March 6, 1951 F. A. BRACKMANN 2,544,216

BATHING IMPLEMENT

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Fig. 1.

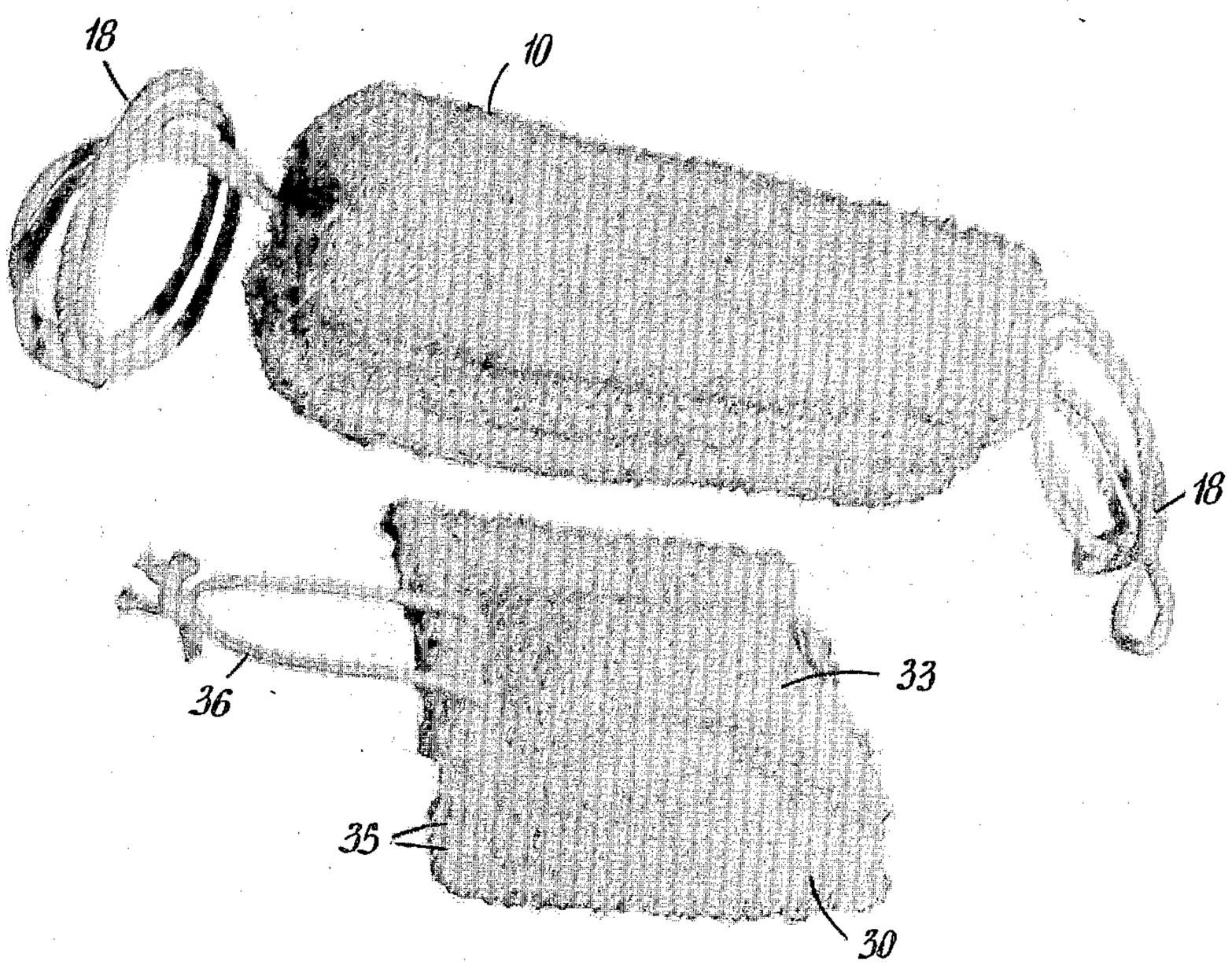

Fig. 2.

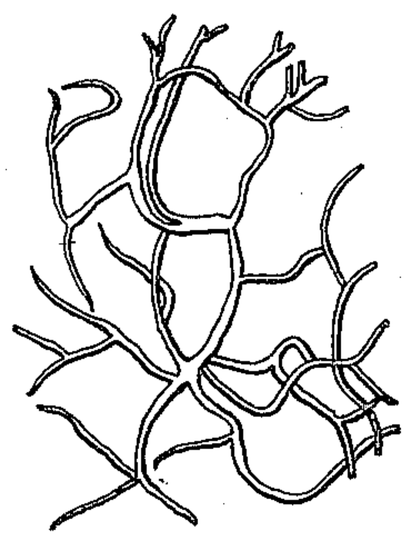

Fig. 9.

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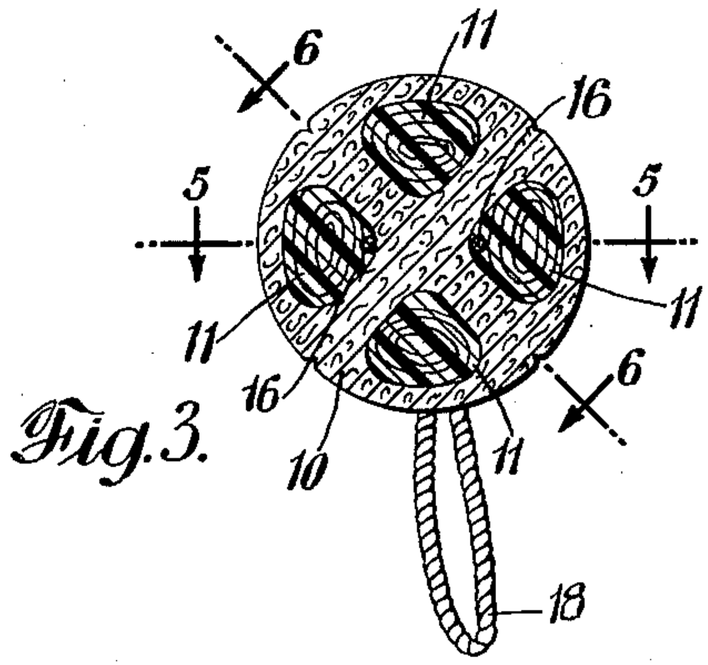

Fig. 3.

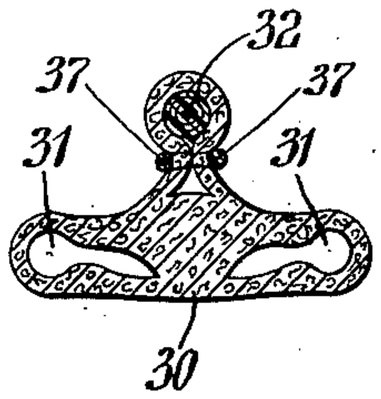

Fig. 4.

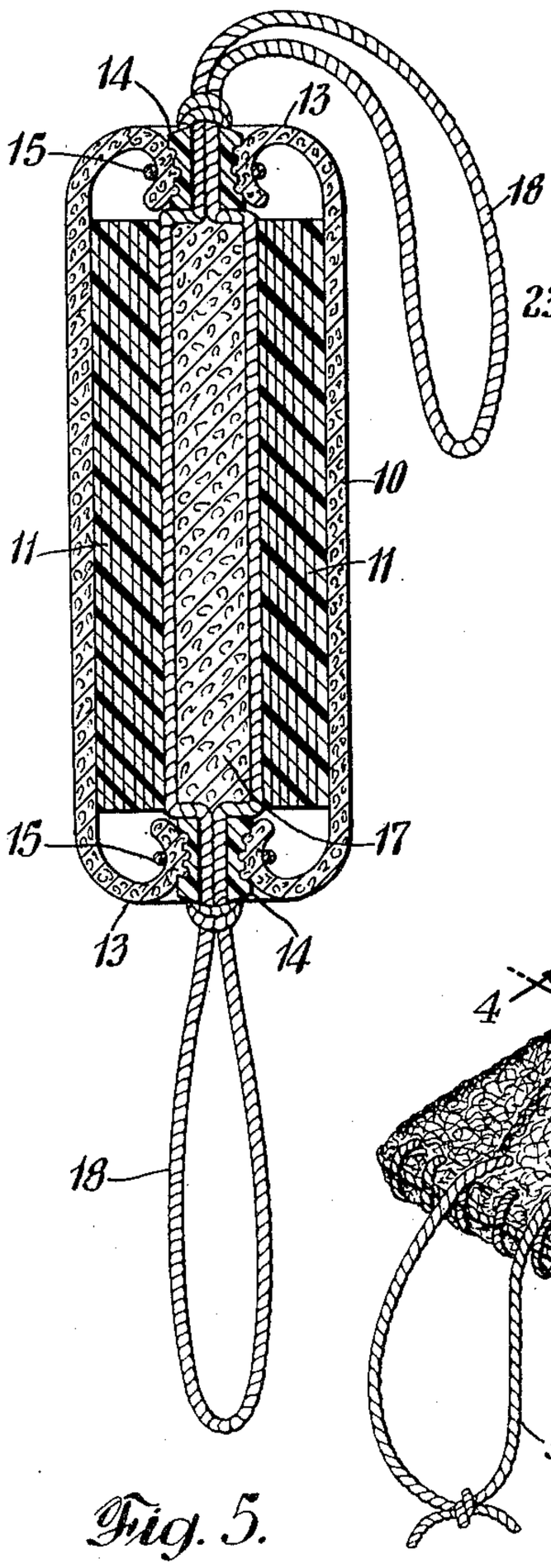

Fig. 5.

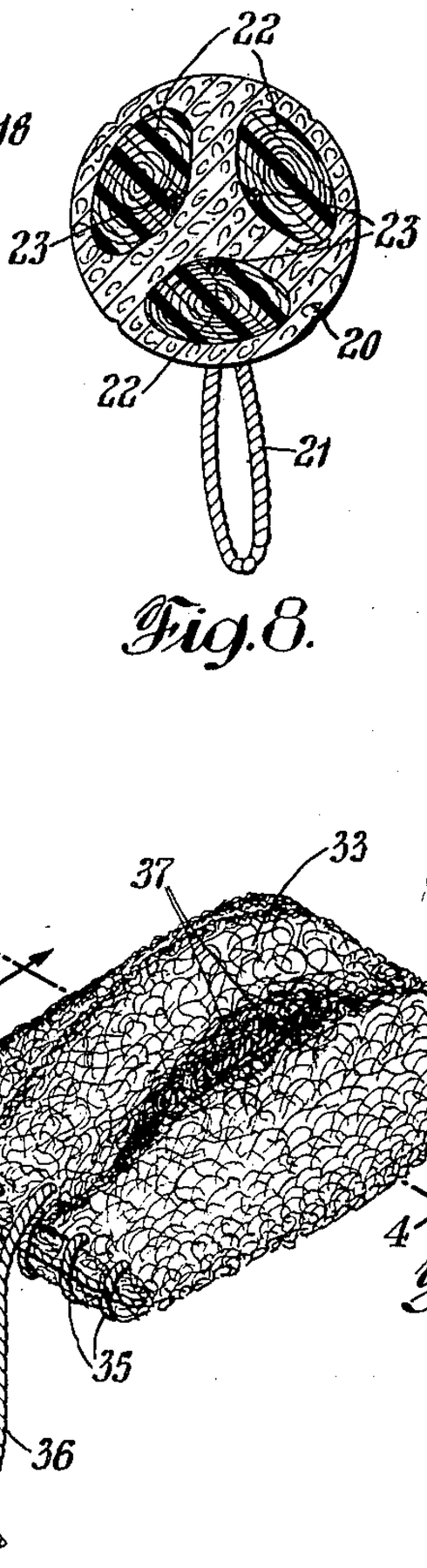

Fig. 8.

Fig. 7.

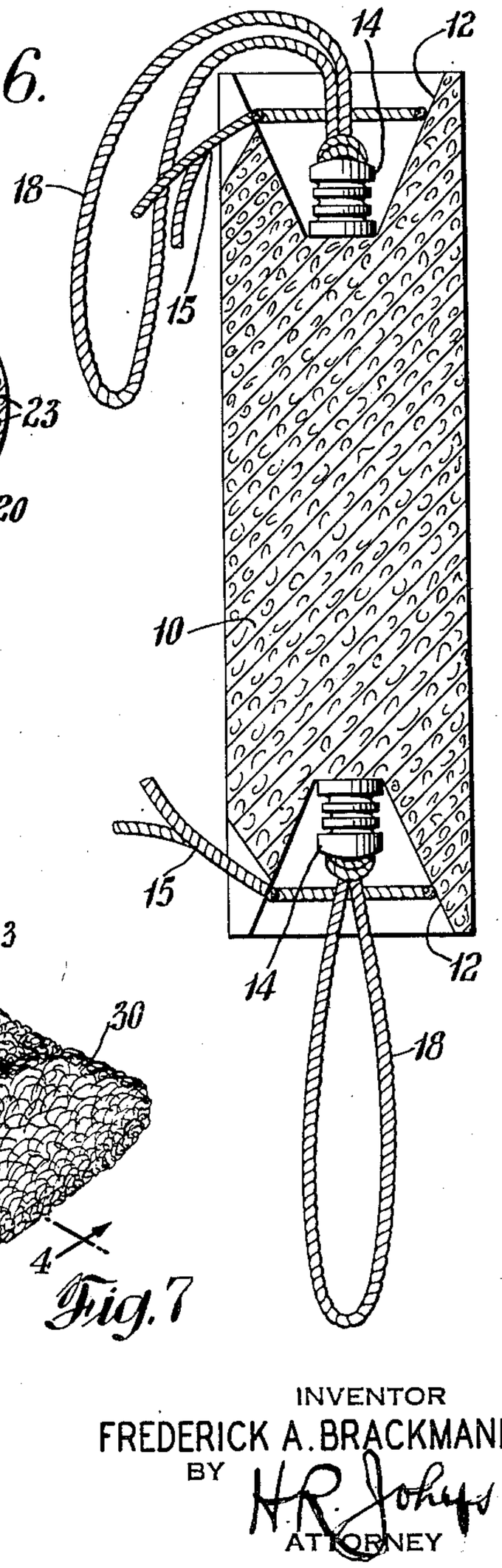

Fig. 6.

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BATHING IMPLEMENT

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Application April 30, 1947, Serial No. 744,807

4 Claims. (Cl. 15—222)

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This invention relates to a bathing or washing implement of the sort adapted for gently washing the skin with a stimulating and slight scraping action by a device composed of vegetable fibers in which inter-fiber mesh openings are large enough so that dirt wiped up will not be held in such openings but will run out as does the water or other cleansing liquid. An object is to provide a bathing device of vegetable fibers known as loofah or hetchema, which may be more easily held and manipulated, in a shape fitting the hand better than when the same material is in flat or sheet form. Another object is to expand the loofah from its flat condition and hold the same open. More specifically, a further object is to retain the expanded loofah material in a generally cylindrical shape for use in the bath tub and elsewhere. Yet another object is to provide the same material in a form adapted to be held conveniently in one hand and applied to the face and elsewhere.

A gourd type vegetable product is grown in Asia and known as loofah or hetchema. It is characterized by fibers growing in a natural mesh so that only a little liquid is held in the smaller of those mesh openings between the fibers although the fibers are moist from absorbed water. A number of such fibers constitute a hard central core as well as ribs between longitudinal channels and an outer covering. This inability of the material to hold water like an ordinary cotton wash cloth or sponge results in its being admirably adapted for use as a washing implement because dirt will not be retained in the interfiber pores but will run out as the water drains from it. The loofah sheet contains several longitudinal channels. The loofahs are dried and shipped in a flat condition, but their more natural form is cylindrical as is signified by their technical name, loofah cylindrica.

According to this invention the loofah is expanded from its flat form by having the fibers absorb moisture and by bringing it into a generally cylindrical shape. A filler is placed in one or more of these channels, such filler being preferably of a mesh material, but not necessarily with rectangular openings, which is slightly resilient or expansible to assist in holding the channel in which it is placed in an opened or expanded position. In one illustrated embodiment three or four such fillers are used, the ends of the material being turned inward to enable the smooth and softer outer layers to protect the user from coarser core fibers and constitute a bathing implement well adapted for holding in the hand. In another embodiment of this invention the loofah is formed into a base portion from which a rib upstands, at least one filler being placed in this rib to constitute a handle portion. In this latter embodiment the ends of the material are closed and the base portion has its ends sewn together and to the ends of the rib portion giving the base a somewhat convex shape adapting it as a smaller bathing implement than the previously described one of generally cylindrical shape. The rib acts to reinforce the base. Referring to the drawings,

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Fig. 1 is a perspective of a bathing implement of this invention in generally cylindrical form.

Fig. 2 is a perspective of another embodiment of this invention in a smaller bathing implement such as that shown in Fig. 7.

Fig. 3 is a transverse cross section through the device of Fig. 1.

Fig. 4 is a section on the line 4—4 of Fig. 7, the same being a transverse cross section of the device shown in Fig. 2.

Fig. 5 is a longitudinal section on the line 5—5 of Fig. 3, the same also being a longitudinal section through the device of Fig. 1.

Fig. 6 is a section on the line 6—6 of Fig. 3 before the ends of the fibrous material have been turned in and held closed.

Fig. 7 is a view of the device of Fig. 2 showing more clearly the stitches at the ends of the base portion which hold this base closed and the ends of the upstanding rib closed, thus giving the base a slightly convex shape.

Fig. 8 is a transverse cross section through the modified construction corresponding to Fig. 3 but in which only three instead of four fillers are present.

Fig. 9 is an enlargement showing a few of the loofah fibers which form a natural mesh.

Referring to the drawing the loofah or hetchema material 10 in its expanded or opened position is shown in Figs. 1, 3 and 5 as being of generally cylindrical shape. The longitudinal channels have been supplied with a filler 11 extending longitudinally as illustrated in Fig. 5 to terminate short of the ends of the loofah material. Between the fillers as shown in Fig. 3 are ribs which are constituted by coarser fibers which are entirely surrounded by the smoother outer surface. The ends of these ribs are recessed as shown at 12 in Fig. 6 so that the ends of the material may be bent over and turned in at 13 to enclose the filler material 11. These ends are brought contiguous the bushings 14 which are of

any suitable material, metal, or plastic or wood. As shown in the drawing the surface of the bushing is ribbed, in order that the inturned ends of the loofah may be held and anchored within the annular recesses between the ribs on the surface of the bushing. To hold the inturned ends in position contiguous the bushing surface a cord 15 or other suitable means may be tightened by having the ends extend out through an opening in the loofah material in order that a square knot may be applied. The core or central portion 17 of the loofah material between the radial ribs may have a cord 16 passed around opposite sides thereof as shown in Figs. 3 and 5, the ends of this cord being brought out through the bushing at each end and forming loops 18 of the desired length to facilitate gripping the ends of the loops and using the implement for example in washing the back while in the bath.

The embodiment illustrated in Figs. 3 and 5 has four fillers whereas the embodiment shown in Fig. 8 has only three, the difference usually depending upon the age of the gourd. In the embodiment of Fig. 8 the loofah material 20 has looped end cords 21 passing radially inside the fillers 22 by means of the cords 23 passed around the core on three sides instead of on only two sides as in Figs. 3 and 5.

The filler in each embodiment illustrated is preferably of a type having at least a slight expansibility this tending to keep the loofah in expanded or opened position with these longitudinal seed channels filled. Another characteristic of the filler material is that it should be about as water permeable as the loofah in order that no dirt may be retained within it but instead any dirt will flow directly out of the filler and loofah as the water runs out of it. One example of an appropriate type filler is the plastic screening material available today for household use, such material being rolled fairly tightly and inserted in the longitudinal openings. The appearance of longitudinal ribs shown in Fig. 1 for example is the result of the natural growth of the vegetable material and is not the result of processing. A convenient size for the cylindrical bathing implement has been found to be about 6 or 7 inches in length, with the cord extending out each end 10 or 12 inches, though of course the desired length of the extending cords will depend upon the size and convenience of the person using the implement.

Referring to Figs. 2, 4, and 7, loofah 30 of the type having three longitudinal channels 31 is adapted to be made into a bathing implement having a convenient handle 33. A filler 32 of the type mentioned in connection with Figs. 1, 3 and 5 to 8 but smaller is disposed in at least a central portion of the handle 33. Stitching, gluing, clips, rivets, or other fastening 35 is adapted to close the ends of the base portion of the implement and also the ends of the handle portion 33, giving the base a slightly convex shape. A cord 36 by means of which the implement may be hung on a hook or wherever convenient may be passed into and through the loofah as shown in Figs. 2 and 7. Longitudinal stitching 37 or other well known fastening means assists in forming the shape of the implement and assists the material in being held in the shape illustrated. The handle portion 33 functions as a longitudinal reinforcement for the base.

The natural mesh formed by the fibers as shown in Fig. 9 is another reason for the adaptability of the loofah to function as a bathing implement. Regardless of the direction in which the implement be moved there always are enough transverse fibers to produce a gentle rubbing action upon the skin. So far as is known no other vegetable product produces fibers which form a natural mesh among them in a suitable manner.

Among the advantages of this invention may be mentioned the provision of a compact bathing implement admirably shaped to facilitate handling the same. A noteworthy feature of the loofah material is its large permeability enabling water and dirt to freely flow out from between the fibers without having the dirt retained therein as is the case in a cotton wash cloth for example and many sponges. The vegetable fibers themselves being absorptive retain enough moisture for a gentle and stimulating wiping action on the skin. Unlike a wash cloth or sponge after dipping this bathing implement in water the bulk of the water drains out almost immediately yet the moisture retained in the fibers gives the desirable cleansing action already referred to and makes the fibers more pliable. The filler material used may be ordinary plastic house screening inasmuch as this has been found to be slightly resilient and tends to expand to hold a loofah in open or expanded position. The filler may, if necessary, be additional loofah material but that is not preferred because this additional loofah material is not resilient or expansible as is desired. Wherever the fillers are used they are entirely protected by an outer cover of the loofah material so that any portion of the bathing implement of either Figs. 1 or 2 may when wet be used as a washing or scrubbing implement without damage to the skin. The pull cords shown in Figs. 1, 5 and 6 are preferably of material and strength to withstand frequent immersions and yet accomplish their function. The cord 15 is held loosely in place by sewing, gluing, or in any other convenient manner in such a way that it will stay in place while the ends at 13 are turned in, and allow the contraction of the loofah during tightening of the cord.

Tests with a bathing implement of the type shown in Fig. 1 weighed 28 grams dry. After one-half to three minutes immersion the same weighed 80 to 85 grams, thereby 52 to 57 grams were taken up. Most of the water ran out of the loofah in 20 seconds, thus indicating the material absorbed only about twice its weight. A cellulose synthetic sponge held roughly eleven times its weight of water. Of the water absorbed by the loofah a substantial part of it is absorbed by the fibers themselves, making them more live and flexible as distinguished from their dry state prior to moisture absorption. Also some of the water is retained in the smaller mesh openings formed by the fibers. In contrast to the small quantity of water retained by the loofah, a natural sponge will retain about ten times its dry weight of water.

What is claimed is:

1. A washing implement comprising an envelope of loofah from which seeds have been removed to provide a plurality of longitudinal channels, a filler for at least a substantial portion of one of said channels, said filler being shorter in length than the loofah, of mesh material, of a size and rounded cross section to hold open at least a substantial portion of said channel in which placed, and substantially as water permeable as said loofah in which the filler is placed, the ends of said filler being covered by outer portions of said loofah whereby said filler is kept

out of contact with whatever surface is being washed by the loofah.

2. A washing implement according to claim 1 in which said filler is at least slightly resilient.

3. A washing implement according to claim 2 in which said filler is constituted by a roll of plastic screening.

4. A bathing implement of loofah from which seeds have been removed to provide a plurality of longitudinal channels, a filler for a substantial portion of the length of each of said channels, each filler being expansively resilient and of mesh material of a size to hold open the channel in which placed, each end of the loofah being recessed and receiving a bushing about which the soft outer end portion of the loofah is turned inward and held in place against the outside of the bushing covering the ends of the fillers, and a pull cord axially passed through each bushing thence radially outward from an inner end of each bushing and longitudinally around a central

core portion radially within and between said channels and secured to said core portion.

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