

G. R. CRISTEL.
 HAIR BRUSH.
 APPLICATION FILED DEC. 17, 1912.

1,085,018.

Patented Jan. 20, 1914.
 2 SHEETS-SHEET 1.

Fig. 1.

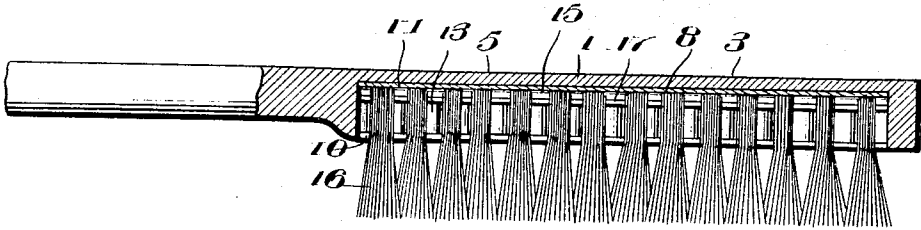


Fig. 2.

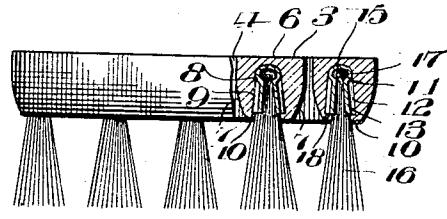


Fig. 3.

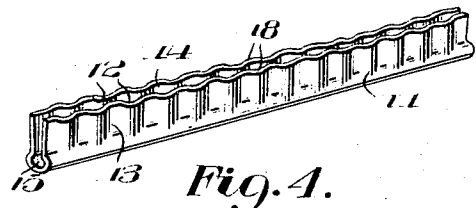
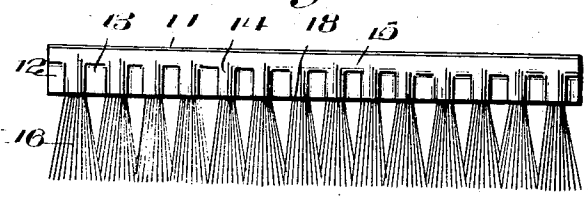


Fig. 4.



Witnesses

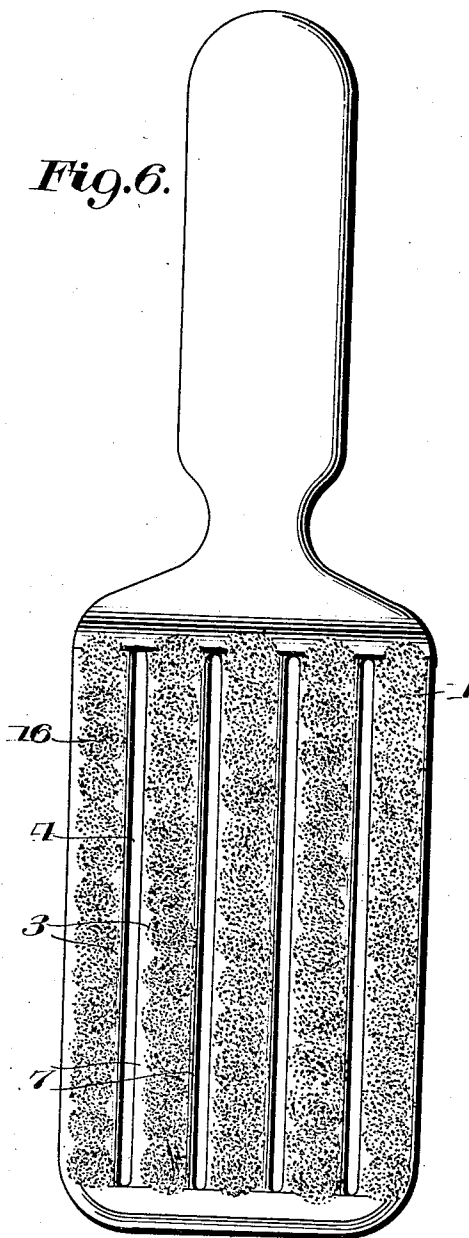
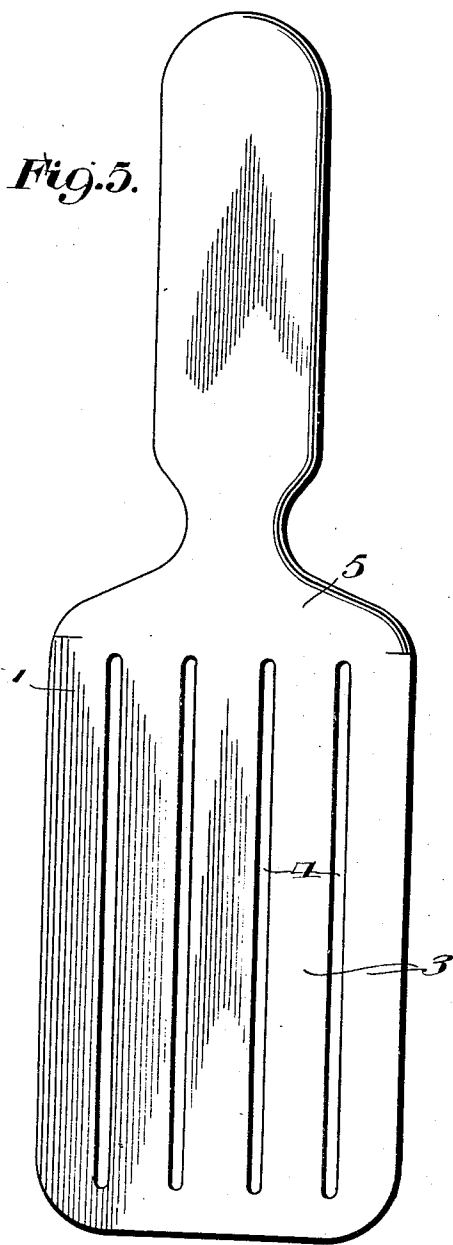
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Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE R. CHRISTEL, OF DENVER, COLORADO.

HAIR-BRUSH.

1,085,018.

Specification of Letters Patent.

Patented Jan. 20, 1914.

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To all whom it may concern:

Be it known that I, GEORGE R. CHRISTEL, a citizen of the United States, residing at Denver, in the county of Denver and State of Colorado, have invented new and useful Improvements in Hair-Brushes, of which the following is a specification.

The invention relates to brushes, and particularly to hair brushes, tooth brushes and the like; and has for its object to provide a brush constructed so that dirt will not readily accumulate on the brush head around the inner portions of the bristles and which may be readily cleaned upon holding the same beneath a water faucet, as the brush is provided with apertures for the passage of water therethrough.

A further object of the invention is to provide means for attaching the bristle tufts to the head so that they will be held positively against withdrawal, thus preventing so called "shedding" of bristles.

With these and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts, as will be hereinafter described and claimed.

In the accompanying drawings:—Figure 1 is a longitudinal sectional view through a brush constructed in accordance with the invention; Fig. 2 is a fragmentary front elevation thereof, showing a number of the attaching ribs in transverse section; Fig. 3 is a detail perspective view of one of the metallic holding members; Fig. 4 is a side elevation of one of the holding members, showing the bristle-tufts in position; Fig. 5 is a top plan view of the brush; and, Fig. 6 is a bottom plan view thereof.

Referring to the drawings, the numeral 1 designates the head of a hair brush constructed in accordance with the invention and having a suitable handle formed thereon. The brush head 1 is provided with a plurality of longitudinally extending, parallel ribs 3 having the spaces 4 provided therebetween. The back 5 of the brush head is cut perfectly flat, and the corresponding faces of the ribs 3 are likewise flat, as at 6, whereas the opposite sides of the ribs 3 are curved to provide converging side faces 7 on each rib adjacent the sides of longitudinally extending grooves 8 provided therein. The groove 8 in each rib 3 is provided with inwardly inclined side walls 9 and the overhanging locking flanges 10 are provided ad-

acent the outer edges of said side walls 9 for a purpose to be more fully described hereinafter.

The bristle tufts are secured within holding members 11, which are adapted to be inserted within the respective rib grooves 8. Each holding member 11 is bent into practically the form of a trough, its transverse section being substantially V-shaped. The side portions 12 of each holding member are struck at intervals, as at 13, so as to provide a plurality of registering pockets or corrugations 14 at spaced intervals throughout the length of the holding member and at the same time to provide a tubiform locking groove 15 at its apex. In applying the bristle tufts to the holding member, each tuft 16 is bent into substantially U-formation and a securing rod or wire 17 is inserted within the loops thus formed against the inner portions thereof, the individual tufts being placed in position upon the securing rod 17 in proper spaced relation to each other. Then, the rod 17 with its attached bristle tufts is placed within the holding member 11 so that the rod 17 and the inner portions of the tufts surrounding the same are disposed within the groove 15, care being taken that the tufts are each disposed within one of the pairs of pockets in the side portions 12 of the holding member. After this has been done, the side portions 12 are forced together as closely as possible by some suitable tool, and the complete holding member with the bristles secured therein is inserted into one of the rib grooves. As the said holding member is forced into the groove, the side portions 12 thereof will frictionally engage the locking flanges 10, until the outer edges 18 thereof have moved past the said flanges, when they will spring outwardly into engagement with the inclined side walls 9 of the rib groove and will thus become engaged with the inner faces of the locking flanges 10 due to the resiliency of the metal from which the holding members are constructed. Each bristle holding member is thus effectively locked in position in its corresponding rib groove and when all of the holding members with their attached bristles are secured in position, the completed structure presents a very neat appearance and is very strong and durable.

The curved converging inner side faces of the ribs 3 tend toward preventing the accumulation of dirt or other foreign matter

around the inner portions of the bristle tufts as would be the case were the said faces flat. In order to wash the brush to remove the small amount of dirt which will
 5 invariably collect around the inner portions of the bristle tufts despite the specific construction of the rib faces just described, it is merely necessary to invert the brush and to hold the same beneath a faucet or other
 10 source of running water, whereupon the said water will pass through the spaces 4 intervening between the ribs 3 and will wash away any dirt that may have accumulated.

15 I claim is:—

The combination with a brush head having a plurality of parallel ribs, each rib being provided with a longitudinal groove in

its inner face and with inwardly projecting, opposed locking flanges, of an elongated
 20 bristle holding member having a pair of longitudinally extending flanges disposed in diverging relation to each other, each of said members being adapted to be inserted into
 25 one of the rib grooves, the flanges of each member being laterally yieldable and adapted for locking engagement with the inner faces of the rib flanges when in applied
 position, and a plurality of bristle tufts secured within each holding member. 30

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

GEORGE R. CHRISTEL.

Witnesses:

M. YOUNG,
 ROY P. GHOLSON.