

No. 726,727.

PATENTED APR. 28, 1903.

W. A. MILLS.  
BRUSH.

APPLICATION FILED DEC. 13, 1902.

NO MODEL.

FIG. 1.

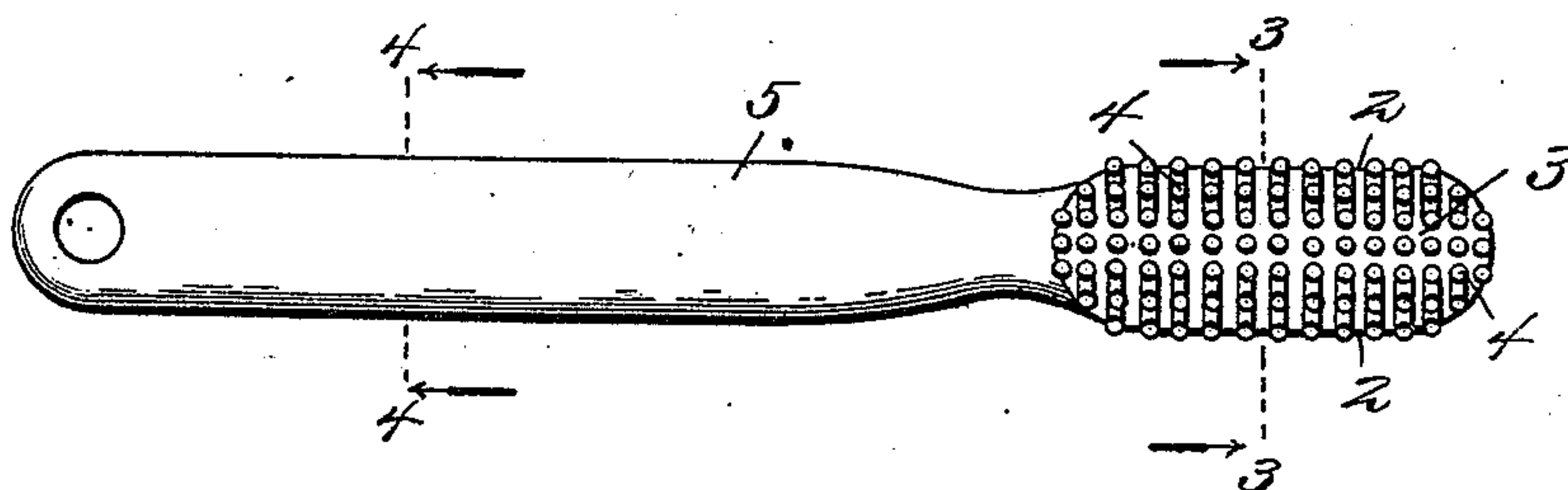


FIG. 2.

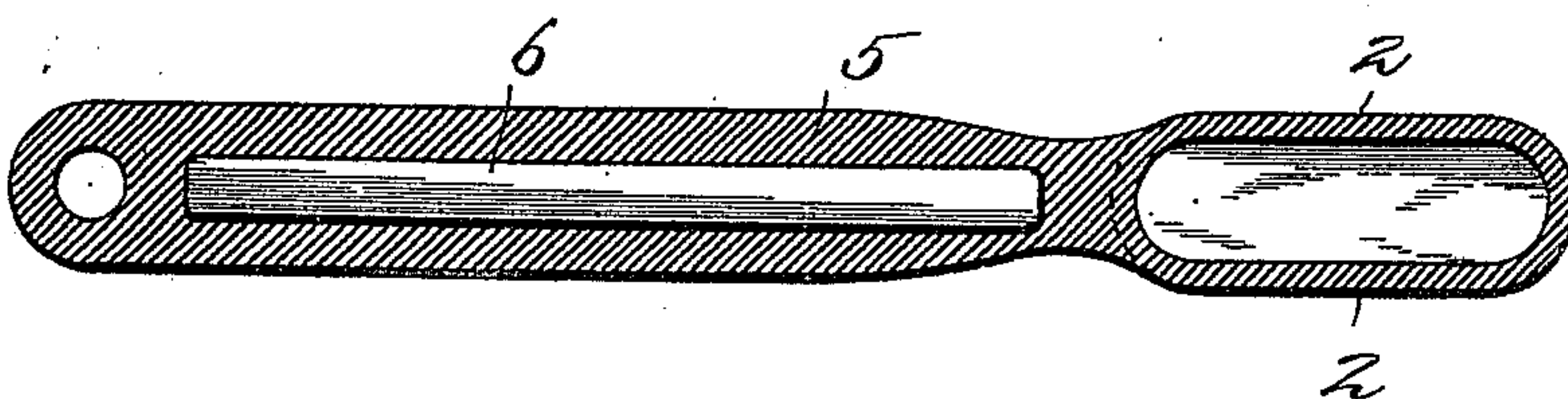


FIG. 3.

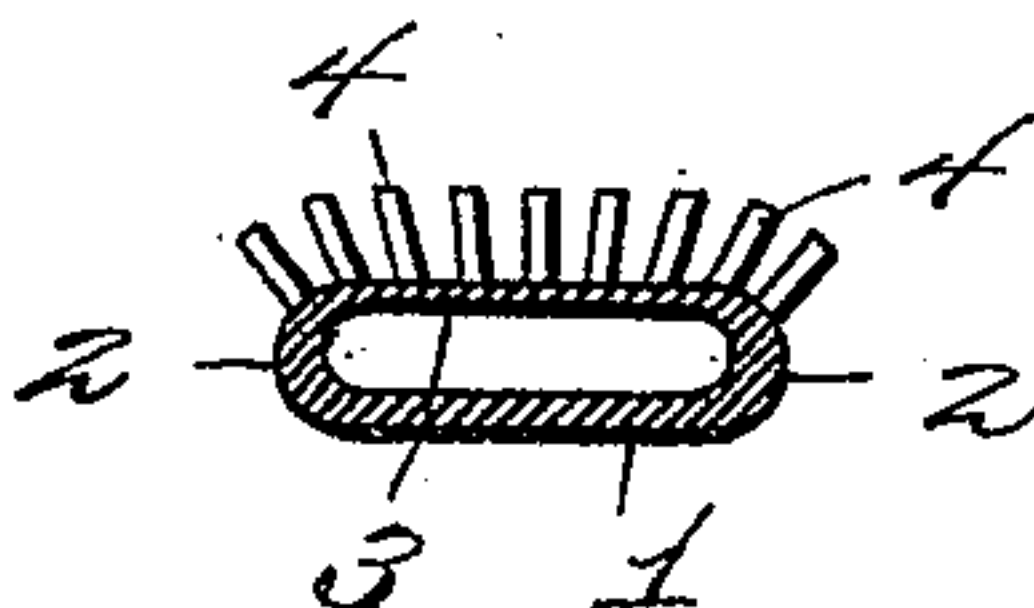


FIG. 5.

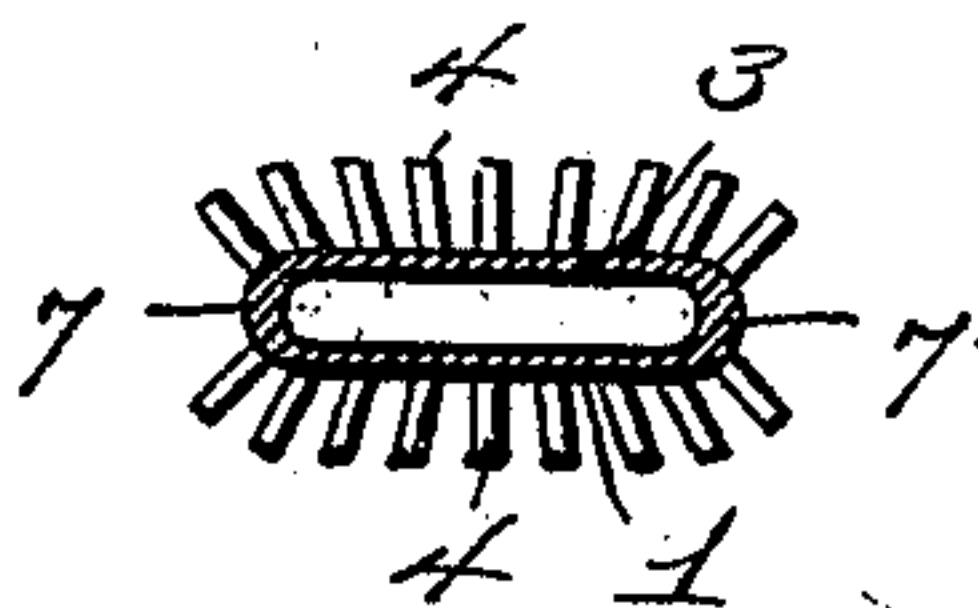


FIG. 6.

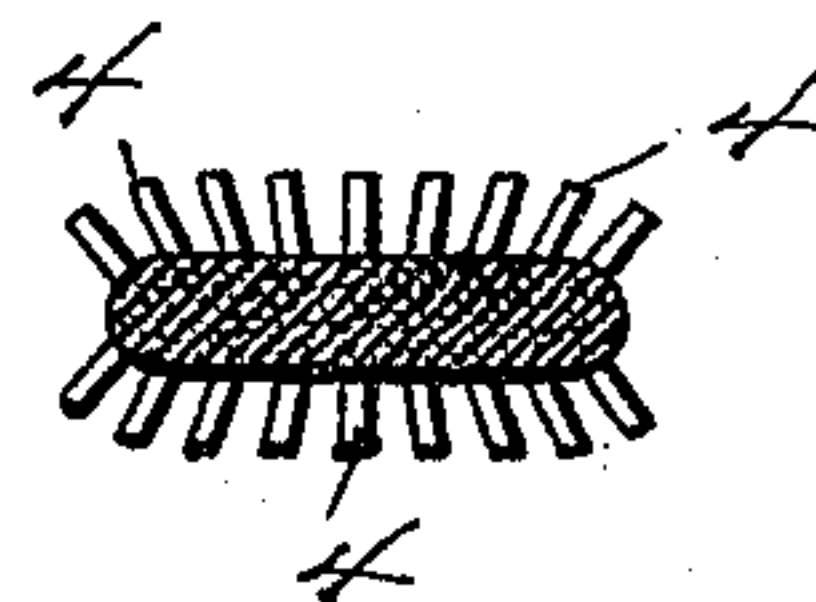
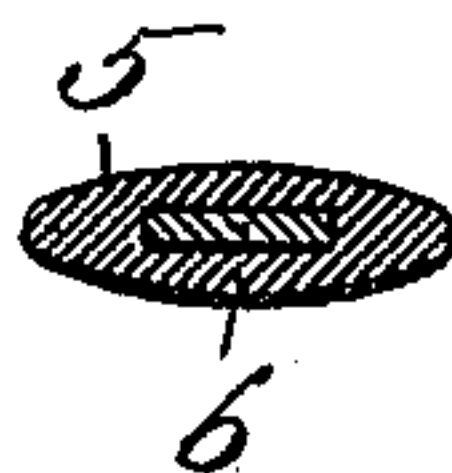


FIG. 4.



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# UNITED STATES PATENT OFFICE.

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## BRUSH.

SPECIFICATION forming part of Letters Patent No. 726,727, dated April 28, 1903.

Application filed December 13, 1902. Serial No. 135,154. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM A. MILLS, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented new and useful Improvements in Brushes, of which the following is a specification.

This invention relates to brushes, and is particularly designed for massaging the gums and inner walls of the mouth and to free them from all injurious secretions.

The object of the invention is to provide a stock or brush-head possessing sufficient resiliency and flexibility to cause the nipples to conform to the irregularities of the gums or interior of the mouth.

Other objects, as well as the novel details of construction, will be specifically set forth hereinafter and illustrated in the accompanying drawings, in which—

Figure 1 is a bottom plan view of a brush constructed in accordance with my invention. Fig. 2 is a longitudinal sectional view through the same. Fig. 3 is a cross-sectional view on the line 3 3 of Fig. 1. Fig. 4 is a cross-sectional view on the line 4 4 of Fig. 1. Fig. 5 is a cross-sectional view through a slightly-modified form of head, and Fig. 6 is a similar view through a still further modified form.

The head of the brush is formed of a hollow body of rubber or similar resilient material, the surface on which the nipples are formed being of thinner material than the remaining portion of the head. In Figs. 1, 2, and 3 the nipples are formed on but one side, and in the structure shown in these figures comprise a head the top of which is designated by the reference-numeral 1, having depending downwardly-curved edges 2, all of a uniform thickness. The lower member 3 comprises a connecting-web of thin material and carries a plurality of nipples 4, which are in suitable rows thereon. The hollow portion of the head terminates at its connection with the handle 5, which is molded or formed integral with the head and is provided with an intermediately-disposed centrally-located strip or bar 6 of metal or stiffening material to add rigidity to the handle and destroy the flexibility thereof. This stiffening strip or bar can be molded or formed with the brush and will effectually prevent the bending of the handle; but as it terminates at a point adjacent to the head the flexibility thereof will in no wise be affected.

Owing to the extreme flexibility and resili-

ency obtained by forming the web 3 of thin material, the nipples can readily come in contact with the entire surface to be treated notwithstanding the irregularity thereof. As soon as pressure is removed or the brush is out of operation the nipples will immediately spring back to their normal position, as shown in Fig. 3.

In Fig. 5 a slightly-modified form of the invention is illustrated, in which the nipples are disposed in opposite directions on the back and front of the brush-head. This permits first one side to be used and then the other, it being understood that both the back and front comprise thin webs connected by an edge band 7 of thick rubber.

In Fig. 6 the head is illustrated as being solid; but when such construction is utilized the head will consist of rubber of a soft spongy consistency, which will have a certain amount of flexibility and permit the nipples to be inserted in the crevices and pass over the irregular surface of the gums and mouth.

By employing the construction of brush similar to the ones just described the nipples and the remaining parts can be readily cleansed by inserting the brush in an antiseptic solution to remove all foreign particles, and which will in no way affect the utility of the device.

Of course it will be obvious that the brush might be utilized for a multiplicity of purposes other than those for which it is primarily intended, and I therefore reserve the right to make minor changes in form and size without departing from the spirit or sacrificing the advantages of this invention.

I claim—

1. A brush having a hollow head, one portion of which is thinner than the remaining portion, and nipples carried by the thin portion of the head.

2. A brush formed of rubber having a hollow head, the top and bottom of which constitute thin webs and the intermediate portion being thickened and nipples projecting from the top and bottom of the head for the purpose described.

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

WILLIAM A. MILLS.

Witnesses:

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S. J. McCORMICK.