

(No Model.)

L. W. JONES.  
TOOTH BRUSH.

No. 561,995.

Patented June 16, 1896.

FIG. 1.

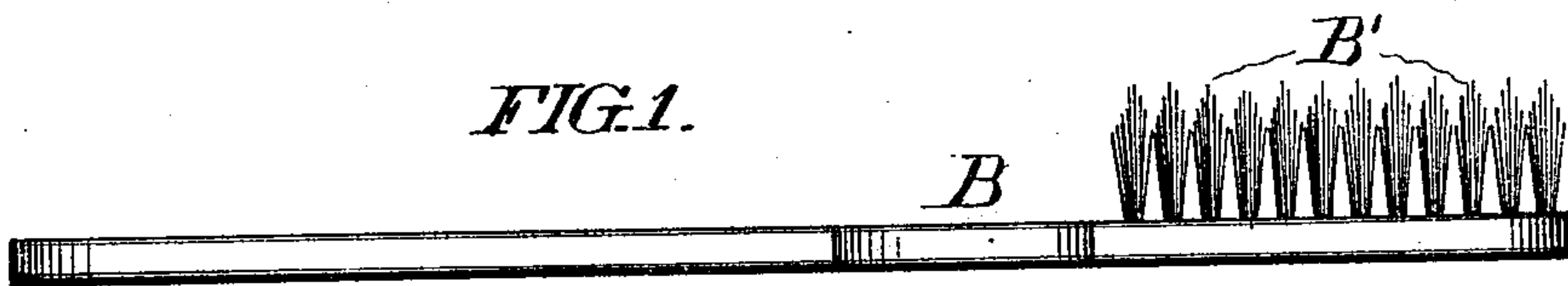


FIG. 2.

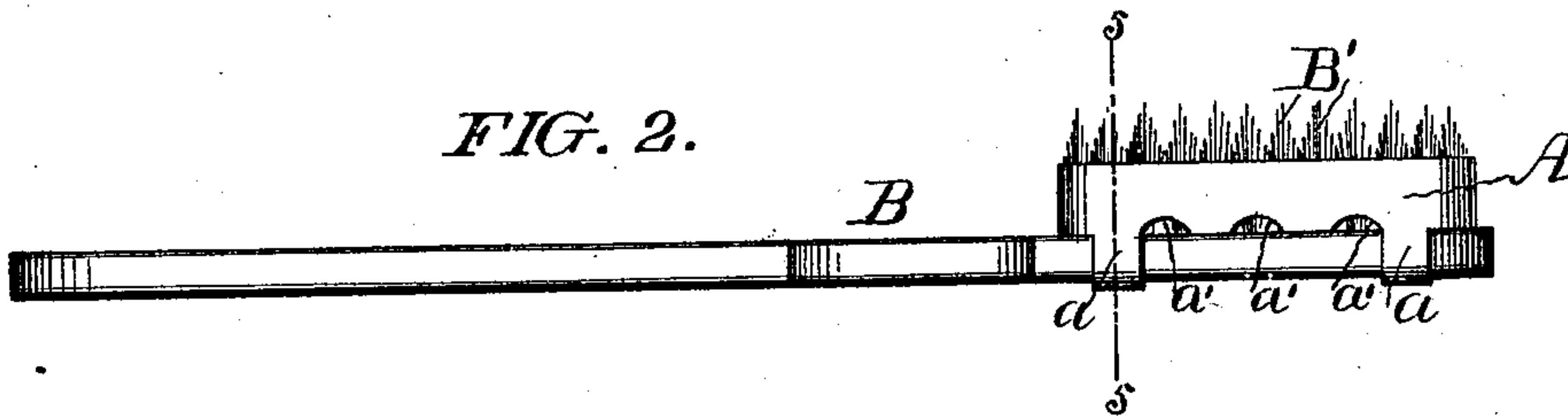


FIG. 3.

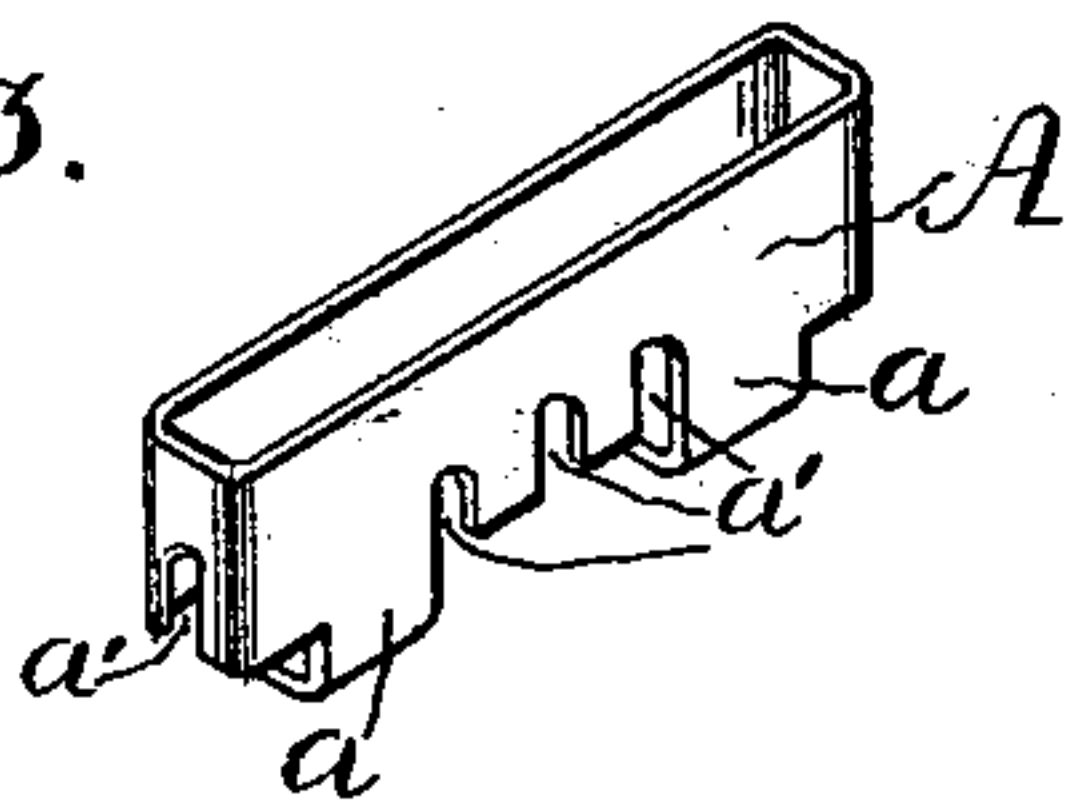


FIG. 4.



FIG. 5.

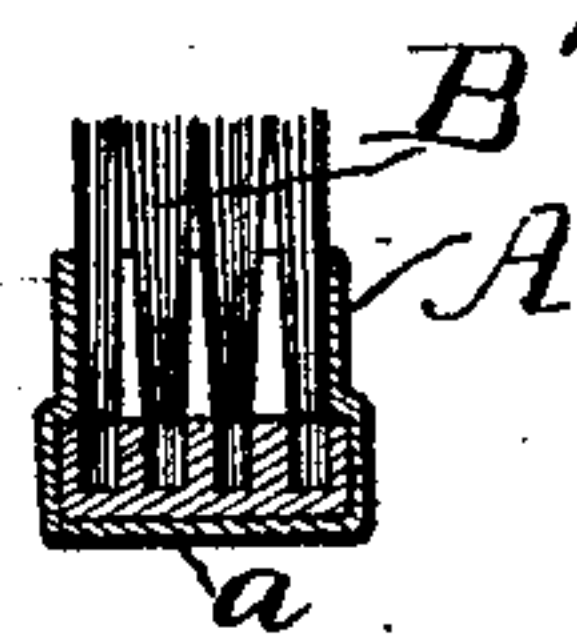
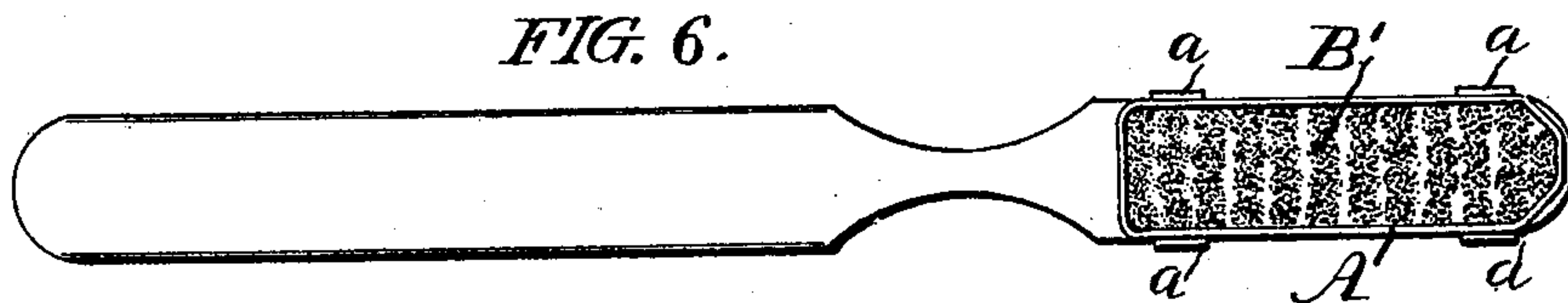


FIG. 6.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

LLEWELLYN W. JONES, OF ALLEGHENY, PENNSYLVANIA.

## TOOTH-BRUSH.

SPECIFICATION forming part of Letters Patent No. 561,995, dated June 16, 1896.

Application filed November 14, 1895. Serial No. 568,889. (No model.)

*To all whom it may concern:*

Be it known that I, LLEWELLYN W. JONES, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a certain new and useful Improvement in Tooth-Brushes; and I do hereby 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 an improvement, hereinafter claimed, in attachments applicable to tooth-brushes, but which may be applied to brushes of various kinds; and my object is to provide such an attachment which will contract and prevent the spreading apart of the bristles of brushes.

In the accompanying drawings, Figure 1 is a side elevation of an ordinary tooth-brush, and Fig. 2 is a similar view showing my invention as applied to such a brush. Fig. 3 is a perspective view of the attachment detached. Fig. 4 is a transverse sectional view of the head of a tooth-brush without the attachment; and Fig. 5 is a section on the line 5 of Fig. 2, showing the application of the attachment. Fig. 6 is a front or face view of a tooth-brush having the attachment applied thereto.

In the use of tooth-brushes it often occurs, particularly when the brush has been in use for some time, that the bristles of the brush spread apart more or less, some of the side bristles becoming bent and projecting laterally from the brush. As the brush is passed to and fro over the teeth in the operation of cleansing them these projecting bristles lacerate or pierce the gums and cause irritation and soreness thereof. To obviate this objection, I have provided an attachment which may be applied to tooth-brushes of well-known form. This attachment consists of a ring or band A, of suitable elastic material, such as india-rubber, adapted to be fitted upon the head of the tooth-brush B in such manner as to surround the brush-bristles B' and be held thereon by the attaching loops or straps *aa*. The ring or band, when in proper position, surrounds and snugly embraces the bristles, and, owing to the elasticity of the material of which the band is composed,

yieldingly contracts the bristles to a slight extent and slightly forces them inward toward each other. To effectively accomplish this purpose, the band, when detached from the brush, should be somewhat shorter than the head of the brush in order that when stretched to go over the bristles it will have a tendency to contract and so exert the necessary yielding pressure upon them without unduly crowding them together. The band should be of such a depth that when placed in position upon the brush its top should reach to, say, about midway the length of the bristles, thus leaving the upper or top portions of the bristles exposed and free to perform their function of cleaning.

The attaching loops or straps *a*, of which there may be any desired number—in this instance two such straps being shown—are preferably made integral with the band and are adapted to be sprung over the head of the brush to hold the band firmly and detachably in position.

To place the attachment upon the brush, it is only necessary to spring the retaining-loops over the head of the brush and the band around the bristles, the elastic material of the attachment readily stretching for this purpose.

Fig. 4 shows the position usually occupied by the bristles of tooth-brushes before they have become spread apart by wear, and Fig. 5 shows the position which my improved attachment causes the bristles to assume.

From the above description it will be understood that the attachment may readily be placed upon and removed from tooth-brushes of well-known form; that when in position on the brush the attachment effectually prevents the brush-bristles from spreading apart or projecting laterally therefrom, while leaving the bristles free to flex or bend when in use, as will readily be understood; and that by the employment of my invention the lives of tooth and other bristle brushes may be prolonged.

To provide for the ready escape of water and other liquid from the brush after it has been used, notches or cut-away places *a'* may be made on or near the bottom edge of the band, which rests upon or comes in contact with the brush-head. These notches or



openings, which expand when the band is stretched in its operative position, also serve to admit air to the bristles to insure their proper drying.

5 I claim as my invention—

The attachment for tooth-brushes consisting of the elastic band for surrounding the brush-bristles, having the attaching loops or straps adapted to fit upon the brush-heads  
10 for detachably securing the attachment to the

brushes, and provided with notches or openings on or near its edge which comes in contact with the brush-head, substantially as described.

In testimony whereof I affix my signature 15  
in presence of two witnesses.

LLEWELLYN W. JONES.

Witnesses:

EDW. F. SIMPSON, Jr.,

R. DALE SPARHAWK.