

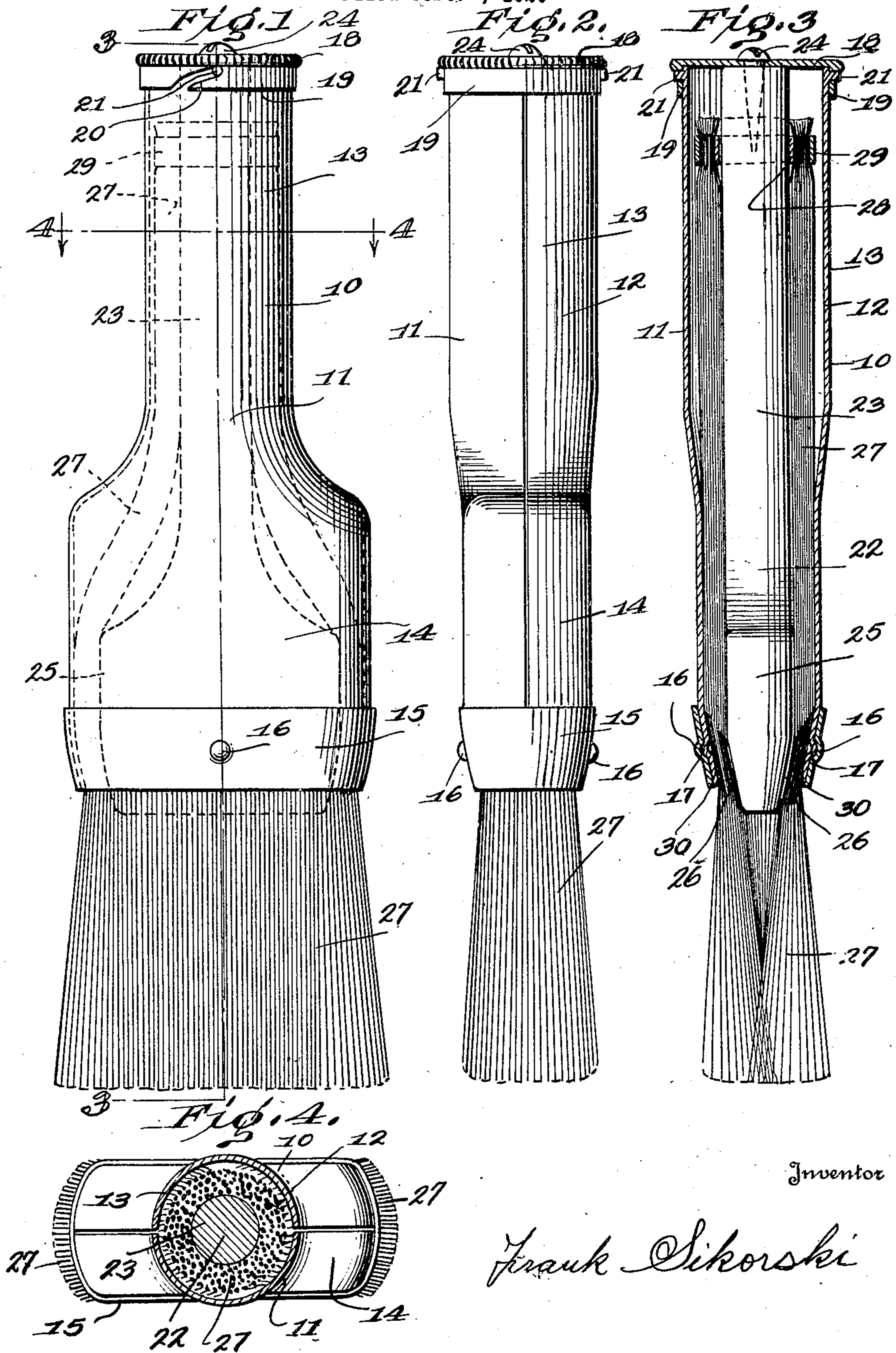
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BRUSH

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BRUSH.

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The present invention relates to a brush and aims to provide a novel and improved device of this character which will permit convenient and efficient adjustment or replacement of bristles therein when the same have become worn or otherwise inefficient in use.

Another object of the invention is the provision of a handle housing having relatively long bristles arranged therein and extending through one end of the same and a clamping member carried by the handle housing for engaging the bristles to hold the same in adjusted position against movement in the housing when the brush is in use.

It is also an object of the invention to provide a device of the above indicated character, which is simple and substantial in construction, which can be manufactured economically, and which will be thoroughly efficient and practical in use.

With the foregoing and other objects in view, which will be apparent as the description proceeds, the invention resides in the construction and arrangement of parts, as hereinafter described and claimed, it being understood that changes can be made within the scope of what is claimed, without departing from the spirit of the invention.

The invention is illustrated in the accompanying drawings, wherein:

Figure 1 is a side elevation of my improved brush, showing portions thereof in dotted lines,

Figure 2 is a side elevation looking at a different side of the brush,

Figure 3 is a longitudinal section taken on line 3—3 of Figure 1, and

Figure 4 is a cross section taken on line 4—4 of Figure 1.

In carrying out the invention, the numeral 10 designates a handle housing constructed of two sections 11 and 12 adapted to have the edges thereof in engagement with each other in order to provide a hand engaging cylindrical portion 13 and an elongated flat portion 14. The cylindrical hand engaging portion 13 is at one end of the housing while the elongated flat portion 14 is at the opposite end thereof. On the end of the housing and on the elongated flat portion 14 thereof a band 15 is arranged for holding one end of each section 11 and 12 of the housing to-

gether. The band 15 is held upon the housing by having indentations 16 therein on opposite sides thereof for permitting engagement of small lugs 17 therein, said lugs 17 being provided on opposite sides of the housing 10.

The upper ends of the sections 11 and 12 are held together by means of a cap 18 having a depending flange 19 thereon provided with bayonet slots 20 therein into which oppositely arranged pins 21 carried by the sections 11 and 12 of the housing engage. By placing the cap 18 upon the cylindrical hand engaging end of the housing and turning the same until the pins 21 engage in the bayonet slots 20, said cap will be held on the housing against accidental detachment. Carried by the cap 18 is a wedge member 22, said wedge member 22 having a relatively long shank portion 23 which is attached to the cap 18 at its upper end by means of a wood screw 24, or the like, said wood screw permitting turning movement of the cap with relation to the wedge member. The wedge member 22 is increased in width, as at 25, and is provided with tapered surfaces 26 on the opposite sides of said portion increased in width. Said portion increased in width is received within the elongated flat portion 14 of the housing.

Arranged about the wedge shaped member 22 are brush bristles 27, the same being relatively long so that the lower ends thereof protrude from the housing 10 while the upper ends thereof are arranged about the upper end of the shank 23 of the wedge member. The upper ends of the bristles are clamped between a pair of ring members 28 and 29 for holding all of the bristles together so that said bristles may be moved longitudinally in the housing for adjusting the position of same within the housing so that the bristles will extend beyond the housing a sufficient distance for permitting efficient operation of the brush. The lower end of the elongated flat portion 14 of the housing is reduced in size so as to provide inclined surfaces 30 adjacent the point where the tapered surfaces 26 of the wedge member are arranged so that the bristles 27 will be firmly clamped between said tapered surfaces 26 and said inclined surfaces 30 for holding the bristles

against longitudinal movement in the housing during use of the brush. It can be seen that when the wedge member 22 is forced down between the bristles so as to firmly press
 5 said bristles in engagement with the inclined surfaces 30 of the housing that the two sections of the housing will be held in tight engagement with the band 15 with the lugs 17
 10 16 of the band, thus preventing movement of the band on the housing and spreading movement of the sections 11 and 12 away from each other.

When the ends of the bristles 27 become
 15 worn and the bristles do not extend a sufficient distance from the housing to permit efficient use of the brush, the cap 18 is turned so as to disengage the pins 21 from the bayonet slots 18 in the cap which will permit said cap to
 20 be moved off of the ends of the two sections 11 and 12 of the handle housing. When the cap is moved from the handle housing, the wedge member 22 is also moved, thus relieving clamping engagement of the brush
 25 bristles between the tapered surfaces 26 on said clamp member and the surfaces 30 of the housing. While the clamp member and cap are in such raised position, the bristles may be pulled upon or forced downwardly
 30 by inserting an instrument in the cylindrical portion of the housing and into engagement with the upper ends of the bristles. After the bristles have been moved so that the same extend the proper distance from the housing,
 35 the cap is placed again on the end of the housing which will cause the wedge member to engage the bristles so as to hold the same in their newly adjusted position. As the cap is turned to permit the bayonet slots to engage
 40 the pins 20, the wedge member will be forced into tighter engagement with the brush bristles. It is to be noted that the cap 18 is mounted upon the end of the shank 23 of the wedge member in such a manner that said
 45 cap may be turned with relation to said wedge member. It is also to be noted that the brush bristles are held together by means of the rings 28 and 29 so that all of the bristles move together when adjusting the position there-
 50 of, and that the inner ring 28 is of a size so that the same is slidably mounted upon the cylindrical shank portion 23 of the wedge member, thus causing the bristles to be fed evenly through the housing and in uniform
 55 formation.

After the bristles have become worn to such an extent that the same cannot be adjusted further for increasing the length of the por-
 60 tions of the bristles to be used, a new set of bristles may be positioned in the housing so as to extend the life of the brush. When placing a new set of bristles in the brush, said bristles are arranged evenly about the wedge member 22 when said wedge member
 65 is in raised position in the housing and the

rings 28 and 29 clamped to the upper ends of the bristles after said bristles have been arranged in such position. After said rings 28 and 29 firmly engage the upper ends of the bristles, the lower ends thereof may be
 70 trimmed so as to render the brush efficient in use.

Having thus described my invention, what I claim as new is:

1. A brush comprising a handle housing, a
 75 clamp member arranged in said housing, brush bristles slidably positioned on said clamp member and received in said housing, said housing having one end thereof reduced
 80 in size so as to provide tapered surfaces, and means for holding said clamp member in position to clamp the bristles between the same and said tapered surfaces.

2. A brush comprising a housing, said
 85 housing being constructed of a pair of sections having the edges thereof in engagement with each other, said housing having a cylindrical hand engaging portion and an elongated flat portion, a band arranged about
 90 the lower ends of said flat elongated portion for holding the two sections together, a cap arranged upon the upper end of said housing for holding the two sections together, brush bristles arranged in the housing, and a clamping
 95 member carried by said cap for holding said brush bristles in adjusted position against longitudinal movement in the housing.

3. A brush comprising a housing constructed of a pair of sections with the edges
 100 thereof in engagement with each other, said housing having a cylindrical portion and an elongated flat portion, a band arranged about said elongated flat portion for holding the
 105 two sections together, brush bristles arranged in said housing, and a clamping member engaging said brush bristles for forcing the same in tight engagement with the two sections of the housing at a point where said
 110 band is provided so as to hold said brush bristles in adjusted position against longitudinal movement in the housing.

4. A brush comprising a housing, a wedge member arranged in the housing, a shank carried
 115 by said wedge member and extending through the housing, brush bristles arranged about said wedge member and said shank and positioned in the housing, said brush bristles also extending through one end of the hous-
 120 ing, a pair of clamping rings carried by the upper ends of said brush bristles one within another, said inner ring being slidably arranged upon said shank, and means for holding said tapered portion in engagement with
 125 said brush bristles so that said brush bristles will be held in adjusted position in the housing against longitudinal movement.

5. A brush comprising a housing, a wedge member arranged in said housing adjacent
 130 one end thereof, a shank carried by said

wedge member and extending through the housing, a pair of ring members slidably arranged upon said shank, brush bristles carried by said ring members and arranged
5 about said shank and tapered member and positioned within said housing, and means carried by said shank for engaging said hous-

ing to hold said wedge member in engagement with said bristles so that said bristles will be held in adjusted position against
10 longitudinal movement in the housing.

In testimony whereof, I have affixed my signature.

FRANK SIKORSKI.