United States Patent [19]

Yearka

[11] **3,791,746**

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[54] **BACK SCRUBBER**

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[52] **U.S. Cl.** **401/201,** 401/8, 401/268, 15/222

[51] **Int. Cl.** **A47k 7/03**

[58] **Field of Search** 401/7, 8, 201, 268; 115/222; 4/158

[56] **References Cited**

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[57] **ABSTRACT**

A two part resilient open cell foamed plastic is joined together. A strap is fastened between the two parts and extends outward in opposite directions from the joined parts. A pair of elastic straps are also joined between the plastic parts with both of these straps extending outward in the same direction which is at 90° from the first strap. The adjoining faces of the two plastic parts are joined part way around the periphery only, and are not joined on the side from which the elastic straps extend. One of the plastic parts has a series of outwardly extending holes into each of which a plurality of stiff fibers are embedded and extend outwardly from the foamed plastic.

11 Claims, 6 Drawing Figures

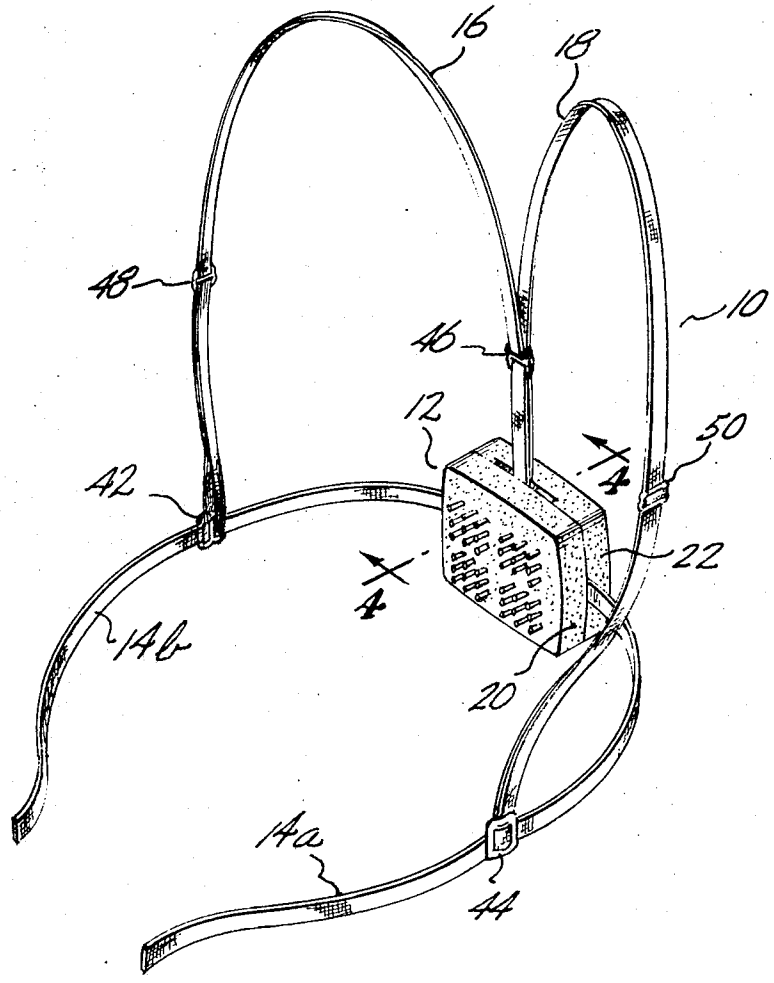


Fig. 1.

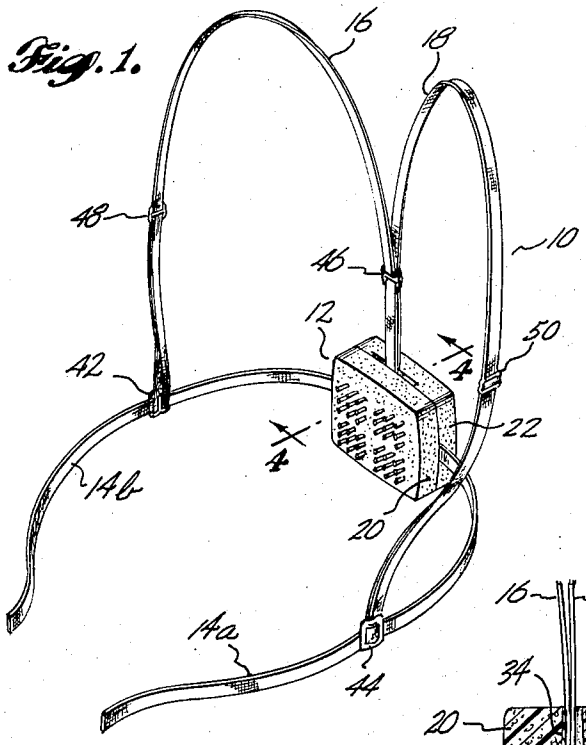
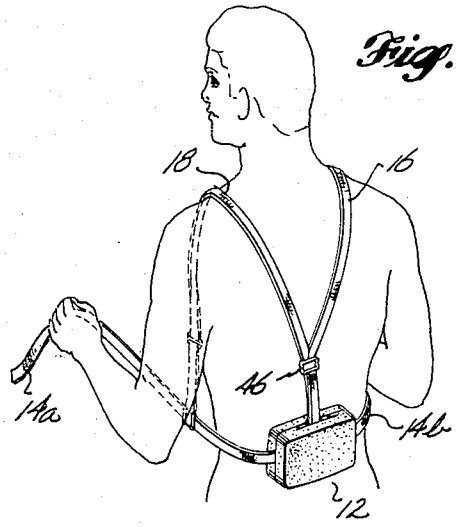


Fig. 2.



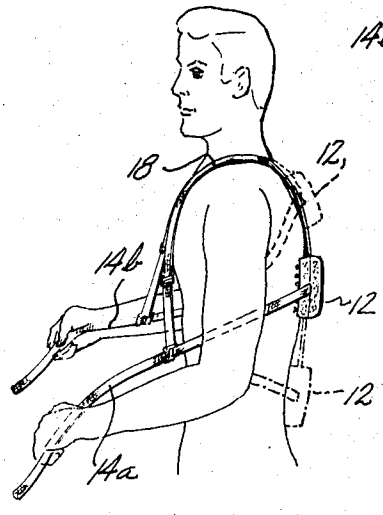


Fig. 3.

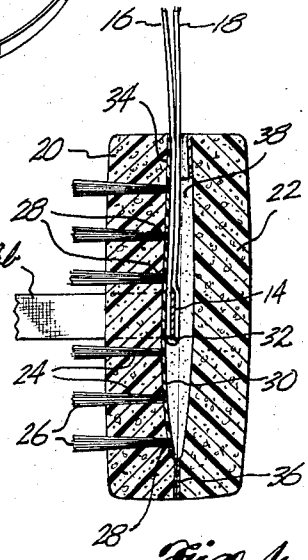


Fig. 4.

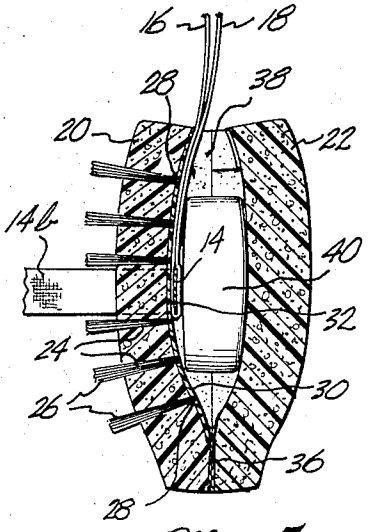


Fig. 5.

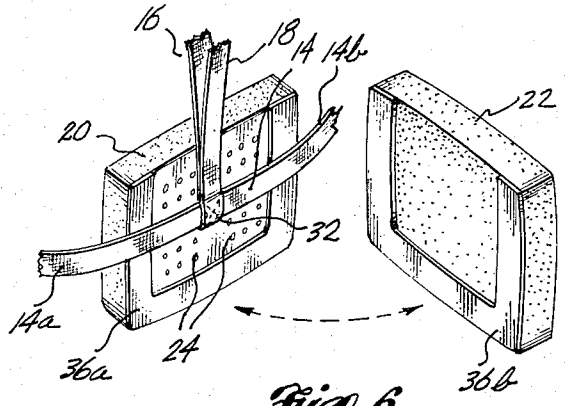


Fig. 6

BACK SCRUBBER

This invention relates to a back scrubber that is used in combination with and holds a bar of soap. The prior art known to the applicant comprises the following U.S. Pat. Nos. 1,404,401, Novick, Jan. 24, 1922; 1,598,574, Gibson, Aug. 31, 1926; 2,035,014, Schaefer, Mar. 24, 1936; 2,305,982, Morando, Dec. 22, 1942; 2,333,436, Novick, Nov. 2, 1943; 2,363,697, Schirmer, Nov. 28, 1944; 2,588,773, Smith, Mar. 11, 1952; 2,830,313, Mountanos, Apr. 15, 1958; 3,124,827, Hull, Mar. 17, 1964; 3,130,441, Hahn, Apr. 28, 1964; 3,488,126, Avallone, Jan. 6, 1970; 3,674,374, Jennings, Jul. 4, 1972.

BRIEF SUMMARY OF THE INVENTION

This invention combines a brush, a flexible strap attached to the brush each end of which is grasped by a person to move the brush back and forth across the back in essentially a lateral motion. The vertical height of the brush is controlled by a pair of elastic straps; which are attached to the brush, and extend out from the brush at 90° from the first strap. The elastic straps are adjustably fastened together part way up the back then are separated with one strap passing over one's shoulder and fastens to one side of the first strap, and the other passes over the other shoulder and thence fastens to the opposite side of the first strap.

The brush is made up of a pair of matching resilient open cell foamed plastic parts which are joined together. One of these parts have stiff filaments extending from the juncture between the two parts outward beyond the part to form bristles on the brush. The contacting faces of the two parts are bonded or joined by an adhesive that covers a strip part way around the periphery to leave the center area and the periphery along the side out of which the elastic straps extend unbonded to form a pocket between the two plastic parts. A pocket into which a bar of soap may be inserted.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 shows a perspective view of a back scrubber with a brush and controlling straps.

FIG. 2 shows a perspective view of the back scrubber of FIG. 1, positioned on a person , as viewed on his back.

FIG. 3 shows a side view of the person of FIG. 2,with mounted back scrubber.

FIG. 4 is a fragmented sectional view of the back scrubber taken along the line 4—4 of FIG. 1.

FIG. 5 is a sectional view as in FIG. 4, with a bar of soap held in a pocket formed by the brush.

FIG. 6 is a fragmented perspective view showing the inside surfaces of the two parts of the brush with the parts rotated 90° from the joined position.

DETAILED DESCRIPTION

A back scrubber **10,** has a brush **12,** a flexible strap **14** and a pair of elastic straps **16** and **18.** The brush has a pair of matching parts **20** and **22.** These parts are both prepared from an elastomeric open cell foamed plastic such as flexible polyurethane, plasticized polyvinylchloride, and neoprene rubber. These foams will act in the same manner as a sponge, but will have much better strength and abrasion resistance. Part **20** has a series of essentially parallel holes **24,** which extend through from the front to the fack face of the part. Each of these holes have a plurality of stiff filaments or

fibers **26** of a material such as but not limited to nylon bonded together and to the inside of the hole at **28.** The fibers extend out from the front face of the part an essentially uniform distance to form bristles for the brush. Alternatively the fibers may also have the inwardly extending ends embedded in a layer of adhesive **30** located along the inside face of part **20.** The adhesive for bonding the fibers should have elastomeric properties. An adhesive such as natural or neoprene (polychloroprene) rubber, urethane or styrene-butadiene may be used. Strap **14** extends across the back face of part **20** and extends outwardly from the part in opposite directions as shown at **14***a* and **14***b*. The strap may be bonded at **32** as shown in FIGS. **4** and **5.** This bond extends along the whole contact surface between the back surface of part **20** and the strap. The elastic straps **16** and **18** may be made up from a single strap which encircles strap **14** and then doubles back on itself; or it may be a pair of elastic straps that are fastened to strap **14** by sewwng or bonding. The elastic straps extend outward at an angle of about 90° from strap **14,** and are bonded at **32** to the back surface of part **20.** Parts **20** and **22** are bonded together along a straip **36** which extends inward from the periphery. This strip extends only part way around the periphery and does not cover near the edge adjacent the upwardly extending elastic straps. This gives a continuous unbonded area in the center and along the top edge of the two foamed parts to create a pocket **38** into which a bar of soap **40** may be introduced from the direction from which the elastic straps extend. The adhesive for all of the bonding should have elastomeric properties; so an adhesive of a natural or neoprene rubber, urethane or a styrene-butadiene may be used. The bonding strip as best shown in FIG. **6,** has a U-shape adhesive layer **36***a* on part **20,** and a U-shape adhesive layer **36***b* on part **22** which when joined form a bond **36.**

In an alternate embodiment the stiff filaments **26** are bonded together inside the holes **24,** but are not embedded in an adhesive layer along the back side of part **20,** and the straps are joined to part **20** and **22** only along bonding strip **36.**

In use the straps may be as shown with the end **42** of elastic strap **16** fastened to strap extension **14***b*, and the end **44** of elastic strap **18** fastened to strap extension **14***a* or elastic straps **16** and **18** may be lengthened and one may grasp all four straps. When using the back scrubber as shown one's arms are placed between the straps with the brush against the back, an elastic strap over each shoulder and the ends **14***a* and **14***b* grasped and moved back and forth to move the brush across the back. The elastic straps have adjustable fastener **46** to assist in keeping the straps on the shoulders, and adjustable fasteners **48** and **50** to adjust the tension on the elastic straps. The back scrubber may be used as shown with the bristles against the back; or it may be turned around with the smooth surface on part **22** against the back. It may be used with a bar of soap inserted in the pocket to lather ones back or the bar may be removed and the brush used to remove the lather.

I claim:

1. A device for rubbing a persons back comprising:

a. a joined two part flexible open cell foamed plastic,

b. means extending from the foamed plastic for scratching,

c. means extending from the foamed plastic for grasping by a person to allow one to move the

foamed plastic with scratching means back and forth across the back, and

d. elastic means extending upwardly from the foamed plastic for controlling the vertical position of the device.

2. A device as in claim **1** further comprising a pocket between the two parts of the foamed plastic for accepting a bar of soap.

3. A back scrubber comprising:

a. a joined two part elastomeric open cell foamed plastic material with one of the two parts having a series of holes extending from the juncture between the two parts outwardly,

b. a plurality of stiff filaments located in and extending outwardly beyond each of the holes in the foamed material,

c. a first strap attached to and extending outwardly in opposite directions from between the two parts of foamed material, and

d. a pair of elastic straps attached to and extending outwardly from between the two part foamed material at about 90° from the direction of the first strap.

4. A back scrubber as in claim **3** further comprising: a fastener holding the elastic strap together at a point part way out from the foamed material.

5. A back scrubber as in claim **4** wherein the fastener holding the elastic straps together is adjustable to allow fastening the straps together at varying distances from the foamed material.

6. A back scrubber as in claim **4** wherein the end of one of the pair of elastic straps adjustably fastens to the first strap at a point out from one side of the joined open cell plastic material, and the end of the other elastic strap adjustably fastens to the first strap at a point out from the opposite side of the joined plastic material.

7. A back scrubber as in claim **3,** further comprising a pocket between the two parts of the foamed material for accepting a bar of soap inserted from the direction from which the pair of elastic straps extend.

8. A bath brush for scrubbing ones back comprising:

a. a first strap,

b. a second and elastic strap comprising a pair of straps fastened to the first strap with each in the pair of elastic straps extending in the same direction at about 90° from the first strap,

c. an elastomeric open cell foamed plastic part having a plurality of essentially parallel holes extending therethrough,

d. a plurality of stiff filaments bonded into each of the holes and extending beyond the foamed plastic on one side, and having the straps bonded to the opposite side, and

e. a second elastomeric open cell foamed plastic part joined on the strap side to the first foamed plastic part with a bond between the adjoining surfaces on a strip extending part way around the periphery to leave unbonded the center area and that part of the periphery adjacent the elastic strap to form a pocket between the two parts for accepting a bar of soap.

9. A bath brush as in claim **8,** further comprising a fastener for adjustably joining the pair of outwardly extending elastic straps at a point part way out from the joined elastomeric open cell foamed plastic parts.

10. A bath brush as in claim **9,** further comprising:

a. an adjustable fastener between the end of one of the pair of elastic straps and one side of the first strap, and

b. an adjustable fastener between the end of the second of the pair of elastic straps and the opposite side of the first strap.

11. A method of preparing a bath brush for the back comprising:

a. selecting a pair of matching resilient open cell plastic sponges,

b. introducing a plurality of essentially parallel holes through one of the sponges,

c. inserting a plurality of stiff filaments into each of the holes with the filaments extending outward at the face side of the plastic sponge and adhering to the sponge inside the holes at the back side of the sponge,

d. looping an elastic strap over a flexible strap and bonding the straps to the back of the sponge, having the holes with filaments with the elastic strap at 90° from the flexible strap, and

e. bonding the second in the pair of resilient open cell plastic sponges to the back side of the first sponge with the bond along a strip adjacent to and extending part way around the periphery, having the bond discontinuous on the side toward which the elastic strap extends.

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