

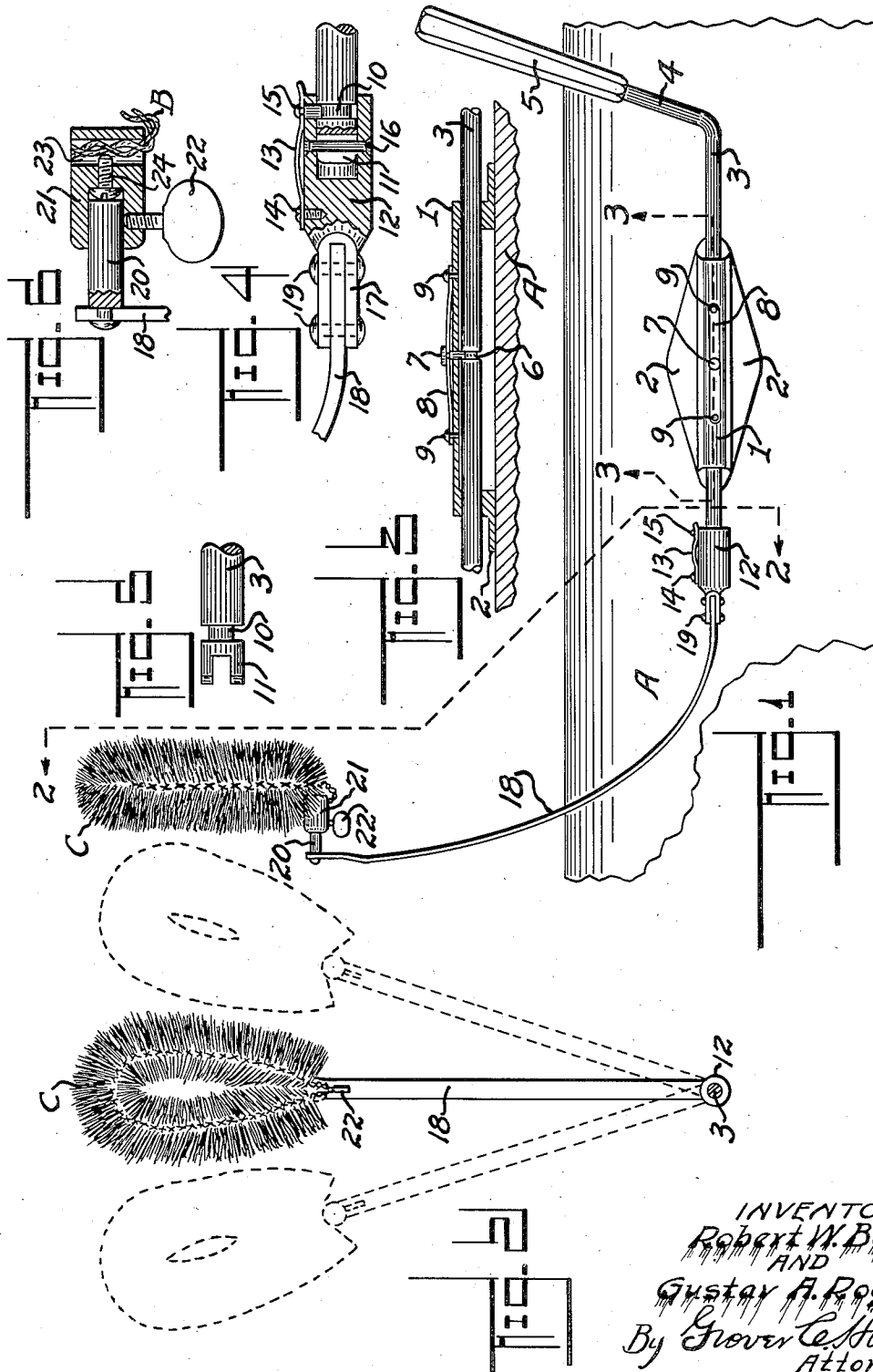
April 30, 1935.

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1,999,799

MECHANICALLY OPERATED BATH BRUSH

Filed June 2, 1934



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UNITED STATES PATENT OFFICE

1,999,799

MECHANICALLY OPERATED BATH BRUSH

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Application June 2, 1934, Serial No. 728,764

5 Claims. (Cl. 4-184)

This invention relates to improvement in bath room appliances, and has for its major object the provision of a mechanical arrangement that is detachably secured to the side wall of the bath tub and being provided with a handle whereby one may quickly and comfortably wash his back while in a sitting position within the bath tub, thereby avoiding the perplexing old-fashioned method of washing the back without the aid of any assistance or appliance for this purpose.

Another advantage of the invention is that it is secured to the side of the tub by means of a suitable cement for this purpose, and when not in use the handle portion and brush therefor may be turned to the wall of the bath room in a manner so as not to interfere with the remaining bathing operation. This will also present an attractive appearance for the bath room at all times when not being used.

The invention possesses further advantages, all of which will become readily apparent during the course of the following detailed description, illustrated throughout the accompanying drawing, and more fully pointed out in the sub-joined claims.

With reference to the drawing:

Figure 1 is an elevation of the complete invention showing the same normally attached to the bath tub, and the latter broken as indicated.

Figure 2 is a sectional view taken directly upon line 2-2 of Figure 1; the dotted lines in this view show the oscillatory motion of the handle and brush.

Figure 3 is an enlarged longitudinal section taken directly upon line 3-3 of Figure 1.

Figures 4, 5 and 6 are drawn to approximately full size and,

Figure 4 is a longitudinal sectional assembly of the attaching means of the brush unit with the handle unit of the device.

Figure 5 is an elevation of the end portion of the handle rod member.

Figure 6 is a longitudinal sectional assembly of the brush fastening means of the device.

The invention comprises housing 1 which is preferably composed of a casting and is of the formation as indicated, and having flanged portion 2 formed thereupon which is adapted to be secured to bath tub A by means of a suitable cement for this purpose and as shown in Figure 1.

Rod 3 is provided, one end of which is deflected as at 4 and is adapted to detachably engage handle 5, and referring to Figure 3 it is clearly seen that circumferentially arranged recess 6 is provided within said rod where shown and which

is adapted to operatively engage stud 7, said stud being permanently fixed with elongated spring 8, and said spring being secured to housing 1 by screws 9.

It is further understood that rod 3 passes through housing 1 in a manner so as to be adapted to oscillate therein during the normal operation of the device.

Referring to Figures 4 and 5 it is observed that one end portion of rod 3 is provided with circumferential recess 10 and yoke 11 as shown, and this end of said rod being adapted to slidably engage socket member 12. Spring 13 is provided with one end thereof being permanently secured to member 12 by screw 14, and the opposite end of said spring having stud 15 secured thereto. Said stud being adapted to operatively engage recess 10 and yoke 11 being adapted to slidably straddle pin 16. Said pin is permanently secured to member 12 in the position as indicated.

Member 12 has elongated yoke 17 formed thereon so as to receive one end of curved member 18 and this connection made substantially permanent by rivets 19.

Member 18 is formed as shown and is composed of spring steel so as to render same flexible with respect to socket member 12. The opposite end of said member has secured thereto stud 20, and referring to Figure 6 it is clear that said stud is adapted to slidably engage socket member 21 and adjustably secured thereto by thumb screw 22. Vertically arranged passage 23 is provided where shown in member 21 so as to accommodate platted wire B of brush C. Screw 24 is provided to lock said wire with respect to member 21 as indicated.

The details of construction of the complete invention having been set forth in the several preceding paragraphs, the operation and advantage thereof follows:—

In Figure 1 it is obvious that the invention is installed within bath tub A and is ready for normal use. The position of the operator is that of sitting within the tub with the device at his left side. By means of handle 5 brush C is dropped so as to comfortably contact the operator's back, then by oscillating handle 5 with said brush normally in contact with the operator's back the brush is accordingly oscillated until the desired effect is obtained.

Of course it is understood that when the operator is sitting within the tub the device may be attached to the tub in a manner so as to be at the operator's right side if preferred, which

is a matter of preference in attaching the device to the tub.

It is understood that brush C may be quickly removed from the device by elevating stud 15 slightly so as to disengage same from recess 10 of rod 3. The socket member, which is secured to curved member 18, with brush C connected thereto, may then be removed from rod 3, thus disengaging the brush unit from the device. In this manner the brush unit may be retained in the cabinet of the bath room or elsewhere when not in use.

It is clear in Figures 4 and 5 that when socket 12 of the brush unit is assembled to rod 3, said unit and rod become integral, and the oscillatory motion of said rod will impart a similar motion to said unit by virtue of yoke 11 of rod 3 and pin 16 within socket 12 as indicated.

If it is desired, rod 3 may also be quickly removed from housing 1 by slightly elevating stud 7 so as to disengage the same from recess 6 within said rod. In this manner rod 3 may be slidably removed from said housing. With the removal of the brush unit and rod 3, housing 1 only would remain upon the bath tub when the device is not in use. This of course is a matter of preference as to the dismantling of the device when normally inoperative.

While we have herein disclosed a preferred embodiment of our invention the same would anticipate certain minor changes in the details of construction or in the design thereof, should this condition present itself during any probable further development of the invention for the market. However in any eventuality a departure from the general principle involved would be consistently avoided.

Having thus described our invention, what we claim as new is:

1. In a mechanically operated bath brush, a housing, said housing being adapted to detachably engage a bath tub, a rod with a handle upon one end thereof, said rod to operatively engage said housing longitudinally of the same, an elongated spring, both ends of said spring permanently fixed with the top of aforesaid housing, and a stud permanently fixed with said spring and intermediate the ends thereof and depending through the top of said housing and operatively engaging a circumferential recess within the aforesaid rod, for retaining the rod in operative relation with said housing.

2. In a mechanically operated bath brush, a housing therefor, a rod with a handle upon one

end thereof, said rod adapted to slidably engage said housing, a circumferential recess within the opposite end portion of said rod, a yoke formed upon the extreme end thereof, a socket member, the last-named end of said rod adapted to slidably engage said member, and means for retaining the same in this relation with the member.

3. In a mechanically operated bath brush, a housing adapted to be detachably secured to a bath tub, a rod, said rod adapted to slidably engage said housing longitudinally of same and having a handle upon one end thereof, a circumferential recess within the opposite end of said rod, a socket member, the last-named end of said rod adapted to slidably engage said member, and a spring, one end of said spring permanently fixed with the top of said member, the opposite end of said spring having a stud fixed therewith, said stud depending through the top of said member and operatively engaging aforesaid recess, for purpose of retaining said rod with said member.

4. In a mechanically operated bath brush, a housing therefor, a rod with a handle upon one end thereof, said rod adapted to operatively engage said housing and longitudinally of the same, a circumferential recess formed upon the opposite end of said rod, a socket member, the last-named end of said rod adapted to slidably engage said member, means upon said member for engaging aforesaid recess for retaining said rod and member in this relation, a yoke formed upon the extreme end of the last-named end of said rod, and a pin vertically passing through and secured to said member, said yoke to detachably straddle said pin for purpose of preventing turning of said rod with respect to said member.

5. In a mechanically operated bath brush, a rod with a handle upon one end thereof, a socket member and a curved member, said curved member being composed of spring steel, means for detachably securing the opposite end of said rod to said member, means for permanently securing one end of said curved member to said socket member, an elongated stud secured to the opposite end of said curved member, an additional socket member, said stud adapted to slidably engage the last-named socket member and means for adjustably locking the stud thereto, a vertically disposed passage for last-named socket member adapted to receive the platted wire of a bath brush, and screw means within said member for detachably locking said wire therewith.

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