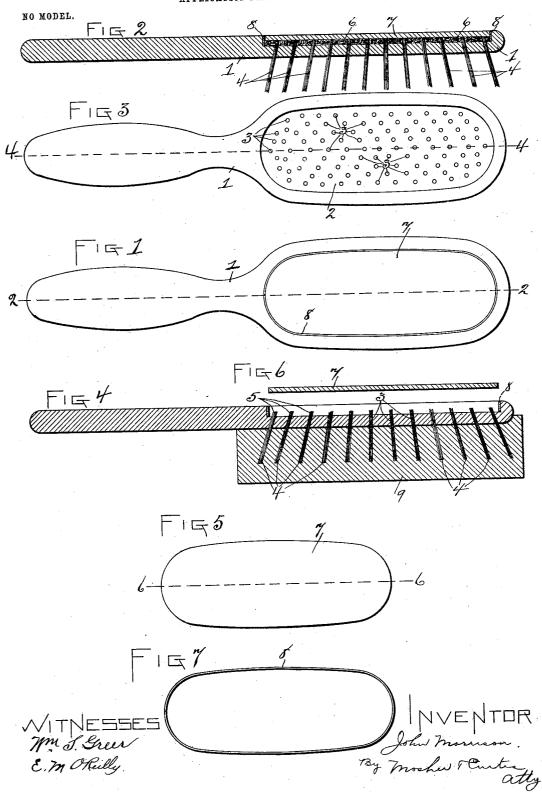
## J. MORRISON.

## MAKING BRUSHES.

APPLICATION FILED AUG. 27, 1902.



## NITED STATES PATENT

JOHN MORRISON, OF TROY, NEW YORK, ASSIGNOR TO THE UNIVERSAL BRUSH COMPANY, OF TROY, NEW YORK, A CORPORATION OF NEW

## MAKING BRUSHES.

SPECIFICATION forming part of Letters Patent No. 734,079, dated July 21, 1903.

Application filed August 27, 1902. Serial No. 121,210. (No model.)

To all whom it may concern:

Be it known that I, JOHN MORRISON, a citizen of the United States, residing at Troy, county of Rensselaer, and State of New York, 5 have invented certain new and useful Improvements in Making Brushes, of which the following is a specification.

The invention relates to such improvements; and it consists of the novel construc-10 tion and combination of parts hereinafter de-

scribed and subsequently claimed.

Reference may be had to the accompanying drawings, and the reference characters marked thereon, which form a part of this 15 specification.

Similar characters refer to similar parts in

the several figures.

Figure 1 of the drawings is a top plan view of my improved brush. Fig. 2 is a central 20 vertical longitudinal section of the same, taken on the broken line 2 2 in Fig. 1. Fig. 3 is a top plan view of the brush body or back. Fig. 4 is a central vertical longitudinal section of the same, taken on the broken 25 line 44 in Fig. 3, showing some of the bristleholes filled with bristles. Fig. 5 is a top plan view of an insert-cover adapted to be inserted in the sink or well in the upper surface of the brush-body. Fig. 6 is a central vertical 30 longitudinal section of the same, taken on the broken line 6 6 in Fig. 5. Fig. 7 is a top plan view of a ring of veneer, which may be used as a lining for the walls of the well in the brush-back.

My invention relates to short-length-bristle brushes and their manufacture.

The objects of the invention are to improve the product and cheapen the cost of manu-

facture.

In carrying out my invention I make use of a brush back or body 1 of the desired form, provided in its top with a sink or well 2, located wholly within its upper surface, and a series of bristle-holes 3, extending through 45 its face or under surface into said well. These bristle-holes are arranged at a distance apart equal to the distance apart desired for the knots or tufts of bristles in the finished brush. Short lengths of bristles 4 are insert-50 ed through the bristle-holes 3, with their in-

ner ends located in the well 2, as shown in Fig. 4. The bristles may be so inserted by hand or in any known manner. The bristleholes being thus filled with bristles, the upper ends 5 of which project a short distance 55 into the well 2, cement 6 is applied to the walls of the well and the ends of the bristles located therein, which cement upon hardening tightly secures the bristles in position in their respective holes, with their outer ends 60 projecting from the face of the brush, as shown in Fig. 2. An insert cover or cap 7 is then placed in the well and secured therein in position to close the well and cover the cemented ends of the bristles. The insert- 65 cover 7 may be of any desired material; but I prefer to make both the body and insertcover of wood, the brush so formed presenting to view only wood and bristles. It will be seen that by applying the insert-cover 70 while the cement upon the walls of the well and ends of the bristles is still soft and adhesive the same cement will serve upon hardening to secure the insert-cover as well as the bristles in position.

It is possible by making the insert-cover 7 of a different material from the body of the brush to secure many unique and ornamental variations and styles of brush-back. When the same material is used for both the brush- 80 back and insert-cover, the parts can be so closely fitted together that the dividing-line between them is hardly noticeable after the surfaces have been dressed and varnished.

If desired, a ring of veneer 8 may be ap- 85 plied to the vertical walls of the well as a lining for the same and the insert-cover fitted within said ring, as shown. With such a construction if both the body and insert-cover are made of the same kind of material, as of go the same kind of wood, the brush is given the appearance of a solid wooden-back brush having inlaid therein a narrow ornamental strip, (represented by the veneer ring 8.) The use of a veneer ring of a different material 95 from that of the brush-back and insert-cover renders less noticeable any slight imperfections in the fitting together of the brush-body and cover, giving to the brush a highly-ornamental and pleasing appearance. TOO 734,079

In Fig. 4 I have shown the brush-body and bristles supported in proper position by means of a die 9 preparatory to the application of the cement and insert-cover.

By the term "bristles" I mean to include

various kinds of brush fiber.

What I claim as new, and desire to secure

by Letters Patent, is-

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1. That improvement in the art of making to brushes which consists in forming a brush back or body with a sink or well located wholly within its upper surface, and a series of bristle-holes extending through its face or under surface into said well; inserting short lengths of bristles through said holes with their inner ends in said well; applying cement in a plastic condition to the interior surfaces of said well

and ends of bristles therein; closing said well by an insert-cover and permitting the cement

to set and hold the cover and bristles firmly 20 in place, substantially as described.

2. A brush comprising in combination a body having a sink or well located wholly within its top surface and a series of bristleholes in its face communicating with said 25 well; bristles inserted through said holes with their inner ends located in said well; an insert-cover fitting within and closing the well; and cement inclosed within said well uniting said body and bristles and insert-cover, substantially as described.

In testimony whereof I have hereunto set my hand this 6th day of August, 1902.

JOHN MORRISON.

Witnesses:

FRANK C. CURTIS, E. M. O'REILLY.