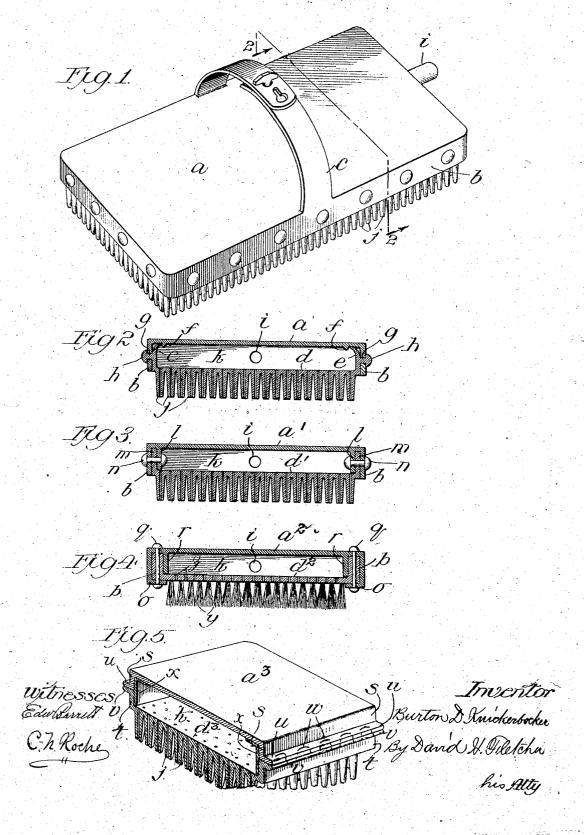
B. D. KNICKERBOCKER. FOUNTAIN BRUSH. APPLICATION FILED NOV. 25, 1904.



UNITED STATES PATENT OFFICE.

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FOUNTAIN-BRUSH.

No. 827,376.

Specification of Letters Patent.

Patented July 31, 1906.

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To all whom it may concern:

Be it known that I, Burton D. Knicker-Bocker, a citizen of the United States, residing at Chicago, in the county of Cook and 5 State of Illinois, have invented certain new and useful Improvements in Fountain-Brushes, of which the following is a description, reference being had to the accompanying drawings, forming a part of this specification, in which corresponding letters of reference in the different figures indicate like parts.

Heretofore fountain - brushes having a chamber in the back for the passage of liquid have been made from india-rubber formed in a single piece. The molding of the device in this form has been attended with difficulties and increased cost, owing to the extra care and skill required in the work and the necessity for additional vulcanization.

The object of my invention is to overcome this objection by constructing a brush of the class described having a two-part hollow back with means for preventing leakage along the line of juncture of the connected parts when liquid is forced into the recess or chamber between them.

To these ends my invention consists in the combination of elements hereinafter more particularly described, and definitely pointed so out in the claims.

In the drawings, Figure 1 is a perspective view of a fountain-brush embodying the features of my invention. Fig. 2 is a transverse vertical sectional view thereof, taken upon the line 2, Fig. 1. Figs. 3 and 4 are like views showing modified constructions; and Fig. 5 is a perspective view, partly in section, showing a still further modification.

Referring to the drawings, a represents the outer or upper portion of the back of a fountain-brush, which portion may be formed from any suitable material—such, for example, as metal or celluloid, but preferably from soft rubber. Said part is provided with a depending peripheral flange b and, by preference, with the usual hand-strap c, both of which are preferably integral therewith. The bottom or counterpart portion d of the two-part back is made of such length and width as to enable it to fit within the flange b with its bottom flush with the lower edge of said flange,

while an upwardly-extended flange e, Fig. 2, preferably tapered at its upper edge and made somewhat longer than the flange b, is formed upon the outer edge of the part d and is bent 55 inwardly at the top, as shown, so that when the two parts forming the back are united the upper part of the flange e will bear against the inner face of the top e between the flange e and a rib e, which is formed around the top 60 parallel to the flange e.

Formed upon the flange e and integral therewith is a row of buttons having shanks g of a length corresponding substantially to the thickness of the flange b, said buttons being 65 provided with heads h and adapted to enter corresponding buttonholes formed to receive them in the flange b.

An induction-tube i is formed upon the flange e and is extended outwardly for the purpose of communicating with a source of water-supply, while upon the bottom of the part d is formed a series of hollow teeth j, the channels in which communicate in the usual way with the space or chamber k between 75 the parts a and d: When in use, the water passes under more or less pressure from the induction-tube i into the distributing-chamber k, from whence it is discharged through the openings in the teeth. The pressure thus 80 formed causes the flexible flange or flap e to press closely against the adjacent flange of the part a, thereby making a complete closure between the two and wholly preventing leakage upon the line upon which the parts 85 forming the back are joined.

While I prefer to form the buttons upon and integral with the inner flap, I do not wish to be confined to this construction, nor even to the buttons at all, as it is obvious that the poparts forming the back may be attached to each other in various ways.

each other in various ways.

In Fig. 3 I have shown an inner flange l in addition to the outer flange b, with a flange m upon the part d extending between the 95 two depending flanges, the three being connected by means of two headed fasteners n, inserted through suitable perforations.

In Fig. 4 the part a is shown with an outward flange a, extending downwardly and inwardly beneath the bottom of the part a, while the flange a on the latter is made thicker,

with vertical holes for the reception of the fasteners q. An inner flange r serves to close

he joint.

In Fig. 5 I have shown a construction in which meeting flanges s t are provided with lateral extensions u v, which are sewed or laced together by means of thread or twine w, while a flexible flap x within serves to cover the joint.

While I prefer the rubber teeth j, I do not wish to be confined thereto, as my invention is applicable to any kind of fountain-brush, and in Fig. 4 I have shown the brush portion formed from ordinary bristles y, with educ-

15 tion-openings z between them.

Among the advantages of my improved construction is the fact that the two parts constituting the brush may be molded from india-rubber in the usual way without extra vulcanization or fluid-pressure. Moreover, the back proper may be made from a different material ornamented in any desired way. The brush part can also be removed and replaced with a new one at any time at a saving of expense to the user. The fasteners while serving to detachably connect the parts may be used as ornamental features, being formed in any desired shape or color.

Having thus described my invention, I

o claim—

1. A device of the class described, in which is combined a back consisting of two parts detachably secured to each other with a chamber between for the passage of liquid, 35 said parts having a marginal joint closed against leakage by means of an interior flexible flap, and means for securing said parts together.

2. A fountain-brush in which is combined a back formed in two parts separable from each other, with a chamber between, one of said parts having an interior flexible flap adapted to press against the other part to prevent leakage at the connecting-joint when

45 liquid is introduced into said chamber, and

means for introducing liquid to said chamber and for discharging it from the brush side thereof.

3. A brush of the class described, having a body formed in two parts from flexible material with a space between the two, means for detachably connecting said parts, means for introducing liquid to said space and means for discharging it upon the brush side thereof

4. The combination in a brush of the class described, of a back formed in two parts with a chamber between, means for introducing liquid thereto and discharging it therefrom upon the brush side, oppositely-extended 60 counterpart flanges, one upon each part, and means for detachably connecting said flanges.

5. A brush of the class described having a two-part hollow back for the reception of liquid, one part having a depending marginal 65 flange and the other a counterpart flexible flange fitted to extend loosely within said depending flange, and buttons formed upon said inner flange to engage openings in said outer flange, whereby a tight joint may be formed when pressure is applied to the inner flange.

6. The combination in a brush of the class

6. The combination in a brush of the class described, of a back formed in two parts, from flexible material, with a space between the two, means upon the outer edge or periphery of said parts for detachably connecting them, hollow flexible teeth upon one of said parts, said teeth being open at their outer ends with their channels in communication with said space, and means for intro-80 ducing liquid to said space.

In testimony whereof I have signed this specification, in the presence of two subscribing witnesses, this 23d day of November,

1904.

BURTON D. KNICKERBOCKER.

Witnesses:

D. H. FLETCHER, CARRIE E. JORDAN.