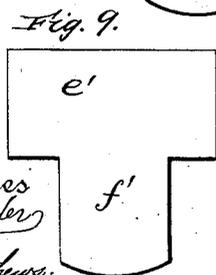
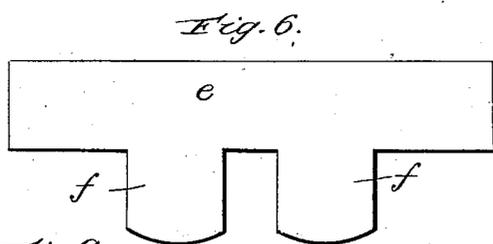
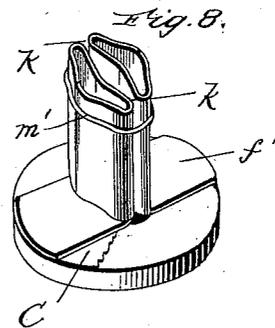
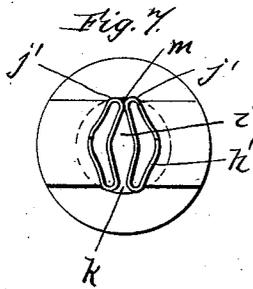
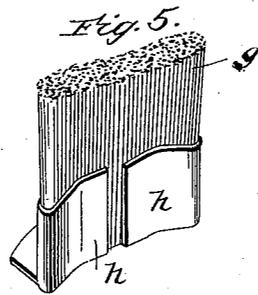
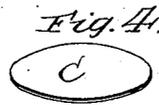
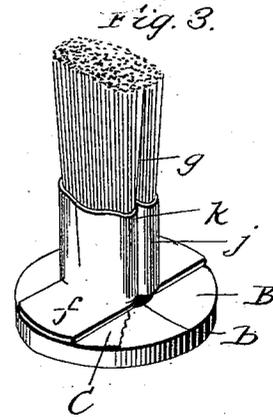
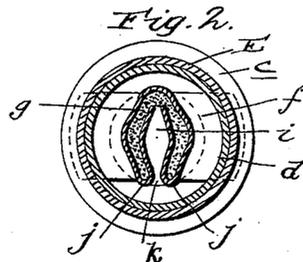
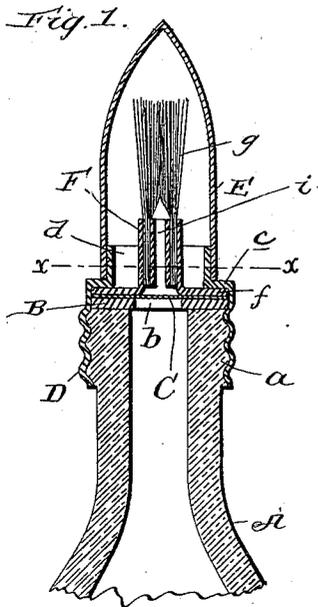


(No Model.)

J. A. SAMPSELL.
BRUSH.

No. 534,011.

Patented Feb. 12, 1895.



Witnesses
[Signature]
 N. P. Matthews.

Inventor
J. A. Sampsell.
 by *James J. Sheehy*
 Attorney

UNITED STATES PATENT OFFICE.

JAMES A. SAMPSELL, OF NEW ORLEANS, LOUISIANA.

BRUSH.

SPECIFICATION forming part of Letters Patent No. 534,011, dated February 12, 1895.

Application filed August 27, 1894. Serial No. 521,412. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. SAMPSELL, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Brushes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in fountain brushes for mucilage holders or bottles, and for other purposes; and it is designed more particularly as an improvement upon the brush disclosed in my Letters Patent No. 522,535, bearing date July 3, 1894.

The prime object of my present invention is to provide a fountain brush embodying a nozzle having an opening or openings in its side or sides for the admission of air to the mucilage or other liquid or semi-liquid so as to enable such liquid or semi-liquid to flow freely through the nozzle.

Other objects and advantages of the invention will be fully understood from the following description and claims when taken in connection with the annexed drawings, in which—

Figure 1, is a vertical, diametrical section of a mucilage holder or bottle embodying my invention, with the removable cap in position over the brush. Fig. 2, is an enlarged, detail, horizontal section taken in the plane indicated by the line *x, x*, of Fig. 1. Fig. 3, is an enlarged perspective view of the combined brush-head and discharge-nozzle together with the cork disk and the disk for closing the mouth of the holder or bottle; the latter being broken away. Fig. 4, is a perspective view of the disk for closing the mouth of the holder or bottle. Fig. 5, is a perspective view illustrative of the manner in which the bristles are fixed in the combined nozzle and head. Fig. 6, is a plan view of the blank from which the combined nozzle and head is formed. Fig. 7, is a plan view of a modified form of nozzle and head. Fig. 8, is a perspective view illustrating another form of nozzle and head, and Fig. 9, is a plan view illustrating one of the pair of blanks of which the nozzle and head shown in Fig. 7, and that shown in Fig. 8, are formed.

Referring by letter to the said drawings, and more particularly to Figs. 1 to 6, thereof: A, indicates a holder or bottle which has its neck threaded as shown at *a*.

B, indicates a disk of cork or other suitable material which is arranged over the mouth of the holder or bottle and is provided with an aperture *b*, for the passage of mucilage or other liquid.

C, indicates a disk of sheet lead, tin or other suitable material which may be arranged above or below the cork disk and is designed to prevent leakage or evaporation of the contents of the holder during transportation or when the holder is packed, and is also designed to be readily punctured to permit the liquid to flow from the holder in practice.

D, indicates a collar which is adapted to engage the threads *a*, of the holder and is provided with the shoulder *c*, and the annular flange *d*.

E, indicates the cap or cover which is designed to take over the flange *d*, as shown in Fig. 1, and cover the brush and prevent evaporation of the contents of the holder after the disk C, has been punctured, and F, indicates the combined discharge nozzle and brush head which is secured to the holder by the collar D, as will be presently described. The said nozzle and brush head F, is preferably made of metal, and in one embodiment of my invention it is formed from the blank shown in Fig. 6, which is similar to that disclosed in my aforesaid Letters Patent and comprises a body *e*, of general rectangular form in outline and the parallel wings *f*, which extend laterally from one longitudinal edge of the body and preferably have their ends rounded as illustrated to conform to the collar D, when the nozzle and head is on the holder. The brush head and nozzle is formed from the said blank in the manner described in my Letters Patent, that is to say the bristles *g*, are laid upon the body *e*, of the blank in a position transverse thereto and the end portions of the body or the portions between the wings *f*, and the ends of the body are bent upon the body and subjected to pressure so as to securely clamp the bristles as shown in Fig. 5, and hold the same without the aid of cement or the like. The body *e*, is then bent

at its middle so as to move the bristle clamping portions *h*, toward each other and the body is then subjected to pressure with a mandrel or the like interposed between the portions *h*, so as to form the opening *i*, for the passage of the mucilage or other liquid. When the portions *h*, are pressed upon the mandrel, care must be taken to prevent the free ends or edges *j*, of said portions from coming together, so as to form the opening *k*, in the side of the nozzle and head, or if desired this opening *k*, may be formed by spreading the edges or ends *j*, apart, after they have been pressed together, or may be formed in any other approved manner. The said opening *k*, in the side of the nozzle and brush head communicates with the puncture in the disk C, and the aperture in the cork disk B, or with the mouth of the holder when the disks B, and C, are dispensed with, and it serves to admit air to the mucilage or other liquid and enables the same, no matter if very thick, to flow freely through the nozzle with no other force than that of gravity, which it could not do when thick if the nozzle was in the form of a tube such as at present employed and had no opening such as *k*, in its side. This provision for facilitating the free flow of thick mucilage renders my improved device far superior to those mucilage holders at present in use which embody fountain brushes, as it is well known to all, that mucilage and the like, tends to thicken upon the slightest exposure to air.

After the body is bent to form the nozzle with the opening *k*, in its side, the wings *f*, which rest upon opposite sides of the body, are bent up at right angles to the body as shown in Fig. 3, and are then in a position to be interposed between the shoulder *c*, of the collar D, and the disk C, so as to enable the said collar to securely hold the combined head and discharge nozzle in position.

It will be readily seen from the foregoing that when the disk C, is intact, the holder or bottle will be air tight and loss of the mucilage or other liquid through leakage or evaporation will be effectually prevented. It will also be seen that after the disk C, is punctured, when the holder or bottle is properly inclined or inverted, the mucilage or other liquid, even if very thick, will flow freely through the combined nozzle or head into the bristles *g*, ready to be spread upon an article, and that the mucilage will continue to flow through the nozzle and head as fast as that upon the bristles is removed.

In the practice of my invention, I prefer to vary the width of the opening *k*, in accordance with the consistency of the liquid which the brush is to be employed to spread, that is to say for very thick mucilage or other liquid the opening *k*, would be made quite wide, while for liquid of a thin consistency it would be made narrow in proportion.

The wings *f*, upon the nozzle and brush head and the collar D, for engaging said

wings and securing the nozzle and brush head on the holder are fully disclosed in my aforesaid Letters Patent and form no part of my present invention; they being simply described as preferred devices for effecting a connection of the nozzle and brush head to a holder.

Thus far I have described my improved nozzle and brush head as being formed from a single blank of sheet metal, but I would have it understood that the nozzle and brush head may be formed in any approved manner and in one or more pieces of any suitable material. I prefer however to use sheet metal, and instead of making the brush head and nozzle from a single blank, I may make it as shown in Figs. 7, and 8, from two blanks such as shown in Fig. 9, which respectively comprise a body *e'*, and a wing *f'*, extending laterally from one longitudinal edge of said body.

In forming the combined nozzle and brush head shown in Fig. 7, the bristles *g*, are laid upon the bodies *e'*, of two blanks such as shown in Fig. 9, in a position transverse thereto, and the end portions of the bodies are bent upon the bodies and subjected to pressure so as to clamp and securely hold the bristles, after which the wings *f'*, of the bodies are bent up at right angles thereto. The body or bristle-clamping portions *h'*, are then pressed upon a mandrel or are shaped in any other approved manner to form the opening *i*, for the passage of the mucilage or other liquid and the edges *j'*, of said body portions on one side of the nozzle and head are connected by solder or the like as indicated at *m*; the edges *j*, on the opposite side being spread apart to form the opening *k*, in the side of the nozzle and head, which is designed to communicate with the opening *b*, in the cork disk B, for the purpose described.

The construction shown in Fig. 8, is formed from two blanks and is similar in all respects to the construction shown in Fig. 7, with the exception that a wire *m'*, which is secured by solder or the like upon the body or bristle clamping portions is employed to connect said portions, while openings *k*, are formed between the body or bristle clamping portions in opposite sides of the nozzle and head to serve the same purpose as the single openings *k*, before described.

Having described my invention, what I claim is—

1. A fountain brush comprising bristles as *g*, and a nozzle and head adapted to hold the bristles and having the opening *i*, aside from the bristle holding portion and having the communicating opening *k*, in its side, substantially as and for the purpose set forth.

2. A fountain brush comprising bristles as *g*, and a nozzle and head formed from sheet metal bent so as to clamp and securely hold the bristles and having a central opening *i*, between its bent or bristle clamping portions for the passage of mucilage and also having an opening *k*, in its side for the admission of

air, substantially as and for the purpose set forth.

3. A fountain brush comprising bristles, a
5 combined nozzle and head formed from two
blanks of sheet metal bent upon themselves
so as to clamp and securely hold the bristles,
and a suitable means for connecting the bent
or bristle clamping portions of the two blanks
together so as to form the central opening *i*,
10 and an opening *k* in the side of the nozzle
and head, all substantially as and for the pur-
pose set forth.

4. A fountain brush comprising bristles, a
15 combined nozzle and head formed from two
blanks of sheet metal bent upon themselves

so as to clamp and securely hold the bristles
and having lateral flanges or wings, and a
suitable means for connecting the bent or
bristle clamping portions of the two blanks
together so as to form the central opening *i*, 20
and an opening *k*, in the side of the nozzle
and head, all substantially as and for the pur-
pose set forth.

In testimony whereof I affix my signature
in presence of two witnesses.

JAMES A. SAMPSELL.

Witnesses:

FRANK MCGLOIN,
JUSTE FONTAINE, Jr.