No. 832,498. PATENTED OCT. 2, 1906.

S. B. McHENRY.

BRUSH.

APPLICATION FILED MAY 31, 1905.

Fig. 6.

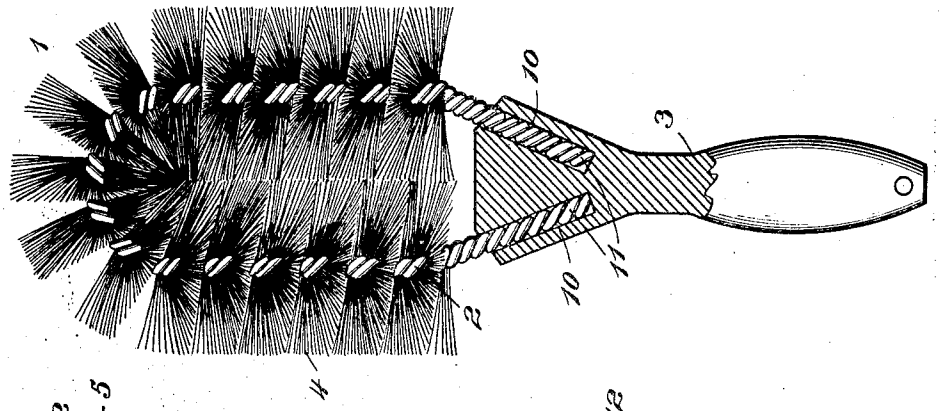


Fig. 4.

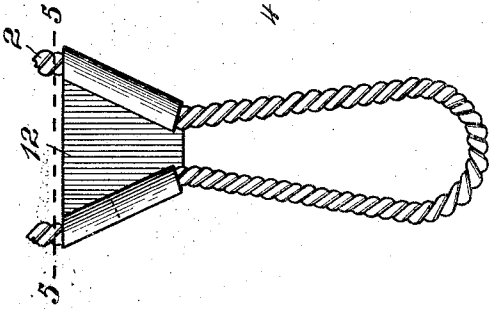


Fig. 5.

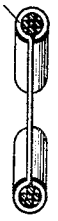


Fig. 7.

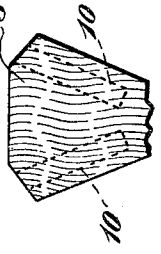


Fig. 2.

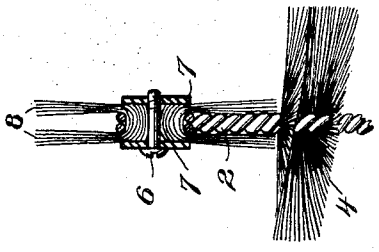
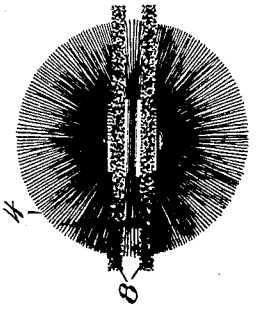


Fig. 3.



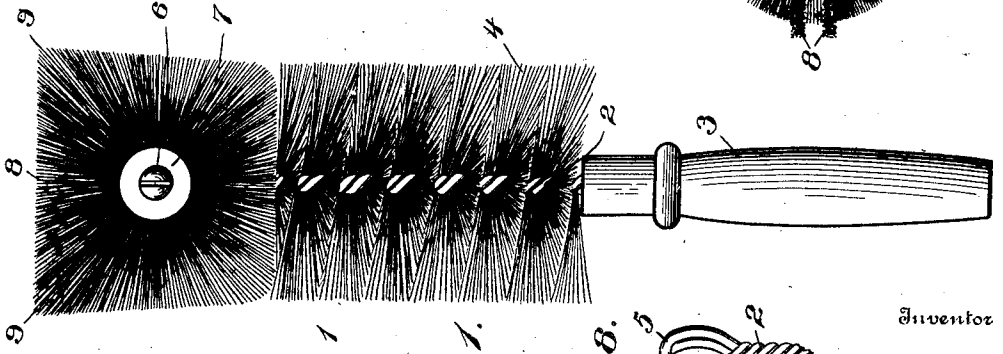


Fig. 1.

Fig. 8.

Witnesses

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UNITED STATES PATENT OFFICE.

SAMUEL B. McHENRY, OF CHICAGO, ILLINOIS.

BRUSH.

No. 832,498. Specification of Letters Patent. Patented Oct. 2, 1906.

Application filed May 31, 1905. Serial No. 263,029.

To all whom it may concern:

Be it known that I, SAMUEL B. McHENRY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Brushes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to "brushes," and has for its object to provide a device of this class which is extremely simple in its construction, cheap to manufacture, clean, and sanitary.

With this object in view my invention consists in the novel construction of the brush and in the handle of same.

Referring to the accompanying drawings, Figure 1 is an elevation of a brush designed particularly for washing bottles. Fig. 2 is an edge view of end of brush. Fig. 3 is a top plan view. Fig. 4 is an elevation of wire handle. Fig. 5 is a transverse section taken on 5 5 of Fig. 4. Fig. 6 is an elevation of brush to be used for clothes, hats, &c. Fig. 7 is a fragmentary view of inner end of wooden handle; and Fig. 8 is a perspective view of end of wire frame in the construction shown in Figs. 1, 2, and 3.

Like numerals of reference indicate the same parts throughout the several figures, in which—

1 indicates the brush, which, as shown in Fig. 1, comprises the frame 2 and handle 3, and, as shown, the frame is composed of four strands of wire twisted spirally, the bristles 4 being laid between the wire before twisting same, thus forming the spiral brush.

Referring particularly to Figs. 1, 2, 3, and 8, it will be seen that the end of the frame 2 is formed into a loop 5, and referring to Fig. 2 it will be seen that a bolt 6 is passed through said loop, and two disks or washers 7 are employed to hold the bristles in position, this construction causing the bristles to radiate from the center of the loop 5 and to lie at substantially right angles to the bristles in the spirally-twisted frame, which bristles in the loop are then trimmed to form substantially a square, as shown in Fig. 1. This construction of brush is particularly adapted to wash bottles, the square end 8 and corners 9 effectually cleaning the bottom of the bottle, which is practically impossible to reach with an ordinary brush.

Referring now to Figs. 6 and 7 it is seen that the handle 3 is provided with two converging holes 10, arranged to receive the ends 11 of the frame 2, and in Fig. 7, which illustrates the grain of the wood, it will be seen that said holes 10 are bored diagonally across the grain, which construction obviates the tendency of the handle to split and makes it possible to employ a much smaller and lighter handle than would be possible were the holes bored with the grain, for the reason that the ends 11 of the frame 2 must fit snugly within the said holes, and when in use the said ends have a tendency to split the handle if the holes are bored with the grain. By reason of this construction increased rigidity and stiffness is imparted to the brush in such manner that there is little or no tendency of the wire frame to twist while using the brush.

In Figs. 4 and 5 a slight modification is shown, inasmuch as the frame 2′ also forms the handle, a metal tie 12 being employed to strengthen the same and to cover the two ends of the wire forming the frame or handle, the point of joining the two ends being shown by dotted line in Fig. 4.

Having thus fully described the several parts of my invention, its operation is of course obvious, and brushes can be made of any size for all purposes, and any kind or quality of hair, bristles, or threads can be employed, and while various slight changes may be made in the construction which would fall within the limit and scope of my invention I consider myself clearly entitled to all such changes and modifications.

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

1. A brush having a frame comprising a wire bent back upon itself and twisted spirally, a suitable brush material interposed between said sprially-twisted wire said wire forming a loop at the end thereof, a suitable brush material passed through said loop and means associated with said loop to engage the brush material in said loop to hold said material in the loop, substantially as described.

2. A brush having a frame comprising a wire twisted spirally, a suitable brush material interposed between said spirally-twisted wire, said spirally-twisted wire forming a loop at the end thereof, a suitable brush ma-

terial carried in said loop, washers associated with said loop and arranged to engage the brush material in said loop to hold the brush material in position and to cause the material to radiate from said loop, substantially as described.

3. A brush comprising a frame, suitable brush material spirally arranged thereon, a handle having holes therein converging toward their bottoms, the ends of said frame converging and arranged to enter said holes in said handle, whereby increased rigidity and stiffness is imparted to said handle, substantially as described.

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

SAMUEL B. McHENRY

Witnesses:

HELEN FRACKER.

M. SCOTT.