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(54) **Back scrubbing brush**

(57) A back scrubber for mounting on a wall of a bathroom or shower cubicle comprising a base (10), and a plurality of brushes (20) mounted thereto. The brushes (20) are arranged so that the scrubber has a scrubbing surface which is shaped to fit a user's shoulders, upper arms and back.

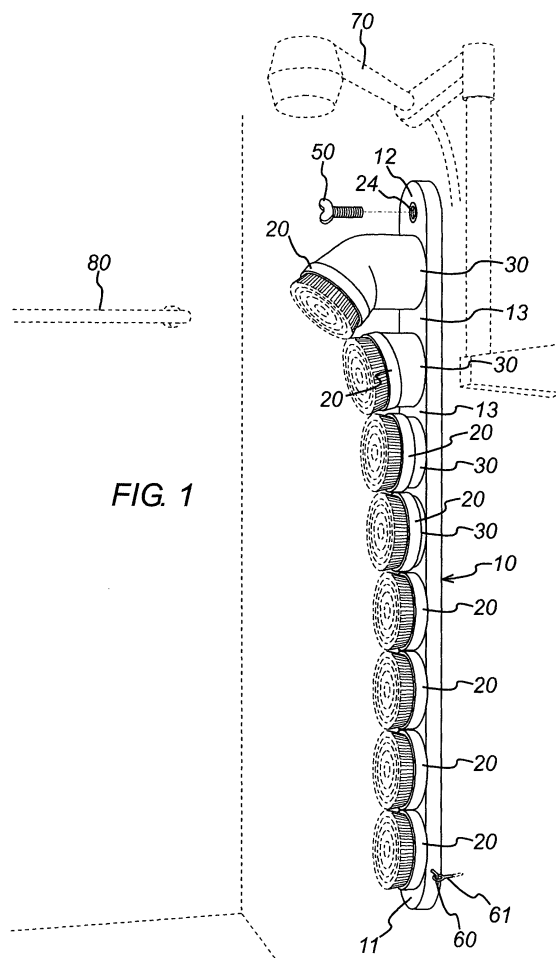


FIG. 1

Description

[0001] The present invention relates to a brush which can be mounted on a wall close to a shower and which can be used to scratch and scrub a user's back and shoulders.

[0002] It is well known that it is difficult to scrub, or scratch one's own back. There are currently a number of long handled brushes available which are sold for the purpose; however, it is very awkward for a user to satisfactorily scrub or scratch their own back with such a brush, because it is difficult for a user to manoeuvre their arm into a suitable position, particularly if the user has poor flexibility in their joints.

[0003] There have been several proposals for back brushes for use in a shower. For example, United States Patent No. 4,943,018 discloses a wall-mountable back brush comprising a base that is curved in accordance with the curvature of the lumbar region, and has two suction cups secured thereto in order to provide a means for fixing the brush to the wall. However, such a curved brush would be difficult to manufacture. Furthermore, if the brush became worn, it would be necessary to replace the entire brush. In addition, any brush that is not fixed solidly to the wall is dislodged from the wall on receiving the slightest pressure. Therefore, if a user applied any significant force to the brush, it would be unlikely that the suction cups would hold the brush stationary. Furthermore, when an up and down scrubbing motion is used along the lumbar region and to the extremity of the spine, the user's back not only straightens itself but actually becomes rounded, curving in the opposite direction. Consequently, the brush disclosed in United States Patent No. 4,943,018 would not satisfactorily scratch and scrub the user's back and shoulders.

[0004] The present invention provides a back scrubber for mounting on a wall comprising: an elongate base having a first end and a second end, a plurality of brushes individually removably mounted to a first side of the elongate base, wherein each of the plurality of brushes has a face, the plurality of faces forming a scrubbing surface, and wherein the scrubbing surface close to the second end of the base is shaped to fit the shoulder region of a user's back.

[0005] The scrubbing surface formed by the faces of the brushes is preferably shaped such that it is parallel to the base at the second end of the base, and curves away from the base between the first end and the second end, such that the distance between the scrubbing surface and the first side of the base is at its maximum at the second end of the base.

[0006] Preferably, each of the plurality of brushes is the same shape.

[0007] Preferably, the back scrubber comprises eight individual brushes.

[0008] The individual brushes may be identical, or they may have bristles of different stiffnesses.

[0009] Preferably, each of the plurality of brushes are

circular brushes.

[0010] Preferably, the base is formed of a waterproof material, for example a plastics material. However, it may be formed of wood, which could be sealed with a waterproof paint or varnish.

[0011] In a preferred embodiment, at least one of the plurality of brushes is mounted on a mounting block which, in turn, is mounted to the elongate base. The mounting block may be formed separately from the base, or may be moulded with the base. The mounting block may comprise a single shaped block on which a plurality of the brushes are mounted. Alternatively, a plurality of mounting blocks may be used, and each mounting block may have a single brush mounted thereto.

[0012] Preferably, the brushes are mounted to the mounting blocks or base using easily removable fixing means. These fixing means may comprise a screw.

[0013] The easily removable fixing means may fix directly into the base or into the mounting block. Alternatively, it may fix into a metal fixing attached to the base or the mounting block. The metal fixing may comprise an internally threaded bushing which is moulded into the base or mounting block.

[0014] The back scrubber can be fitted to the wall in a number of ways, provided that the back scrubber is easy to remove for cleaning.

[0015] The back scrubber may be provided with a pair of hooks close to the first end of the base which can be used to engage a pair of eye screws mounted to a wall.

[0016] The back scrubber may also be provided with a hole close to the second end of the base, through which a wing bolt or thumb bolt can be used to attach the back scrubber to an internally threaded bushing mounted in a wall.

[0017] Alternatively, the back scrubber may be provided with a hole close to the second end of the base, and a hole close to the first end of the base, through which fixing bolts or screws can be used to attach the back scrubber to internally threaded bushings mounted in a wall. The fixing bolts or screws can have any suitable head. For example, they could have slotted heads, cross heads, socket heads, or wing shaped heads. It is not necessary to use the same fixing bolt or screw in both of the holes. Preferably, the fixing bolt used at the second end has a wing shaped head, and the fixing bolt used at the first end has a slotted or cross head.

[0018] The back scrubber may be mounted to the wall of a shower cubicle or above a bath which is fitted with a shower attachment. Preferably the second end of the back scrubber is positioned at about the shoulder height of the person using the back scrubber, and the first end of the back scrubber is positioned at about the level of the lower end of the user's spine, e.g. about 85 cm from the floor.

[0019] The back scrubber may be mounted to the wall in such a way that the height of the back scrubber above the floor can be changed, so that users of different heights can position the back scrubber in an optimal po-

sition for their height: The base of the back scrubber may be provided with a pair of slots. One of a pair of threaded screws or bolts affixed to the wall can extend through each of the slots. The back scrubber could slide on the pair of screws or bolts so that movement of the back scrubber is guided by the slots and screws or bolts. Once the optimal position has been determined, the height of the back scrubber can be fixed by clamping the back scrubber to the wall using a wing nut on each of the screws or bolts. Alternatively, an internally threaded bushing mounted in the wall could be used in conjunction with a wing screw or thumb screw extending through each slot. In such a way the position of the back scrubber can be easily altered so that it can be used by people of different heights.

[0020] Alternatively, two internally threaded bushings, mounted in the wall, could be used in conjunction with two "click on/off" fastenings that can extend through two of a plurality of holes, for example eight holes, drilled into the base of the back scrubber between the brushes. Half of the holes could be positioned on each side of the base in such a way that the scrubber can be clicked on and off the fastenings, thus enabling it to be fixed to the wall at different heights.

[0021] The back scrubber can alternatively be attached to the wall using Velcro®.

[0022] Preferably, the shower fitting is fixed to the wall above and to one side of the back scrubber, preferably about 18cm to one side of the back scrubber. In use, the shower head can be swivelled from a first position in which it is positioned over and slightly in front of the brush to a second position in which it is positioned away from the brush. In the first position, a user can use the back scrubber to scratch and scrub their back, whilst being showered with water. In the second position, the user can use the back scrubber to scratch and scrub their back, without simultaneously being showered with water. Alternatively, in the second position, they can shower in the usual way without using the back scrubber.

[0023] Preferably, a hand rail is positioned on a wall perpendicular to the wall on which the back scrubber is fixed, and within easy reach of the person using the back scrubber, so that a user can scratch and scrub their back and shoulders with the back scrubber whilst steadying themselves by holding on to the hand rail. Preferably the hand rail is positioned about 140 cm from the floor.

[0024] The present invention will now be described in detail, by way of example only, with reference to the following figures in which:

figure 1 shows a perspective view of a back scrubber according to the present invention;
figure 2 shows a partially cut away side view of a back scrubber according to the present invention;
figure 3 shows a front view of a back scrubber according to the present invention; and
figure 4 shows a front view of a back scrubber according to a second embodiment of the present in-

vention.

[0025] A back scrubber according to the present invention is shown in figures 1 to 3. The back scrubber comprises an elongate base 10 which is formed of a plastics material and which has a first end 11 and a second end 12, and a first side 13. Attached to the first side 13 of the elongate base 10 are eight individual brushes 20. All eight of the brushes 20 are of the same shape. The four brushes nearest to the first end 11 of the base 10 are attached to the base using screws 40. The screws 40 screw into metal internally threaded bushings (not shown) which are moulded into the base.

[0026] The four brushes nearest to the second end 12 of the base 10 are attached to mounting blocks 30 which are, in turn, attached to base 10. These four brushes are also attached using screws 40. The mounting blocks 30 on which the two brushes nearest to the second end 12 are mounted have angled mounting surfaces such that the two brushes 20 nearest to the second end 12 of the base 10 are not parallel to the base 10. In addition, the mounting blocks increase in height away from the first end 11 towards the second end 12 such that the scrubbing surface formed by the faces of the brushes 20 is shaped to fit the shoulder and back of the user.

[0027] By fixing the brushes with screws 40, the brushes 20 can be removed easily if they become worn and need replacing or if they need to be cleaned. Similarly they can be replaced easily if each user prefers to have their own personal brush attachments. Furthermore, different brushes can be provided with bristles of different stiffnesses, so that the back scrubber can be tailored to the individual requirements of the user. For example, if a brush positioned in a particular place wears quicker than another brush, it can be replaced with a brush with stiffer bristles.

[0028] Close to the second end 12 of the base 10, a hole 24 is formed through the base 10. The back scrubber can be attached to the wall using a wing bolt 50 which can be screwed into a corresponding internally threaded bushing 51 mounted in the wall. Close to the first end 11 of the base 10, the back scrubber is provided with two hook members 60 extending downwardly, which engage with corresponding eye screws 61 fixed into the wall.

[0029] The back scrubber is fixed to a wall so that the brush closest to the second end 12 of the base 10 is at about the same height as a user's shoulders. The brush closest to the first end 11 of the base 10 is at about the same height as the lower end of the user's spine.

[0030] The back scrubber is positioned to the side of and slightly below a rotatable shower head 70. The shower head can be rotated to spray water on the user whilst they are using the back scrubber to scrub and scratch their back. The shower head can also be rotated away from the back scrubber so that the back scrubber is not being sprayed with water.

[0031] In use, soap can be applied to the brushes of

the back scrubber, and the user can rub their back, shoulders and arms against the soaped back scrubber.

[0032] A hand rail 80 can also be provided on a wall perpendicular to the wall on which the back scrubber is mounted, so that a user can hold the hand rail whilst scrubbing their back with the back scrubber.

[0033] Accordingly, the described wall mounted brush is simple to manufacture.

[0034] Another advantage of the described wall mounted brush is that it is configured so that it can be used to scratch and scrub every part of a user's back as well as the upper arms and shoulders satisfactorily.

[0035] A further advantage is that any worn brushes can be easily replaced. This is advantageous because individual brushes may wear at different rates. This is also advantageous because different users may wish to have their own personal brushes for use with the back scrubber. Another advantage is that the back scrubber can be provided with brushes of different stiffnesses, or worn brushes can be replaced with brushes of different stiffnesses.

[0036] It has been found that another advantage of using a plurality of individual brushes rather than a single brush is that the bristles of the brush are less prone to being pushed flat after prolonged use. When a single brush is used, the bristles tend to be pushed flat. In order to prevent this occurring, stiffer bristles are required. However, such bristles could be too stiff for comfortable use. Therefore, by using a plurality of individual brushes, brushes with bristles of a comfortable stiffness can be used without the bristles being pushed flat after prolonged use.

[0037] Yet another advantage is that the wall mounted brush can be fixed to the wall in a stationary position, but can also be removed easily. The wall mounted brush can also be movably fixed to the wall so that it can be positioned at the optimum height for each user.

[0038] A back scrubber according to another embodiment of the present invention is shown in figure 4. The back scrubber of figure 4 is the same as that of figures 1 to 3, except that the base 13 is differently shaped so as to accommodate a pair of slots 70. One of a pair of threaded screws or bolts affixed to the wall extends through each of the slots 70. The back scrubber is then able to slide on the pair of screws or bolts so that movement of the back scrubber is guided by the slots 70 and screws or bolts. Once the optimal position has been determined, the height of the back scrubber can be fixed by clamping the back scrubber to the wall using a wing nut 71 on each of the screws or bolts. Consequently, the back scrubber of figure 4 can be mounted to the wall in such a way that the height of the back scrubber above the floor can be changed, so that users of different heights can position the back scrubber in an optimal position for their height.

[0039] It will of course be understood that the present invention has been described above purely by way of example, and that modifications of detail can be made

within the scope of the invention as defined by the following claims.

5 Claims

1. A back scrubber for mounting on a wall comprising: an elongate base (13) having a first end (11) and a second end (12), a plurality of brushes (20) individually removably mounted to a first side of the elongate base (13), wherein each of the plurality of brushes (20) has a face, the plurality of faces forming a scrubbing surface, and wherein the scrubbing surface close to the second end (12) of the base (13) is shaped to fit the shoulder region of a user's back, wherein

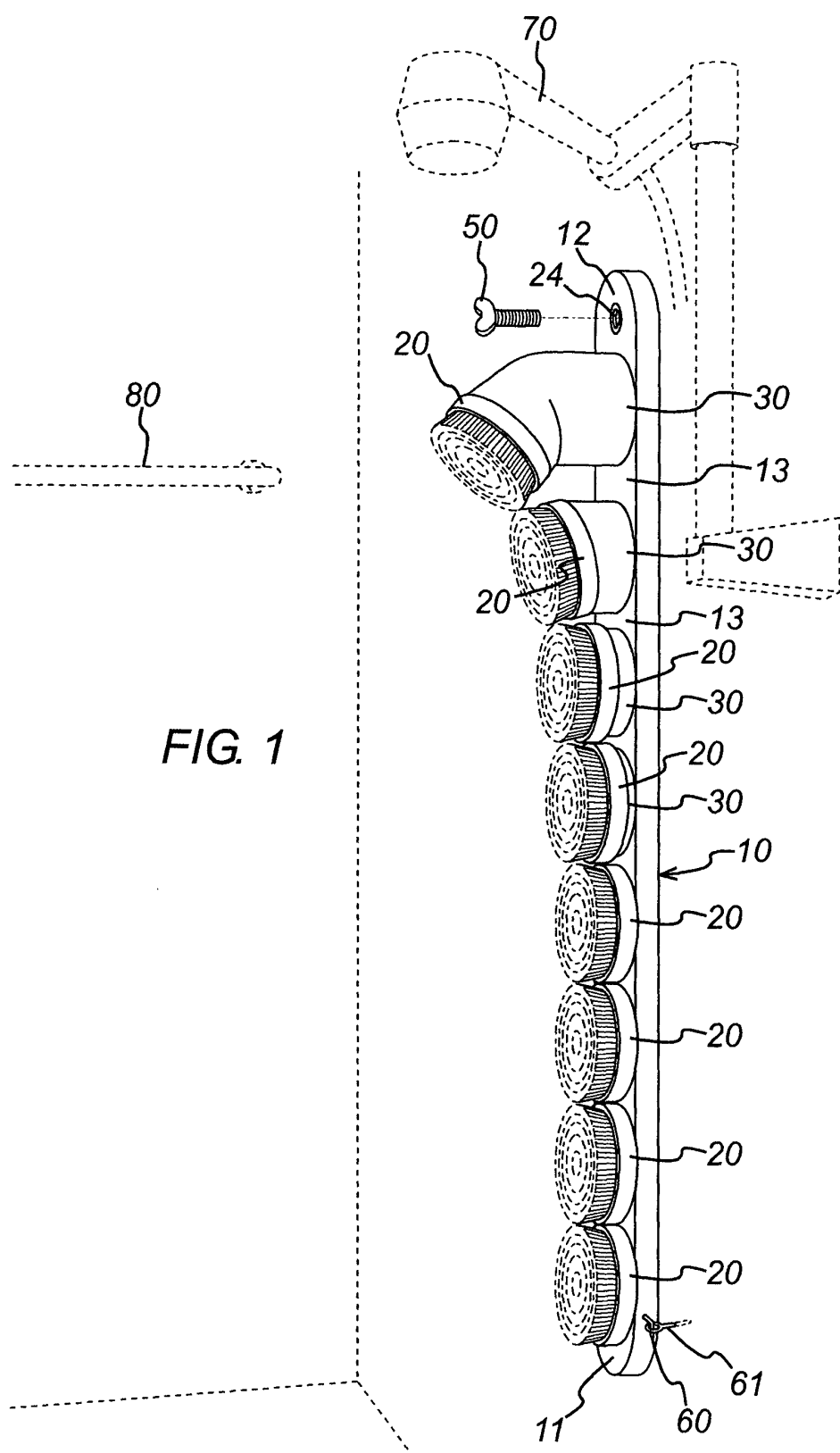
the scrubbing surface formed by the faces of the brushes (20) is parallel to the base (13) at the second end of the base (13), and curves away from the base (13) between the first end (11) and the second end (12), such that the distance between the scrubbing surface and the first side of the base (13) is at its maximum at the second end (12) of the base (13).

2. The back scrubber of claim 1 wherein each of the plurality of brushes (20) is the same shape.
3. The back scrubber of claim 1 or claim 2 wherein the plurality of brushes (20) comprises eight individual brushes.
4. The back scrubber of any preceding claim wherein at least one of the plurality of brushes (20) has bristles of a different stiffness to the bristles of another of the plurality of brushes.
5. The back scrubber of any preceding claim wherein each of the plurality of brushes (20) are circular brushes.
6. The back scrubber of any preceding claim wherein the base (13) is formed of a hard plastics material.
7. The back scrubber of any preceding claim wherein at least one of the plurality of brushes (20) is mounted onto at least one mounting block (30) which, in turn, is mounted to the elongate base (13).
8. The back scrubber of claim 7 wherein the at least one mounting block (30) and the base (13) are moulded in one piece.
9. The back scrubber of claim 7 or 8 wherein more than one of the plurality of brushes (20) are mounted onto a single mounting block (30).
10. The back scrubber of claim 7 or claim 8, comprising

a plurality of mounting blocks (30), wherein each mounting block (30) has a single one of the plurality of brushes (20) mounted thereto.

11. The back scrubber of any of claims 7 to 10 wherein the at least one of the plurality of brushes (30) is mounted onto the at least one mounting block (30) using easily removable fixing means (40). 5
12. The back scrubber of claim 11 wherein the fixing means (40) comprises a screw. 10
13. The back scrubber of claim 11 or claim 12, wherein the easily removable fixing means (40) fixes directly into either the base (13) or the mounting block (30). 15
14. The back scrubber of claim 11 or claim 12, wherein the easily removable fixing means (40) fixes into a metal fixing attached to or moulded into the base (13) or the mounting block (30). 20
15. The back scrubber of any preceding claim, further comprising means (50; 60; 70, 71) for attaching the back scrubber to a wall. 25
16. The back scrubber of claim 15, wherein the means for attaching the back scrubber to a wall comprises a pair of hooks (60) close to the first end of the base which can be used to engage a pair of eye screws (61) mounted to a wall. 30
17. The back scrubber of claim 15 or claim 16, wherein the means for attaching the back scrubber to the wall comprises a hole through the base at a position close to the second end (12) of the base (13), through which a wing screw or thumb screw (50) can be inserted in order to attach the back scrubber to an internally threaded bushing mounted in a wall. 35
18. The back scrubber of claim 17, further comprising a hole through the base at a position close to the first end (11) of the base (13), through which a fixing screw can be inserted in order to attach the back scrubber to an internally threaded bushing mounted in a wall. 40 45
19. The back scrubber of claim 15, wherein the means for attaching the back scrubber to a wall comprises a pair of slots (70) formed in the elongate base (13) through each of which a threaded screw or bolt can extend such that the back scrubber can slide on the screws or bolts and the position of the back scrubber can be movably fixed relative to the wall. 50

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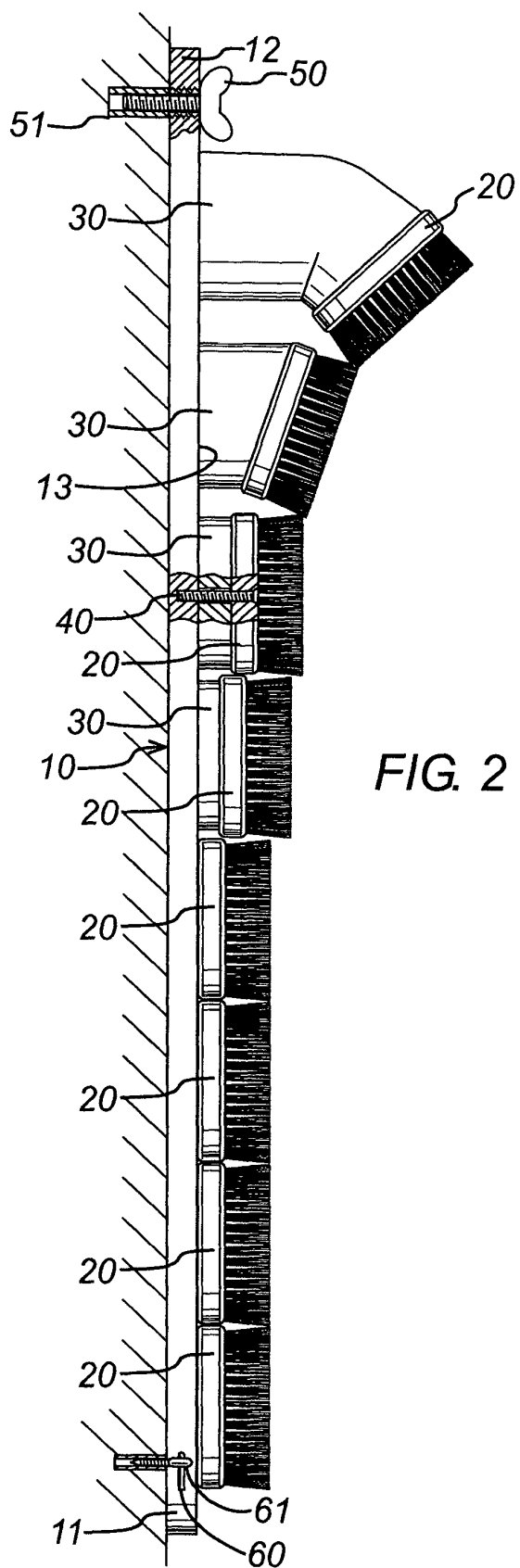


FIG. 3

