

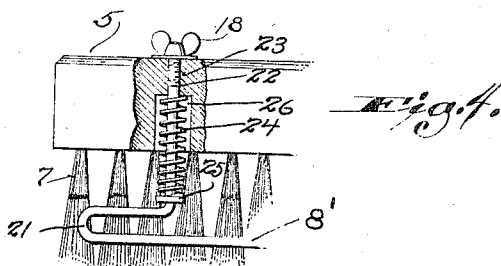
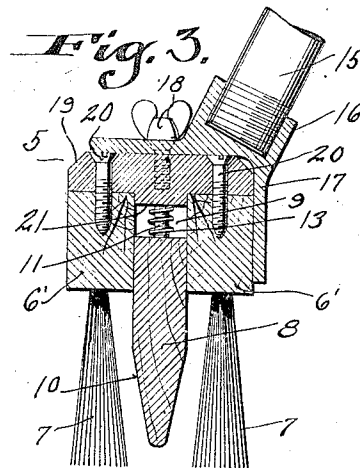
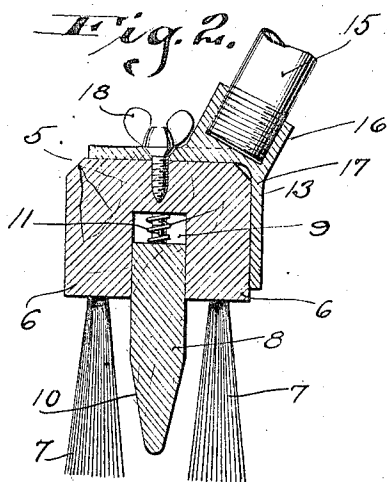
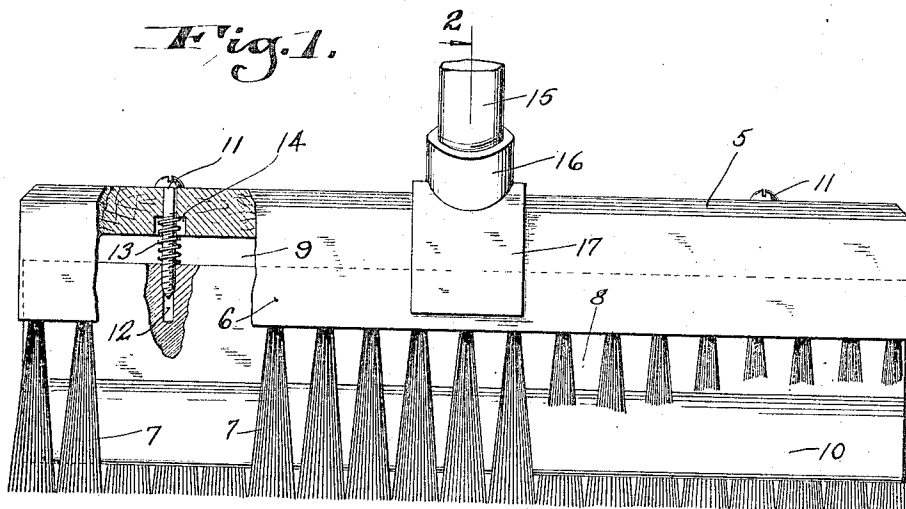
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A. G. TOLMAN

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BRUSH

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INVENTOR.
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BY

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BRUSH.

Application filed February 15, 1922. Serial No. 536,756.

To all whom it may concern:

Be it known that I, ARTHUR G. TOLMAN, a citizen of the United States, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Brushes, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

This invention relates to certain new and useful improvements in brushes and refers more particularly to a general utility brush.

At the present time, various types of brushes have been designed for this type of work, but they have all been open to many objections, among which are the inability to present a sufficiently strong set of bristles and the inefficiency of the brush due to its becoming out of shape after slight use.

Hence with the above objections to the existing type of brushes in mind it is one of the objects of this invention to provide an improved form of brush in which a member is positioned among the brush bristles to substantially reinforce the same and prevent their curling or bending in use at the point of connection with the brush head.

Another object of this invention is to provide a brush especially adapted for use in connection with cement work in which an elongated member, or insert is positioned intermediate the bristles with its outer edge preferably spaced a slight distance from the bristle ends to be out of the path thereof and at the same time provide a reinforcing or stiffening means therefor.

A further object of my invention is to provide a brush of the type described, in which the stiffening or reinforcing member is capable of adjustment to accommodate for wear of the bristles.

This invention has for a still further object to provide a brush of the type described which may be constructed at a minimum cost and which will perform its functions in a highly desirable manner.

With the above and other objects in view which will appear as the description proceeds, my invention resides in the novel construction, combination and arrangement of parts substantially as hereinafter described and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the

herein disclosed invention may be made as come within the scope of the claims.

In the accompanying drawing, I have illustrated one complete example of the physical embodiment of my invention constructed according to the best mode I have so far devised for the practical application of the principles thereof, and in which:

Figure 1 is a view looking at one side of a brush embodying my invention, parts thereof being broken away and in section, to more clearly illustrate details of construction;

Figure 2 is a transverse sectional view taken through the brush on the line 2—2 of Figure 1;

Figure 3 is a view similar to Figure 2 illustrating a slightly modified form of brush; and

Figure 4 is a fragmentary view of one end of another modified form of brush, parts being broken away and in section to more clearly illustrate structural details.

Referring now more particularly to the accompanying drawing in which like numerals designate like parts throughout the several views; the numeral 5 designates a brush head which is preferably of substantially inverted U-shape in transverse section to provide two spaced parallel ribs 6 from which project bristles 7. The ordinary brush consists of nothing more than rows of bristles 7 which flex or bend under use from their point of connection with the brush head and consequently after but a short while are of practically no value and as only the outermost portions of the bristles are engaged with the work, I provide a center member 8 in the form of an elongated strip having its inner edge slidably mounted in a recess 9, formed by ribs or flanges 6. The outer portion of the member 8 is preferably tapered as at 10 and the outer edge thereof terminates adjacent the ends of the bristles.

The member 8 is movable into and out of the recess 9 to adjust the relation of its outermost edge with the bristle ends by means of screws 11 which pass through the top wall of the brush head and into recesses 12 in the member 8, that portion of each screw 11 within the recess 9 being surrounded by an extensile spring 13, one end of which abuts the member 8 and the other end of which extends into a counterbored recess 14 within the inner wall of the brush head.

The spring 13, as will be readily obvious, yieldably urges member 8 outwardly and at the same time permits its ready adjustment by manipulation of screws 11.

5 The handle 15 is detachably secured in a socket 16, formed on an angle bracket 17 which is reversibly secured to the brush head by a thumb screw 18. The angle bracket 17 has its upper portion substantially extending
10 ing across the top of the brush head and its side portion along the side thereof and when the bristles are worn on one side, or are bent rearwardly due to constant use, the bracket member 17 is reversed in order to reverse the
15 normal direction in which the brush is moved when in use. With this arrangement the life of the brush is increased and when the bristles wear down and the edge of the member 8 is too close thereto, the
20 screws 11 are adjusted to properly position said member as will be readily obvious.

In Figure 3 I have illustrated a slightly modified form of my invention in which the bristles 7 are carried by two elongated blocks
25 or strips 6' secured to a top plate 19 by fastenings 20. The top plate having a centrally longitudinally extending rib 21 on its under side to properly space the strips 6' to form the recess 9. With this construction
30 it will be readily seen that the bristles 7 may be readily renewed when they have become substantially worn out.

Member 8 may be constructed of a single length of wire, as illustrated in Figure 4 at
35 8', having a return bend or loop 21, adjacent each end 22, which passes through an opening 23 in the brush head. A spring 24 is coiled about each end 22 between a washer 25, adjacent bend 21 and a shoulder formed
40 by a counterbored part 26 in which the spring is compressible. As in the other forms of my invention, member 8' is adjustable by wing nuts 18.

From the foregoing description taken in connection with the accompanying drawing 45 it will be readily obvious that I have provided a brush which will be highly desirable for use in connection with cement work, roof work, or the like, and one the life of which will be materially prolonged as well
50 as its efficiency increased.

What I claim as my invention is:

1. As an article of manufacture, a brush comprising a brush head, bristles carried by the brush head, an elongated member substantially concealed within the bristles and extending along the free ends thereof to reinforce the bristles, means for moving the member toward and away from the bristle ends, and means yieldably retaining said
55 member in its adjusted position with respect to the bristle ends. 60

2. As an article of manufacture, a brush comprising a brush head, bristles carried by the brush head, a member running longitudinally of the brush head and concealed within the bristles, guide parts carried by said member and passed through the brush head, screw means for adjusting said guide parts in the head, and means on the guide
65 parts for yieldably retaining said member in its adjusted position. 70

3. In a device of the character described, a brush head provided with an elongated groove in its lower face, bristles projected
75 from the head adjacent the groove, an elongated reinforcing member having its inner end engaged in the groove and its outer edge positioned adjacent the outer ends of the bristles, and means for moving said member
80 into and out of said groove to adjust its outer edge with respect to the bristle ends.

In testimony whereof, I affix my signature.

ARTHUR G. TOLMAN.