

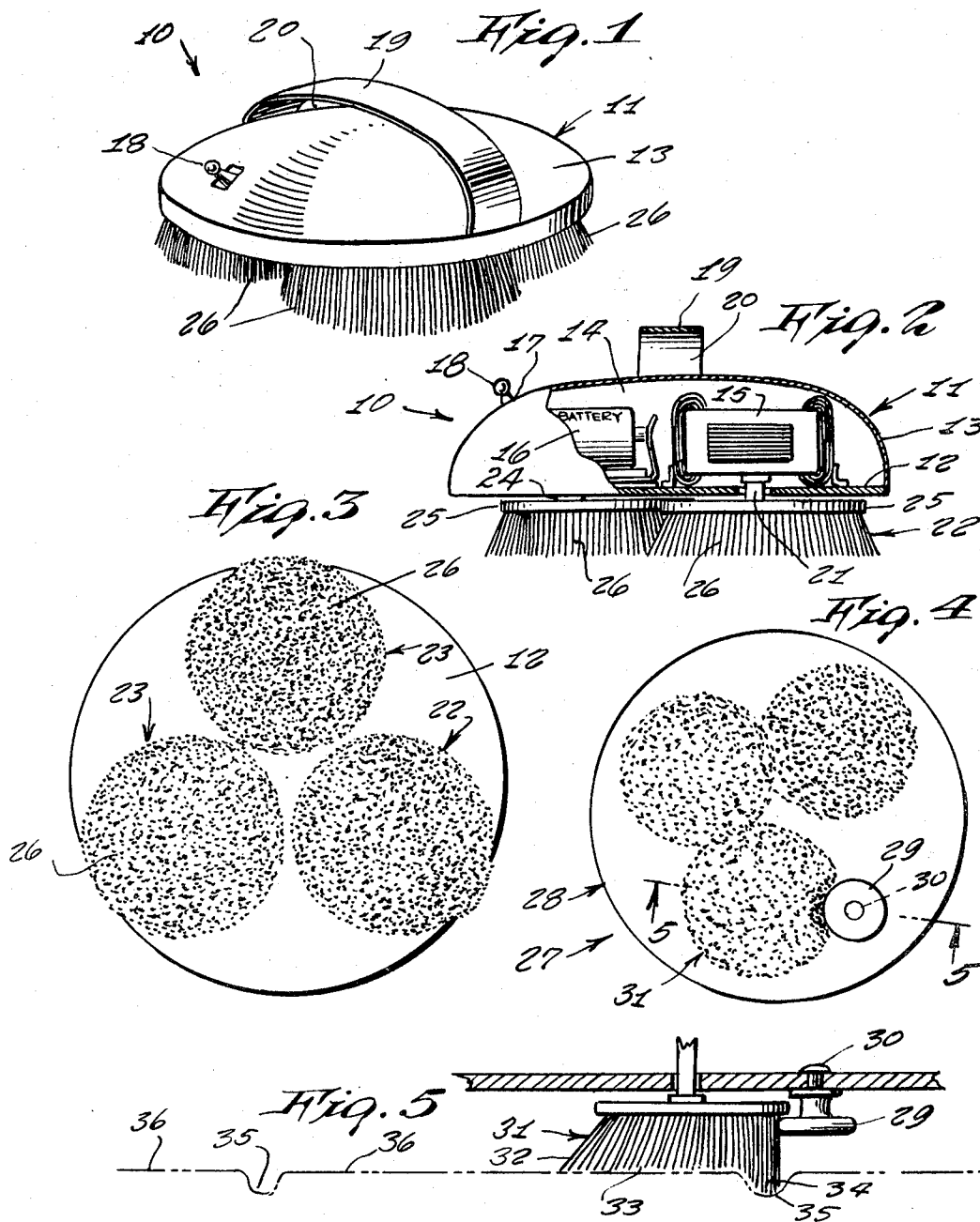
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CERAMIC TILE SCRUBBER

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CERAMIC TILE SCRUBBER

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1 Claim

ABSTRACT OF THE DISCLOSURE

A scrubbing brush, including a hollow handle containing a battery operated motor for rotating several circular brushes on the underside of the handle.

This invention relates generally to scrubbing brushes. More specifically it relates to brushes having rotatable brush heads.

A principal object of the present invention is to provide a scrubbing brush for the purpose of cleaning bathroom ceramic tiles such as are used on the walls around a bathtub and on the bathroom floors.

Another object is to provide a ceramic tile scrubber that includes a plurality of rotatable brush heads for scrubbing a tile surface.

Yet another object is to provide a ceramic tile scrubber having a hollow handle that contains a motor therewithin for driving the rotatable brush heads.

Yet another object is to provide a ceramic tile scrubber wherein the motor may be battery powered or connected by an electric cord to a house current electrical source.

Yet a further object is to provide a ceramic tile scrubber having self-contained means for the brushes of the brush heads to dig into the crevices between the tiles so to clean the surface of the grouting.

Other objects are to provide a ceramic tile cleaner which is simple in design inexpensive to manufacture, rugged in construction, easy to use and efficient in operation.

These and other objects will be readily evident upon a study of the following specification and the accompanying drawing wherein:

FIGURE 1 is a perspective view of a scrubber incorporating the invention,

FIGURE 2 is a side view thereof, partly in cross section,

FIGURE 3 is a bottom plan view thereof,

FIGURE 4 is a similar view of a modified form thereof, and

FIGURE 5 is a cross sectional view taken on line 5—5 of FIGURE 4.

Referring now to the drawing in detail, the reference numeral 10 represents a ceramic tile scrubber according to the present invention wherein there is a handle 11 including a base plate 12 and hollow hemi-spherical dome 13 enclosing a central compartment 14 within which an electric motor 15 is secured on the base, the motor being powered by a dry cell battery 16, also contained in the compartment, together with a switch 17 having a switch button 18 extending outwardly of the handle for manual control by a person's finger.

A strap 19 secured to opposite sides of the handle provides an opening 20 therebetween and the handle into which a person may insert his hand when grasping the handle.

A motor shaft 21 protrudes through base plate 12 and

carries a circular brush head 22 which may or may not be peripherally engaged with rotatable brush heads 23 supported freely on pins 24 secured to base plate 12. Each brush head comprises a circular base 25 and bristles 26.

In operative use, a person inserts his hand within opening 20 and pushes button 18 thus causing the motor to rotate brush head 22 for scrubbing action.

Obviously, an electric cord extending to a house electrical current outlet could be used instead of the self contained battery if preferred.

In a modified construction 27, shown in FIGURES 4 and 5, the scrubber 28 includes an idler wheel 29 mounted freely rotatable on pin 30 secured in the base plate. The brush head 31 is shown to have its peripheral bristles 32 mounted to the base at an angle or extending divergently outward therefrom. The wheel 29 is located so that it interferes with the path of the peripheral bristles as the brush head rotates, thereby causing the bristles to be force perpendicularly from the base while passing the wheel 29, as shown in FIGURE 5, these bristles thus extending beyond the flat bristle face 33 formed by the remaining bristles not engaging wheel 29. Thus the extended ends 34 of the distorted bristles may readily extend into crevices 35 formed between tiles 36 to clean the grouting surface. As shown in FIGURE 4, the brush heads may engage each other by contact of peripheral bristles which serve as teeth.

The novel features and the operation of this device will be apparent from the foregoing description. While the device has been shown and the structure described in detail, it is obvious that this is not to be considered limited to the exact form disclosed, and that changes may be made therein within the scope and the spirit of the invention.

I claim:

1. In a ceramic tile scrubber, the combination of a handle and a plurality of rotatable brush heads carried by said handle, said handle comprising a base plate and hollow dome to form a central compartment housing a motor, a battery and switch in electrical circuit, said switch having a button protruding outward of said handle, a handle strap, a motor shaft protruding outward of said base plate and carrying one of said rotatable brush heads, the other of said brush heads being freely rotatable on pins secured to said base plate, said brush heads each comprising a circular base and bristles secured to said base, the peripheral bristles thereof extending angularly outward to engage corresponding peripheral bristles of an adjacent brush head so to transmit rotational power therebetween, an idler wheel being mounted rotatably free on a pin secured to said base plate, said wheel intercepting said peripheral bristles of one of said brush heads so to cause them to distort momentarily from said angularly outward position into a perpendicular direction respectively to said base while passing said wheel.

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