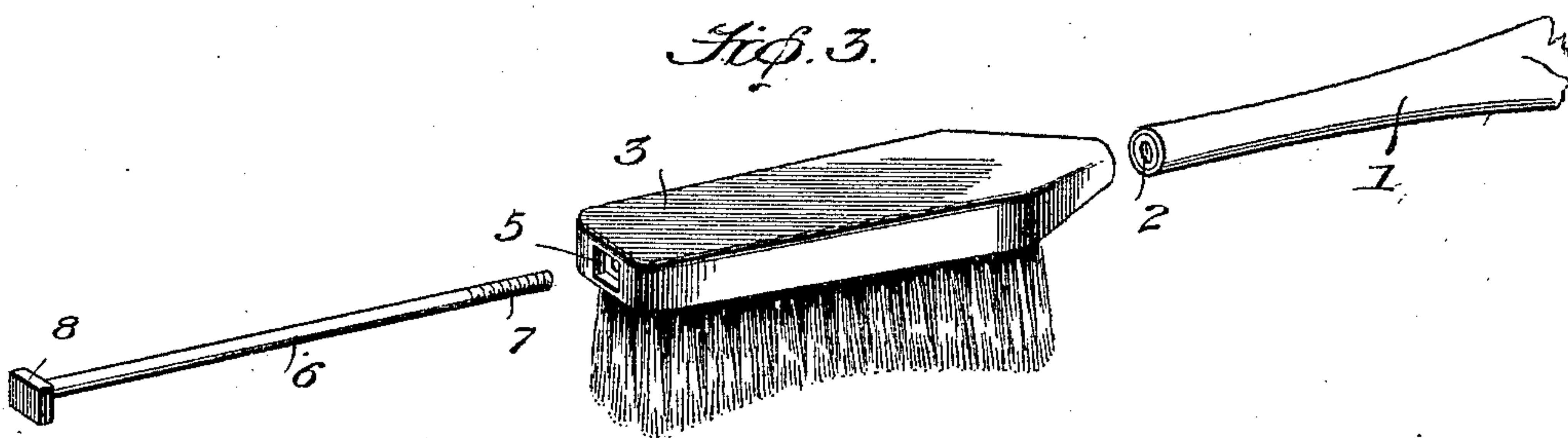
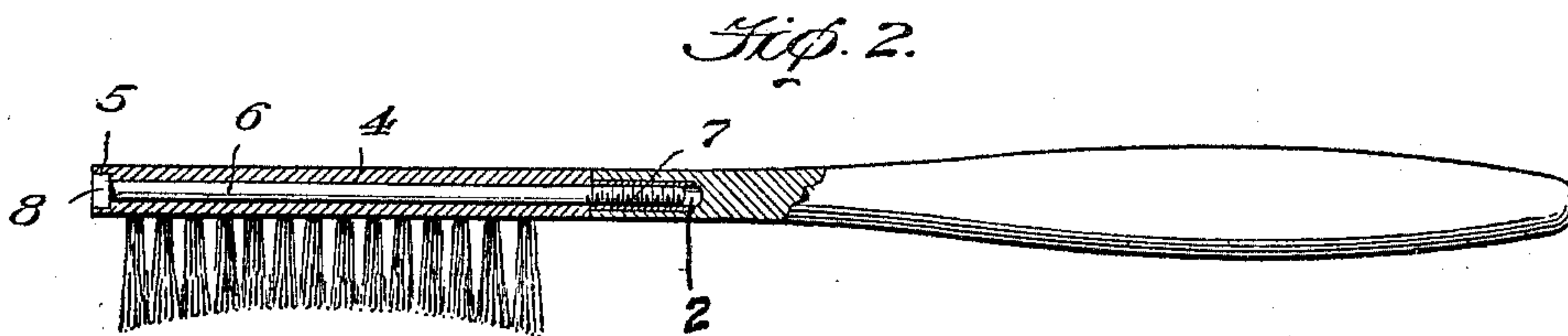
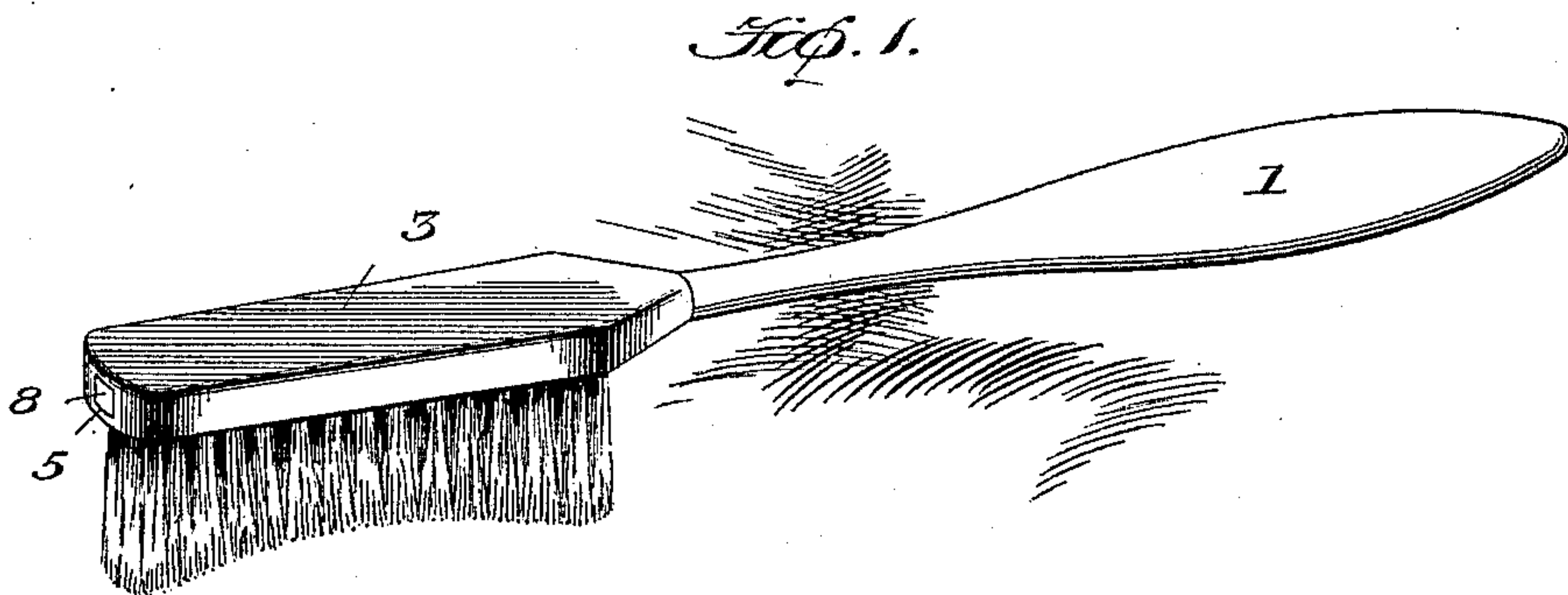


A. L. BONIN.  
SEPARABLE TOOTH BRUSH.  
APPLICATION FILED MAR. 1, 1911.

998,744.

Patented July 25, 1911.



Witnesses  
*Mr. L. Newcomb*

Inventor:  
*Alexander L. Bonin*  
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his Attorney



# UNITED STATES PATENT OFFICE.

ALEXANDER LEPROHON BONIN, OF MONTREAL, QUEBEC, CANADA.

## SEPARABLE TOOTH-BRUSH.

998,744.

Specification of Letters Patent.

Patented July 25, 1911.

Application filed March 1, 1911. Serial No. 611,547.

*To all whom it may concern:*

Be it known that I, ALEXANDER L. BONIN, a subject of the King of Great Britain, residing at Montreal, Province of Quebec, Canada, have invented certain new and useful Improvements in Separable Tooth-Brushes, of which the following is a specification.

This invention relates to separable tooth brushes.

This invention has for its object the provision of a tooth brush of novel construction composed of but three parts, a detachable bristle-carrying head, a handle, and a member connecting the head to the handle in a new and advantageous manner, whereby on unscrewing the handle, the head can be quickly and easily removed for substitution of another head.

The invention contemplates the provision of a handle having a screw-threaded socket, a detachable bristle-carrying head having a longitudinally extending opening, and a fastener extending through the opening, provided with a novel head to engage the bristle-carrying head, and having a screw-threaded part adapted for reception in the socket aforesaid, the parts being so constructed and arranged that on turning the handle, the bristle-carrying head will be placed under compression and cramped against the handle and thereby held in position.

In the accompanying drawings:—Figure 1 is a perspective of the invention; Fig. 2, a longitudinal section showing the connecting member in full lines; and Fig. 3, a view of the different parts detached from each other.

The handle 1 may be of any suitable or preferred construction save that it is provided with a screw-threaded socket 2, a metal bushing being preferably employed, in the end thereof adjacent the detachable bristle-carrying head 3. The head 3 may be of any suitable or preferred construction, preferably of bone or composition, and the bristles may be held therein in any suitable manner, the novel feature being the provision of a longitudinal median bore or opening 4 extending therethrough from end to end and provided at one end with a countersunk part 5 of a form other than circular, preferably polygonal. The detachable head

3 and the handle 2 are held together by the connecting rod or member 6, which is provided with a screw-threaded end 7 adapted to engage the screw-threaded socket 2 and is of such length that it will extend completely through, and fit, the bore or opening 4, said connecting member being provided with a head 8 adapted to fit in, and conforming in shape to, the countersunk portion 5.

Having inserted the member or rod 6 through the opening 4 so that the screw-threaded end 7 projects from the head 3, the handle 1 is manipulated to cause the insertion of the end 7 in the socket 2 and said handle then turned until it ultimately abuts the end of the head 3, and on further turning, the head 3 is placed under a certain amount of compression which cramps the flat abutting ends of the head 3 and handle 1 together, as shown at 9. The parts will remain in this position during ordinary use, but whenever it is desired to remove the head 3, the handle 1 is turned in the reverse direction and the parts may be then separated and a new head 3 readily substituted.

The invention possesses the distinct advantage of having no metallic projecting or exposed parts on the bristle-carrying head to strike the gums of the user or to collect foreign matter, as there are no ledges.

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

1. In a detachable or separable tooth brush, the combination with a handle having a screw-threaded socket extending inwardly from one end thereof, of a bristle-carrying head having a bore extending longitudinally therethrough, and a connecting member provided with a head, said member extending through said bore and having a screw-threaded end received in the screw-threaded part of the handle, whereby on turning the handle to bring the end thereof in abutment with the bristle-carrying head, the said head is placed under compression and cramped against the end of the handle.

2. In a detachable or separable tooth brush, the combination with a handle having a screw-threaded socket in one end thereof, of a bristle-carrying head having a bore extending longitudinally therethrough and provided at one end with a countersunk

portion, a connecting member provided with  
a head engaging the countersunk portion  
and extending through said bore and hav-  
ing a screw-threaded end received in the  
5 screw-threaded part of the handle, whereby  
on turning the handle to bring the end  
thereof in abutment with the bristle-carry-  
ing head, the said head is placed under com-

pression and cramped against the head of  
the handle.

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

ALEXANDER LEPROHON BONIN.

Witnesses:

M. L. NEWCOMB,

HENRY D. HUNTEMANN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,  
Washington, D. C."