R. J. MONTGOMERY.

BRUSH.

APPLICATION FILED OCT. 3, 1912

1,121,652.

Patented Dec. 22, 1914.

Fig. 3.

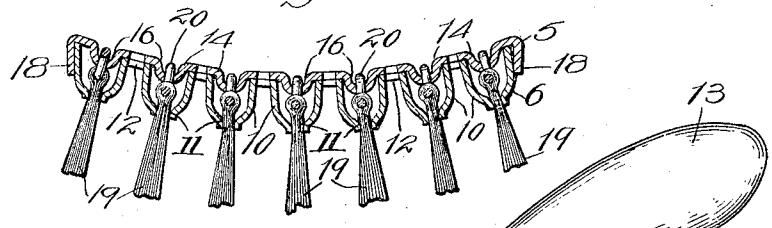


Fig. 1.

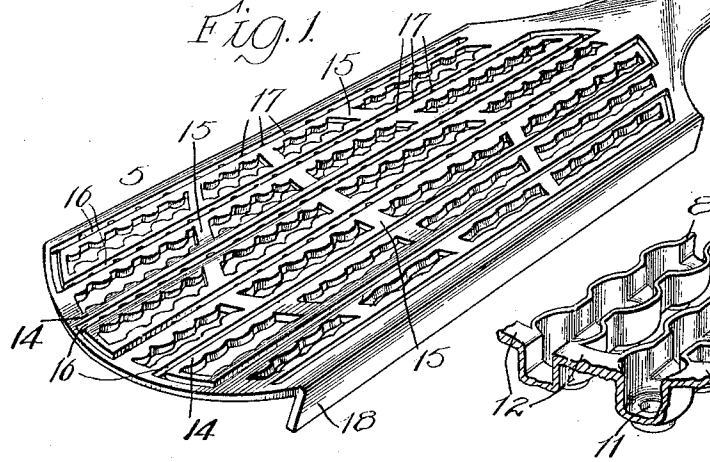
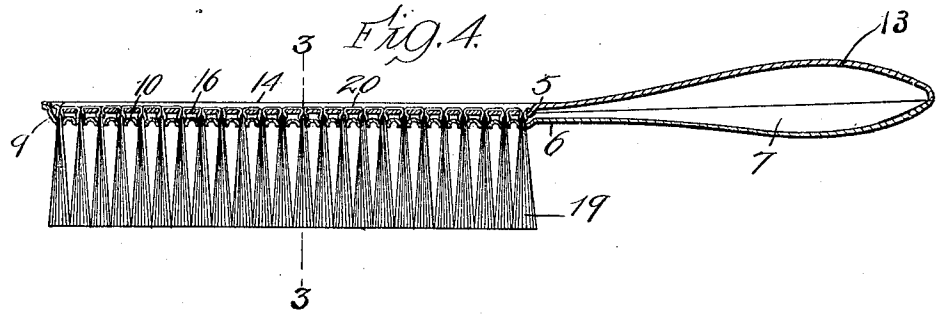


Fig. 2.

Fig. 4.



Witnesses:

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ROBERT J. MONTGOMERY, OF CHICAGO, ILLINOIS.

BRUSH.

1,121,652. Specification of Letters Patent. Patented Dec. 22, 1914.

Application filed October 3, 1912. Serial No. 723,712.

To all whom it may concern:

Be it known that I, ROBERT J. MONTGOMERY, a citizen of the United States, residing at Chicago, in the county of Cook, in the State of Illinois, have invented certain new and useful Improvements in Brushes, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in brushes and more particularly to toilet brushes.

It has for its leading object to provide a very simple construction whereby the entire brush frame, including the handle portion, can be formed of but two pieces of metal, and which frame when put together and provided with the bristle bunches will effectually inclose the upper ends of the bristle bunches and at the same time provide rows of openings between the bristle bunches so that water can be freely passed through the brush to keep it at all times in a sanitary condition. This object I attain by the construction shown in the drawings and hereinafter specifically described.

That which I believe to be new will be set forth in the claims.

In the drawings,—Figure 1 is a perspective view of the top member of the frame of my improved brush; Fig. 2 is an enlarged perspective view of a portion of the lower member of the frame; Fig. 3 is an enlarged cross-sectional view taken at line 3—3 of Fig. 4; and Fig. 4 is a longitudinal central section through the brush.

Referring to the several figures of the drawing in which corresponding parts are indicated by like reference numerals—5 and 6 indicate respectively the upper and lower members of the brush frame, each being, in the construction shown, formed from a single piece of sheet metal. The member 6 comprises a handle portion 7 from the forward end of which, and best made integral therewith, extend a series of channeled strips which are practically the full length of the brush, their front ends being closed to prevent the admission to the channels of dirt and other foreign matter. As shown in Fig. 4 such closing of the front ends of the channels is effected by turning up the front edge of the sheet out of which the channels are stamped so as to form a lip 9 whose upper edge is suitably secured to the forward edge of the upper member 5 of the frame. At regular intervals the side walls of each channel are swelled outward to form suitably-shaped chambers 10 adapted to receive the upper ends of the bristle bunches, there being a hole punched in the bottom of each chamber, one of such holes being shown in Fig. 2 and indicated by 11. At intervals the longitudinal openings between the channeled strip are bridged by short braces 12, best made integral with such strips as they can be easily so left by the use of proper dies that are employed to stamp the sheet from which the lower member 6 is formed.

The upper member 5 comprises a handle portion 13 fitting over and upon the lower handle portion 7 and with such portion 7 forming the complete brush-handle. Projecting forward from this handle portion 13 is a grid-like plate, the stamping out of which provides a series of long narrow covering strips 14 of a width and shape to fit over and close the several channeled strips 8, the several strips 14 being connected together at their forward ends by an uncut part of the sheet from which this member 5 is formed, and being further braced and held together by bridging pieces 15. In the top of each covering strip 14 is formed a longitudinally-extending narrow groove 16, and the bottom of each groove is provided with a series of small holes 17, one of such being over the hole in the bottom of each chamber 10. The sides of the plate from which this upper member 5 is formed are bent down to form flanges 18 that bear against the sides of the lower member 6.

19 indicates the brush bristles, each bunch being bent on itself as shown and forced through the holes 11 and held in place in the chambers 10 by a wire 20 in the usual way.

I have shown the brush back formed of the body portions of the members 5 and 6 curved from side to side, and I prefer to so form it but it is to be understood that I do not limit myself to so shaping the brush, as it is evident, of course, that these parts might be made flat or straight instead of curved.

What I claim as my invention and desire to secure by Letters Patent is,—

1. In a brush, the combination with a metal plate member provided with a series of channeled strips having openings between them, and bristles secured in the channels of said strips, of a covering device for said plate member comprising a series of strips

secured over the said series of channeled strips, said covering strips each having a longitudinal groove and a series of openings in the bottom thereof, and a bristle-securing wire adapted to be passed through such holes and lie in said grooves.

2. In a brush, the combination with a metal plate member provided with a series of channeled strips having openings between them, the channel of each strip being widened at intervals to form chambers, and bristle bunches secured in the said several chambers, of a covering device for said plate member comprising a series of strips having openings between them, said strips being secured over and upon the said series of channeled strips, each of said covering strips having widened portions adapted to fit over the widened portions of the said channeled strips.

ROBERT J. MONTGOMERY.

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