

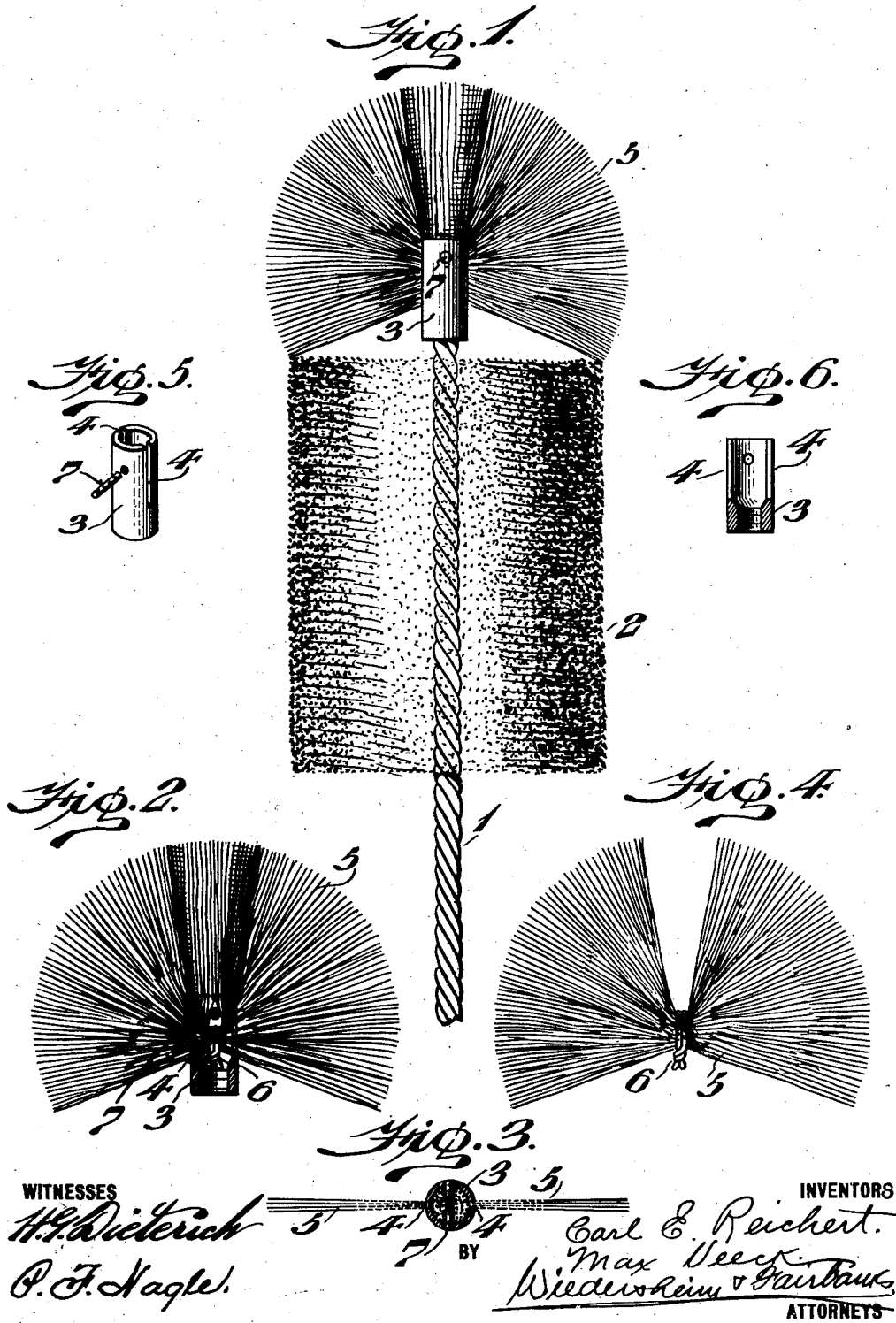
C. E. REICHERT & M. VEECK.

BOTTLE BRUSH.

APPLICATION FILED APR. 19, 1912.

1,055,981.

Patented Mar. 11, 1913.



UNITED STATES PATENT OFFICE.

CARL E. REICHERT AND MAX VEECK, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNORS TO EAGLE BRUSH MANUFACTURING COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

BOTTLE-BRUSH.

1,055,981.

Specification of Letters Patent.

Patented Mar. 11, 1913.

Application filed April 19, 1912. Serial No. 691,837.

To all whom it may concern:

Be it known that we, CARL E. REICHERT and MAX VEECK, both citizens of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Bottle-Brush, of which the following is a specification.

Our invention consists of an improved brush for washing or brushing bottles having round bottoms, such as soda-water bottles, such brush having radiating bristles at a portion of its stem and having bristles projecting in fan-shape at the end of the stem.

It further consists of such a brush having a detachable tip formed with opposite slots through which the bristles of a tuft radially project in fan-shape.

It further consists of improved means for securing such tuft in such tip.

It further consists of other novel features of construction, all as will be hereinafter fully set forth.

The annexed drawings and the following description set forth in detail one mechanical form embodying the invention, such detail construction being but one of various mechanical forms in which the principle of the invention may be used.

Figure 1 represents a side-view of a brush embodying our improvement. Fig. 2 represents an axial section of the detachable tip. Fig. 3 represents a transverse section of the tip. Fig. 4 represents a view of the tuft of bristles. Fig. 5 represents a perspective view of the ferrule and its pin. Fig. 6 represents an axial sectional view of the ferrule.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings, the reference numeral 1 indicates the stem of the brush, which in the present instance is formed from twisted wires between the outer portions of which are secured bristles, 2, radiating in all directions from the stem to form a cylindrical brush. The outer end of the stem is screw-threaded, and a tubular and open-ended ferrule, 3, is screwed upon said end. Said ferrule has slots, 4, formed in opposite sides and having open outer ends. A tuft, 5, of bristles, is tied at its middle by a tie, 6, of wire or any other suitable or desired material, and is inserted into the slots

to have the ends of its bristles project through the slots in flat fan-shape. A rivet or pin, 7, is secured through the sides of the ferrule at a right angle to the planes of the slots and secures the tuft within the ferrule, being secured nearer the outer end of the ferrule than the tied portion of the tuft. As the two portions of the tuft at opposite sides of the tie are flattened by passing through the slots in the ferrule and extend through the outer end of the ferrule on both sides of the pin, a central portion, 8, thicker than the outer portions, is formed, which central portion extends out through the open outer end of the tubular tip.

The fan-shaped tip end of the brush is, on account of its shape, particularly adapted to fit and brush the concave inner bottom faces of bottles having round bottoms, such as bottles containing sodawater, ginger-ale or similar charged beverages. As the end bristles of the brush are subject to more wear than the bristles of the cylindrical portion which brushes the sides of the bottles, we have found it to be of great practical value to secure the end-bristles in a detachable tip so as to admit of renewal of such bristles. The ferrule of such detachable tip has been made with four open-ended slots, into which the bristles of a tuft tied at its middle have been passed to project in four directions and secured by bending the edges of the slots inward, but such device has not proved fully satisfactory, as the bristles would project irregularly and the tuft was liable to be pulled out of the ferrule in withdrawing the bottle from the brush, through the open ends of the slots.

In the present form of brush, the bristles will project in a regular fan-shaped tuft, and the pin, engaging within the tied and doubled middle of the tuft, will fully secure the tuft against withdrawal.

Other modes of applying the principle of our invention may be employed instead of the mode herein explained. Change may therefore be made as regards the mechanism thus disclosed, provided the principles of construction set forth, respectively, in the following claim are employed.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent, is:—

A detachable tip for a bottle-brush com-

prising a tubular ferrule formed with opposite slots having open outer ends, a tuft of bristles tied at its middle and inserted through said slots with its ends spread to
5 project in fan-shape through the slots and the open end, and a pin secured through the sides of said ferrule near the outer end of the same and exterior to the tied middle

of the tuft and in the crotch thereof to confine the tuft within the ferrule.

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Witnesses:

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