-nut fiber, and this by a layer of finer fiber, which, in its turn, is surrounded by a layer of fine cotton-wool, and the whole inclosed in a gauze bag.

Artificial sponges made in this way can be produced at so small a cost that they may be destroyed by burning after being once used, to avoid possibility of infection under any and all circumstances. They may also be used in the same way as ordinary sponges, for they will take up a large volume of liquid, and this by squeezing may in great part be expressed from them, and for this purpose the medical or antiseptic substance will of course not be required. They can also very advantageously be used as surgical tissues for many medical and surgical purposes, with or without antiseptic or other medication, as dressings or pads for health or comfort.

I am aware that it has been proposed to form bats or pads of fibrous material incased in an open-work bag or covering, and at times provided with a water-proof backing; but such bats or pads have little or no elastic properties, and, when moistened, "mat" and become useless for the purposes for which my sponges are adapted.

Having now described the nature of my said invention, what I claim, and desire to secure by Letters Patent, is—

1. The improved substitute for sponges, especially applicable for medical purposes, and adapted also for ordinary use, said substitute being formed of two or more concentric layers of coarse or elastic fiber and cotton-wool inclosed in the open-work bag or covering, substantially as described, and for the purpose set forth.

2. The improved substitute for sponges, especially applicable for medical purposes, but adapted also for ordinary use, said substitute being formed of two or more concentric layers of coarse elastic fiber and cotton-wool incased in a gauze or other open-work bag or covering, and having inclosed a capsule containing salt, powder, or other medical or antiseptic substance, substantially as described.

JOSEPH SAMPSON GAMGEE.

Witnesses:

PHILIP M. JUSTICE,
ALLEN PANY JONES.