No. 719,156. PATENTED JAN. 27, 1903.

J. F. SPENCE.

FOUNTAIN BRUSH.

APPLICATION FILED JUNE 12, 1902.

NO MODEL.

Fig. 1.

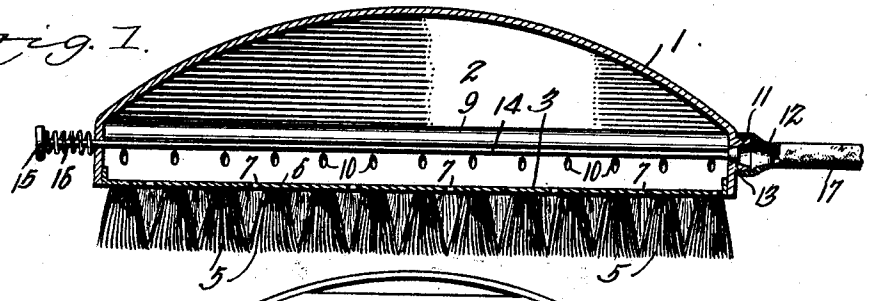


Fig. 2.

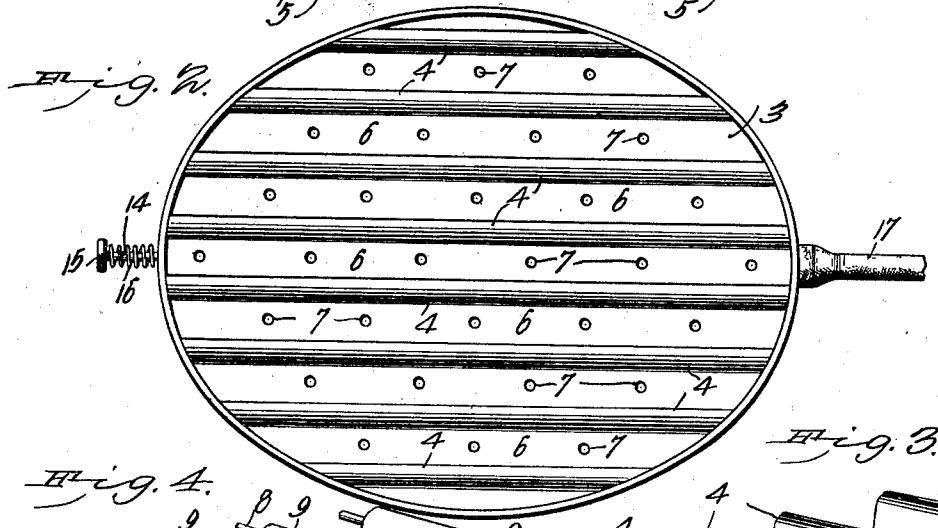


Fig. 3.

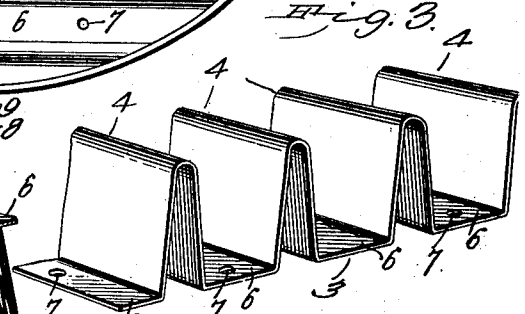


Fig. 4.

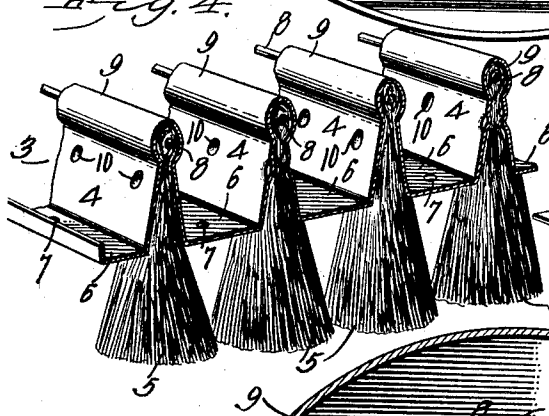
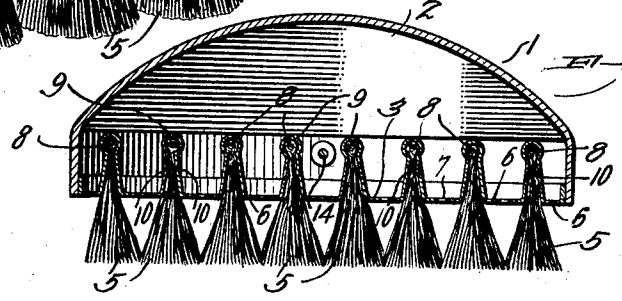


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES F. SPENCE, OF LIBERTY, NEBRASKA.

FOUNTAIN-BRUSH.

SPECIFICATION forming part of Letters Patent No. 719,156, dated January 27, 1903.

Application filed June 12, 1902. Serial No. 111,378. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. SPENCE, a citizen of the United States, residing at Liberty, in the county of Gage and State of Nebraska, have invented a new and useful Fountain-Brush, of which the following is a specification.

This invention relates generally to fountain-brushes, and particularly to a novel form of fountain toilet-brush.

The object of the invention is to provide a brush adapted for general toilet purposes, but more particularly as a bath-brush, wherein provision is made for connection with a faucet or other suitable supply of water and in which positively-operating means are provided to control at will the supply of water to the brush.

A further object is to effect a novel assemblage of the hairs or bristles with the brush-body, the connection to be such that the bristles will at once be positively held against separation from the body and be spaced into bunches or tufts, thereby to facilitate the distribution of the water over the entire brush-surface.

With these and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a fountain-brush, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like numerals of reference indicate corresponding parts, there is illustrated one form of embodiment of the invention capable of carrying the same into practical operation, it being understood that the elements therein exhibited may be varied or changed as to shape, proportion, and exact manner of assemblage without departing from the spirit of the invention, and in these drawings—

Figure 1 is a view in longitudinal section through the center of the brush. Fig. 2 is a view in plan from the under side of the brush, the bristles being omitted. Fig. 3 is a perspective detail view of a section of the face-plate, showing the manner in which the same is struck up prior to having the bristles assembled therewith. Fig. 4 is a similar view showing the manner in which the bristles are secured in position. Fig. 5 is a view in transverse section through a completed brush.

Referring to the drawings, 1 designates the body of the brush, comprising a reservoir 2 and a face-plate 3. These parts are to be made of any suitable metal, preferably one that is non-oxidizable, and the brush as a whole may be elliptical, as shown in Fig. 2, or of any other preferred contour. The face-plate is provided with longitudinally-disposed corrugations 4, of any preferred depth, the corrugations being disposed within the reservoir, and between the opposing walls thereof the rows of bristles or hairs 5 are secured. The metal between the corrugations presents a plurality of flat surfaces 6, having orifices 7, disposed as close together as may be desired, these orifices constituting liquid-escape openings by which the water is supplied to the bristles. The bristles are secured within the corrugations by being looped around retaining-wires 8, as clearly shown in Figs. 4 and 5, and the crests of the corrugations are then passed between suitable rollers to crimp or bind them around the bends of the bristles and the wires, presenting thereby tubular housings 9, as clearly shown in the figures above referred to. In practice the bristles will be strung closely together upon the wires, and in order to separate them into bunches or tufts, as is common with ordinary hair-brushes, the walls of the corrugations are indented or upset, as at 10, presenting thereby inward-projecting studs or tongues, which, in addition to spacing the hairs into bunches, as above set forth, also serve additionally to effect binding of the bristles between the corrugations.

One end of the body is provided with a tubular projection 11, having a tapered bore 12, in which is seated a conical valve 13, and connecting with the valve is a stem or rod 14, which projects through the opposite end of the body and carries a press-button, between which and the said end of the body is arranged a coiled spring 16, the function of which is to keep the valve normally seated, and thus preclude entrance of water to the reservoir. The projection 11 is designed to be engaged by a piece of rubber tubing 17, which may connect with a faucet or other suitable source of water-supply.

In the use of the device the water is permitted to flow to the tube 17, but is prevented from entering the reservoir until the valve 13 is unseated. When this is done, the water rapidly fills the reservoir and escapes through the openings 7 onto the bristles or hairs and from these to the person of the user. As soon as the press-button is released the supply of water is positively cut off, so that when the brush is not in use and is suspended by the tube any water in the tube will be prevented from leaking into the reservoir, and thus to the bristles, which would prevent the bristles from becoming thoroughly dried after use.

Should it be desired to use the brush as an ordinary hair-brush, it may be detached from the tubing 17, the reservoir being previously filled or not, as may be preferred.

The brush of this invention will be found thoroughly sanitary in use, for the reason that as the water is supplied outward any matter caught by the bristles will be expelled by the water passing through them.

It will be understood in practice that the body and face-plate or brush-carrier will be formed independently of each other and that after the bristles have been associated with the face-plate this will be attached to the body in any preferred manner, as by being soldered or brazed thereto.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A toilet-brush comprising a hollow body portion and a face-plate having inward-projecting corrugations and lateral bristle-spacing means, and bristles secured within the corrugations at the crests thereof.

2. A toilet-brush comprising a hollow body portion and a face-plate provided with inward-projecting corrugations, bristles secured within the corrugations at the crests thereof, retaining-wires disposed between the bends of the bristles within the corrugations, and means for spacing the bristles into tufts or bunches.

3. A toilet-brush comprising a body portion and a face-plate provided with inward-projecting corrugations, bristles secured within the corrugations at the crests thereof, and means in the walls of the corrugations to effect separating of the bristles into bunches.

4. A toilet-brush comprising a body portion and a face-plate provided with inward-projecting corrugations having their crests crimped and their walls provided with inward-projecting tongues, and bristles held within the corrugations by the crimps and spaced into tufts or bunches by the tongues.

5. A toilet-brush comprising a hollow body portion having means for connection with a source of liquid-supply, and a face-plate provided with inward-projecting corrugations having water-escape openings between them, means for controlling the supply of water to the body portion, bristles secured within the corrugations at the crests thereof, retaining-wires disposed between the bend of the bristles within the corrugations, and means for spacing the bristles into tufts or bunches.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JAMES F. SPENCE.

Witnesses:
W. J. DILLON,
J. H. JOCHUM, Jr.