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SAFETY BATH FOOT PAD

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Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

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This invention relates to a safety tread surface for the bottom of the foot and has as its object to provide a non-slip pad which is adapted to be easily and quickly applied to the foot and which is capable of greatly reducing the hazard of slipping in a bathtub or in a tiled pool or shower.

Another object is to provide such a device which is flexible and elastic, adapted to be formed fitting and of such size and shape as not to impede the natural movement of the feet in swimming and diving, and likewise not to offer any substantial additional resistance to the movement of the feet in the water, leaving the toes free.

Fig. 1 shows a preferred embodiment of this invention in position on the foot.

Fig. 2 is a bottom view of the device of Fig. 1. Fig. 3 is a top plan view of another embodiment of this invention.

Fig. 4 is a perspective view of still another embodiment.

Fig. 5 is a bottom plan view of the device of Fig. 4.

The accident insurance companies' statistical data indicate a surprisingly large number of accidents from persons slipping on the porcelain surface of a bathtub when getting in or out or when changing their position. The present invention is adapted to cut down this danger and give the wearer increased protection against slipping on wet porcelain or tile surfaces.

The embodiment illustrated in Fig. 1 comprises a rubber band 10 of a size to snugly fit about the foot and under the ball of the foot.

The bottom 11 of this band is coated with a layer of granular cork particles, preferably of about a thirty-second of an inch mesh and held to the rubber by means of elastic and flexible adhesive. While any elastic and strong adhesive may be appropriate, it is preferable to have one that does not shrink or contract in setting. The elastic adhesive which has been found satisfactory under the tests made is one which is sold today on the market under the trade name of "All Right". Fig. 1 shows how this coating of cork particles extends over the sides 12 as well as the bottom, though it need not extend over the narrow top portion of the band 10. This band is made wide on the bottom in order to provide a larger tread surface.

An advantage of the devices of Figs. 1 and 2 resides in the band being elastic and form fitting, adapted for even deformed feet, and fitting so snugly and compactly that it does not substantially impede free and natural movement of the feet in diving and swimming.

Another advantage is that the device may be quickly and easily attached or removed from the foot.

The device of Fig. 3 comprises a pad 13 of compressed cork particles which may be of any convenient thickness, though preferably only about an eighth of an inch in thickness, in order to avoid discomfort in wearing. This pad is adapted to fit under the ball of the foot and an elastic 14 secured to the top of the pad extends over the top of the foot as does the rubber band in Fig. 1. The elastic 14 may be secured to the cork pad by stapling or stitching, such for example as is illustrated in Fig. 4. This elastic 14 may either extend all the way across the top of the cork pad 13 or it may only be secured adjacent the side edges thereof as is the case in Fig. 4.

The compressed cork pad is an article of commerce on the market today and known as compressed cork. Some suitable binder is used in assisting the compressed cork particles to adhere, but an important distinction between the pad 13 and the tread surface 11 of Fig. 1 resides in the fact that the pad 13 is not elastic or extensible as is the cork surfaced rubber of Figs. 1 and 2.

In Figs. 4 and 5 is shown another embodiment of this invention in which the cork pad 15 is of the same general type as that illustrated in Fig. 3 except that it is made heavier, preferably about one-quarter inch in thickness.

An elastic band 16 secured by stitching 17 is adapted to hold the pad 15 against the bottom of the foot. A number of perforations 18 in the pad are useful in letting water out, that may be between the bottom of the foot and the pad. As shown in the bottom plan view of Fig. 5, these perforations 18 have their sides 19 sloping outwardly and downwardly as illustrated, to assist in functioning as suction cups when the foot closes the top of the perforations.

The front portion of the compressed cork pad 15 is beveled as shown at 20 and the rear edge may likewise be beveled as shown at 21. The pad of Fig. 5 is of the size to extend under the toes sufficiently to keep them off the floor. The pad may extend rearwardly to a position under part of the instep though leaving the heel exposed for contact with the floor.

The pad of Figs. 4 and 5 is more in the nature of a sandal than are the other embodiments of this invention and by keeping the toes off the
The device of Fig. 1 is the preferred embodiment because it is thinner on the bottom, more form fitting and better adapted to affect the movement of the feet and their feel in swimming and diving. The rubber for the embodiment of Fig. 1 may be of any convenient thickness and a rubber band which is about one-sixteenth of an inch in thickness has been found to give the requisite strength and feel.

Where a less elastic adhesive is used for the ground cork particles in the embodiment of Figs. 1 and 2, it may be desirable to stretch the rubber band 16 over some form which is larger than the size of the foot for which it may be intended and apply the cork particles and adhesive to the band when it is so stretched. Then when the adhesive is partially or entirely set the band may be removed from its form and allowed to contract to its natural size. Such an expedient has been found to give satisfactory results with those adhesives which are not as elastic as might be desirable and which have a tendency to shrink on setting.

Instead of rubber other elastic materials such as lastex and the like may be used, not only in Fig. 1 but in the other embodiments of this invention.

Cork particles have been found to be the best material for a non-slip tread surface for contact with wet tile or porcelain surfaces. Of course, the embodiments of this invention are not of the sort that would need to be worn at the seashore where the sand does not provide a hazard of slippery surfaces.

Another advantage of the tread surface of each embodiment herein illustrated is the yielding nature of the cork particles and their freedom from danger of scratching the surface of any tub or pool.

No special pad is necessary for a deformed foot since that of Fig. 1 especially is form fitting.

While elastic bands have been illustrated as in connection with holding this foot pad in position, it will be understood that a non-elastic band which is provided with a fastener of some sort, or one which is intended to be tied may be equally effective, although possibly not as convenient to slip in place or take off.

The device of Figs. 1 to 3 does not obstruct the washing of the feet and toes. On account of the rubber band of Figs. 1 and 2 being thin, the small size cork particles make for greater comfort than would the use of much larger size cork particles which would be more difficult to spread evenly.

I claim:

A non-slip safety bath foot fitting pad comprising a band adapted to pass over the top of the foot and a pad adapted to be worn under and contiguous the ball of the foot and having a tread surface comprised of yieldable cork particles held together by a flexible adhesive and adapted to reduce any tendency for the wearer to slip in a bath tub or around a tile pool without danger of scratching, the pad being held by said band and being substantially wider than the band and of an extent sufficient to contact with substantially the entire ball portion of the foot from at least just behind the toes, under the metatarsal bones, to adjacent the forward portion of the arch, and said band and pad being of such weight and thickness as not to impede the natural movement of the feet in swimming and diving, said band being of elastic material.

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