

D. L. CHANDLER.
BRISTLE TUFT HOLDER.
APPLICATION FILED NOV. 27, 1911.

1,049,341.

Patented Jan. 7, 1913.

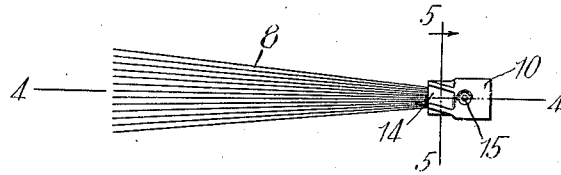


Fig. 1.

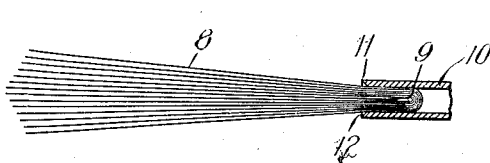


Fig. 2.

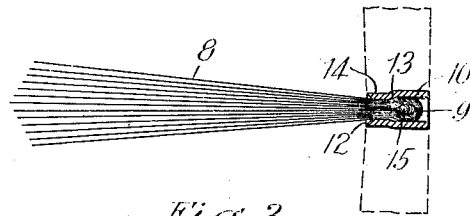


Fig. 3.

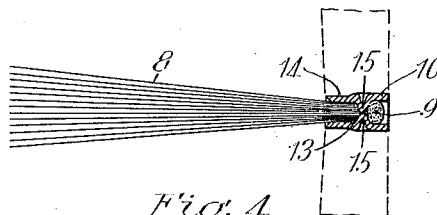


Fig. 4.

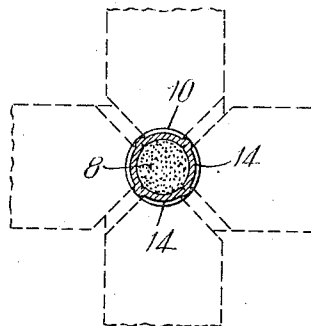


Fig. 5.

Witnesses.
Franklin E. Low
Leonard A. Powell

Inventor.
Daniel L. Chandler,
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UNITED STATES PATENT OFFICE.

DANIEL L. CHANDLER, OF AYER, MASSACHUSETTS.

BRISTLE-TUFT HOLDER.

1,049,341.

Specification of Letters Patent.

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Application filed November 27, 1911. Serial No. 662,541.

To all whom it may concern:

Be it known that I, DANIEL L. CHANDLER, a citizen of the United States, residing at Ayer, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Bristle-Tuft Holders, of which the following is a specification.

This invention relates to improvements in holders for tufts or bunches of bristles such as are used in tooth brushes, hair brushes, and in fact in any form of brush in which tufts or bunches of bristles may be employed.

The object of the invention is to provide a holder formed of suitable material, preferably metal, which will retain its shape and is adapted to firmly grip the tuft of bristles at or near one end thereof to properly form said tuft and to lock the bristles against displacement.

The object is further to provide a holder, the interior of which has no sharp corners or edges which might injure the bristles contained therein.

The invention consists in the combination and arrangement of parts set forth in the following specification and particularly pointed out in the claims thereof.

Referring to the drawing: Figure 1 is an enlarged elevation of a tuft of bristles and their holder embodying my invention. Fig. 2 is a longitudinal section through a tuft of bristles showing the same inserted in the end of a tube from which said holder is formed. Fig. 3 is a longitudinal section of said tuft of bristles and the holder therefor, portions of the forming dies being shown in dotted lines. Fig. 4 is a section taken on line 4—4 of Fig. 1. Fig. 5 is a section taken on line 5—5 of Fig. 1, looking in the direction of the arrows and showing a portion of the forming dies in dotted lines in connection therewith.

In the drawings, 8 is a tuft of bristles formed in a loop 9 at one end thereof and inserted in the end of a tube 10, preferably of metal. The end 11 of said tube 10 is chamfered or beveled at 12 to prevent the cutting or injuring of said bristles. After said bristles have been correctly positioned within said tube, suitable means are brought to bear upon the end of said tube 10 and adjacent to the end from which said bristles project to constrict the same, thereby forming a shoulder 13 in close proximity to the

loop 9 of said tuft. There are many ways in which the constricting of said tube may be accomplished, but I preferably employ dies, as shown in dotted lines in Figs. 3, 4 and 5, which engage said tube and form in its periphery helically disposed indentations 14, 14 which extend circumferentially past each other and form upon the interior thereof the substantially continuous shoulder 13 which entirely surrounds said tuft of bristles and firmly grips the same. In the constricting of said tube about said bristles below the loop 9, the tuft as a whole is securely locked therein owing to the increased size of said looped end, but the individual bristles might be pulled out one at a time and to guard against this, spurs 15, 15 are provided which project from opposite sides on the interior of the tube 10 into the loop 9 and meet substantially midway thereof, engaging the inner side of said loop and forcing said bristles outwardly against the interior surface of the larger end of said tube. At the conclusion of this operation, suitable means are brought forward which sever the end of the tube 10 from the main portion thereof at a point adjacent to the loop 9, thus completing said holder and leaving said tube in a condition to be placed in a suitable handle prepared to receive the same.

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

1. The combination of a tuft of bristles formed in a loop at one end thereof, a holder surrounding said looped end having a constricted portion which forms a shoulder in close proximity to said loop and adjacent to the end of said holder from which the free ends of said bristles project, and spurs disposed at opposite sides of said holder intermediate the ends thereof and projecting into said loop and meeting substantially midway thereof, whereby said bristles are locked within said holder.

2. The combination of a tuft of bristles formed in a loop at one end thereof, a holder surrounding said looped end and constricted to form a shoulder in close proximity to said loop and adjacent to the end of said holder from which the free ends of said bristles project, said holder also being chamfered upon the inside of said end, and spurs formed in said holder intermediate the ends thereof and projecting from opposite sides thereof into said loop and meeting there-

within, whereby said bristles are locked within said holder.

3. The combination of a tuft of bristles looped at one end thereof, a holder surrounding said looped end and having a plurality of helically disposed indentations in its periphery extending circumferentially past each other and forming upon the interior of said holder a substantially continuous shoulder adjacent to the end from which the free ends of said bristles project adapted to grip said bristles adjacent to said loop,

and spurs formed in said holder intermediate the ends thereof and projecting from opposite sides thereof into said loop and meeting therewithin, whereby said bristles are locked within said holder. 15

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

DANIEL L. CHANDLER.

Witnesses:

DANIEL CHESTER PARSONS,
PATRICK J. BEATTY.