

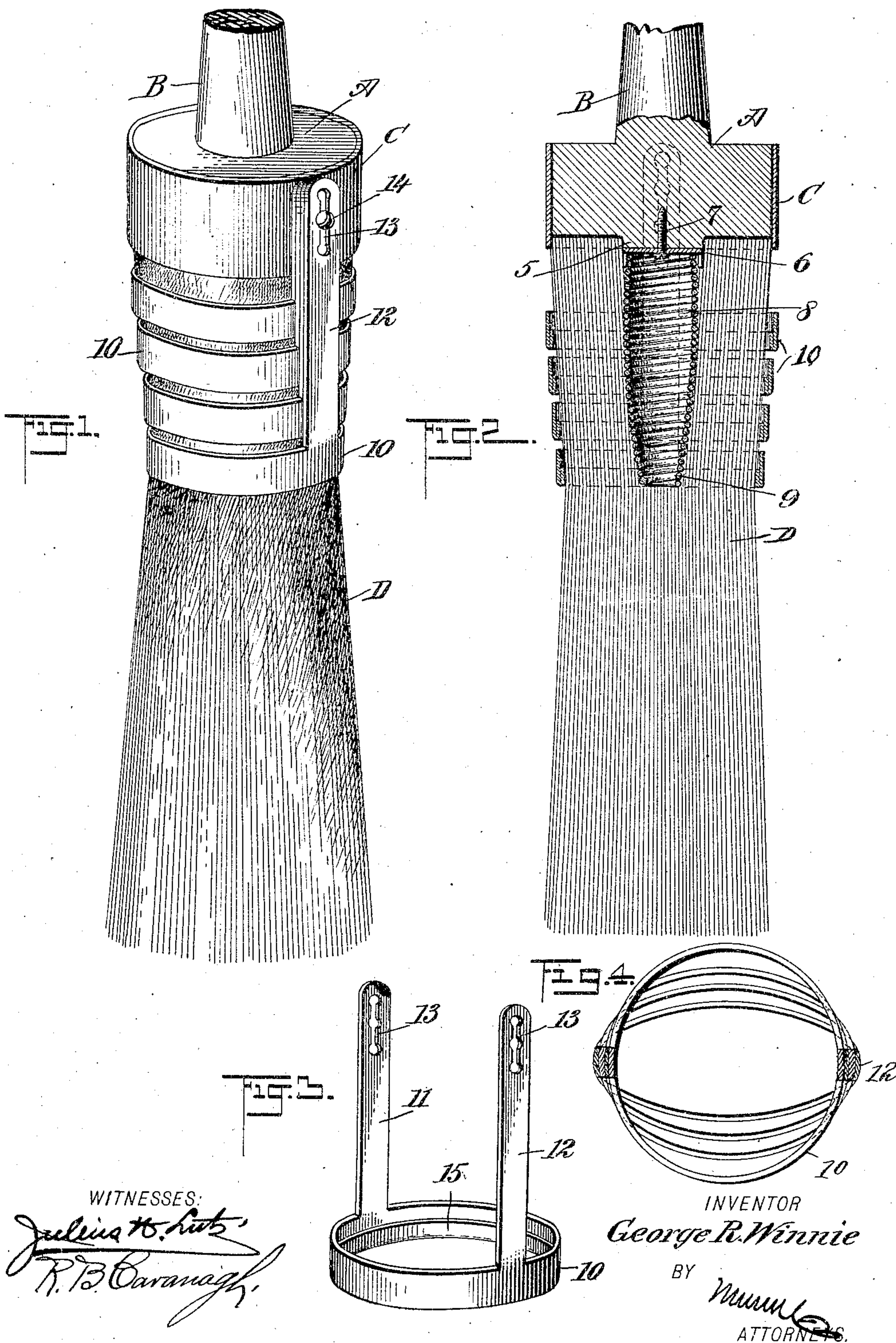
No. 785,463.

PATENTED MAR. 21, 1905.

G. R. WINNIE.

BRUSH BRIDLE.

APPLICATION FILED MAY 20, 1903.



UNITED STATES PATENT OFFICE.

GEORGE R. WINNIE, OF TRAVERSE CITY, MICHIGAN.

BRUSH-BRIDLE.

SPECIFICATION forming part of Letters Patent No. 785,463, dated March 21, 1905.

Application filed May 20, 1903. Serial No. 157,939.

To all whom it may concern:

Be it known that I, GEORGE R. WINNIE, a citizen of the United States, and a resident of Traverse City, in the county of Grand Traverse and State of Michigan, have invented new and useful Improvements in Brush-Bridles, of which the following is a full, clear, and exact description.

The present invention relates to paint-brushes, and particularly refers to certain improvements in what is commonly termed the "bridle" of the brush.

It is the object of my invention to provide an improved bridle which may be used upon short or long bristle brushes and one which will give firmness to a long-bristle brush in addition to causing the bristles to bend or give evenly from the ferrule of the brush down to the end of the brush.

A further object of the invention is to provide a bridle which may be adjusted to suit the brush in any condition—that is to say, whether the brush be new or whether it be old and worn out through constant service.

Finally, I have in view as an object the construction of a paint-brush which shall embody the essential features of simplicity, durability, and cheapness of cost.

With the above recited objects and others of a similar nature in view my invention consists in the construction, combination, and arrangement of parts, as is described in this specification, delineated in the accompanying drawings, and set forth in the annexed claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a brush having my improvements applied thereto. Fig. 2 is a central vertical sectional view of the same, and Fig. 3 is a detail perspective view of one of the sections or members of the improved bridle.

Referring now to the accompanying drawings in detail, A designates the head of a brush of a well-known type, such head having extended upwardly therefrom a handle,

as at B. A ferrule C has its lower circumferential edge a short distance below the head 50 of the brush, such ferrule being adapted to bind or retain the ends of the bristles D. The lower central surface of the head A is formed with a short projection or block 5, to which block is secured, through the medium of the 55 plate 6 and the securing-screw 7, a coiled spiral spring 8, said spring tapering downwardly at its lower portion 9. When the bristles have been secured to the brush-head, this coiled spring is adapted to extend down- 60 wardly into the body of the bristles, thereby preventing the brush from collapsing, the spring giving or bending in any desired direction and the tapered end 9 thereof insuring that the spring will not hold the lower 65 end of the bristles open or spread apart.

My improved bridle comprises in the present instance a plurality of sections or members, which are adapted to be secured to the head of the brush. As these members are all 70 similar in construction, a description of one will be sufficient. Each section or member of the bridle comprises a band or ring 10, formed of any suitable material, such as sheet metal, said band having extending upwardly 75 therefrom diametrically-arranged arms 11 and 12, the upper end of each of said arms being slotted or apertured, as at 13, these slots being adapted to permit the passage of a screw, as at 14, which secures the sections of the bridle to 80 the brush-head, the longitudinal slots also permitting of the adjustment of the bridle-sections up or down relatively to each other and to the bristles of the brush without entirely removing the screw or fastening. The lower edge of each 85 of the annular members 10 is preferably turned inwardly, thereby forming a flange 15, which flange rests in contact with the inner wall of the ring, the construction being such that a rounded or smooth lower edge will be 90 formed on the ring, this construction obviating the possibility of scratching or scarring the work or surface being painted. The lowermost section of the bridle is preferably formed slightly larger than the upper sec- 95 tions. The bands are the same size around;

but the bands as they approach the lower extremity of the brush are formed into ovals, the upper band being nearly the shape of the ferrule of the brush and the lower one being quite oval. This is what gives an ordinary brush a chisel edge and also allows the arms to work by each other. The arms of the lowermost section are also relatively longer than the arms of the upper sections, this construction permitting of the adjustment of the sections of the bridle and at the same time will allow one retaining screw or stud, as at 14, to secure the adjacent arms of the various sections to the brush-head, so that it will be seen that in order to secure the sections of the bridle in position on the brush, as shown in Figs. 1 and 2, it is only necessary to employ two retaining screws or studs.

From the above description, taken in connection with the drawings, the construction and advantages of my improved device will be readily apparent. If desired, when the brush has grown short through usage and wear the sections may be removed successively, the lowermost section first, thus lengthening the amount of bristle-surface available. When the brush is in use, the arms will have a slight sidewise movement relative to each other, which will prevent paint, oil, or any other substance from clogging the space between the arms on the bands.

A further advantage incident to my brush is that when the brush is used with the broad side turned to the surface to be painted it possesses great flexibility, but when turned in the opposite direction it is rigid, as the arms reinforce each other, this being especially advantageous in such work as tracing sash-cuttings, painting moldings, and the like.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A brush-bridle, comprising a plurality of bands having their lower edges bent upon themselves to form rounded edges, the bands being arranged upon the brush one below the other and provided with arms graduated in length, the arms overlying one another and all adapted to be pivoted at their upper ends to the brush-head by common pivots, the uppermost band being approximately circular and the others elliptical and gradually increasing in eccentricity from the top to bottom, as and for the purpose set forth.

2. A brush-bridle, consisting of a plurality of bands provided with arms of unequal length and adapted to overlie one another and having at their ends slots adapted to receive fastening-screws, one of the bands being circular and the others elliptical and gradually increasing in eccentricity, as set forth.

3. A brush-bridle comprising a plurality of bands having arms of unequal length adapted to overlie one another, the arms being provided at their ends with registering openings for the purpose set forth.

4. A brush-bridle, comprising a plurality of bands provided with arms of unequal length for securing them to a brush, one of the bands being approximately circular and the others elliptical and gradually increasing in eccentricity, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE R. WINNIE.

Witnesses:

ROBERT G. DAVIDSON,
WILLIAM A. WHELOCK.