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TOOTHBRUSH
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# UNITED STATES PATENT OFFICE 

2,005,337<br>TOOTHBRUSH

Emil Doll, West New York, N. J.<br>Application February 23, 1934, Serial No. 712,665<br>4 Claims. (Cl. 15-176)

This invention relates to improvements in toothbrushes and more particularly to improvements over those types of toothbrushes forming the subject matter of Patent No. 1,874,467 grant5 ed to me under date of August 30, 1932.

An object of the present invention is to simplify the manner and means for detachably connecting the bristles or head with the handle of the brush, and the invention together with numerous objects and advantages will be best understood from a study of the following description taken in connection with the accompanying drawing wherein:

Figure 1 is a fragmentary sectional elevational view of a preferred form of the invention.

Figure 2 is a fragmentary sectional view of the handle of the invention of Fig. 1.
Figure 3 is a side elevational view of the head to be used with the handle shown in Figure 2.
Referring to the drawing by reference numerals it will be seen that in each form of the invention the handle includes a shank portion I which is longitudinally tapered and is of relatively small diameter. At its largest end the shank I is integral with a grip portion (not shown) while at its smallest end the shank portion 1 is integral with a substantially flat disk like head section 3.
In the form of the invention shown the disk like body 3 of the handle is provided with a tapered socket 15 the wall of which at the inner face of the body 3 is extended beyond said face of the body 3 and externally threaded as at 16. In this form of the invention the body 5 of the head 4 is provided with a frustro-conical pin 17 that is adapted to fit within the socket 15 , and around the base of the pin 17 the body 5 on its top side is provided with a circular screw threaded recess 18 into which the extended part 16 of the wall of the socket 15 is screwed in the securing of the head on to the handle of the brush, and as will be clear from a study of Figure 1.

Having thus described my invention and the numerous embodiments thereof, what is claimed as new is:

1. A toothbrush including a handle having a disk integral with one end thereof, said disk being provided with a tapered socket having the wall thereof projecting beyond one face of the disk and externally threaded, and a head for the brush including a disk like bristle carrying body having an integral tapered pin fitting said socket and a threaded recess circumjacent the pin at the base thereof threadedly receiving the threaded wall extension of said socket.
2. A toothbrush including a handle, a head connected with one end of the handle, said head 15 being provided with a socket, the wall of which is extended beyond one face of said head and externally threaded, and a head for the brush including a bristie carrying body having a couping sleeve integral therewith and adapted for screw threaded engagement with the threaded extended end of said wall.
3. A toothbrush comprising a handle having a disk integral with one end thereof, said disk being provided with a socket having the wall 2 thereof extending beyond one face of the disk and externally threaded, and a head for the brush including a bristle carrying body provided with an internally threaded recess adapted to screw threadedly receive the extended wall 30 portion of said socket.
4. In a toothbrush, the combination with a handle having a shank tapering toward one end, and at its smallest end merging into a body having an externally-threaded disc-like projection, and a head including a body, and bristles secured to the body, said body having an inter-nally-threaded bore securing the body of the head and the externally-threaded projection of 40 said handle together.

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