W. P. BRAUN.

BRUSH.

APPLICATION FILED AUG. 6, 1919.

1,337,819.

Patented Apr. 20, 1920.

2 SHEETS—SHEET 1.

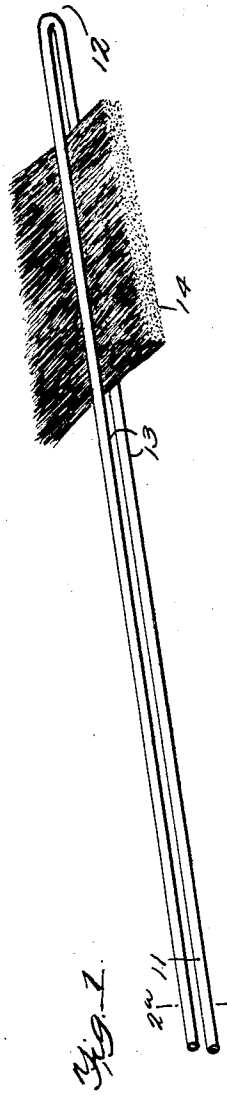


Fig. 1.

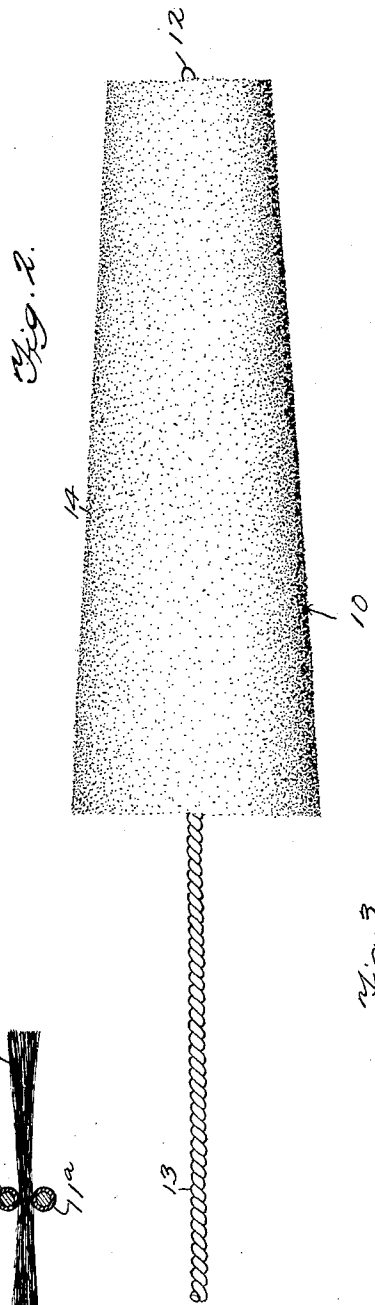


Fig. 2.

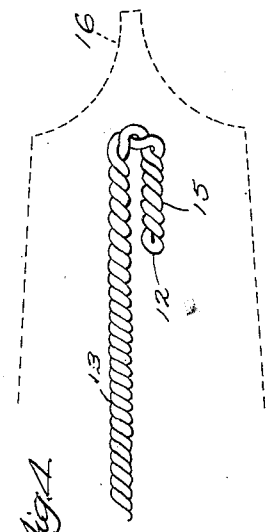


Fig. 4.

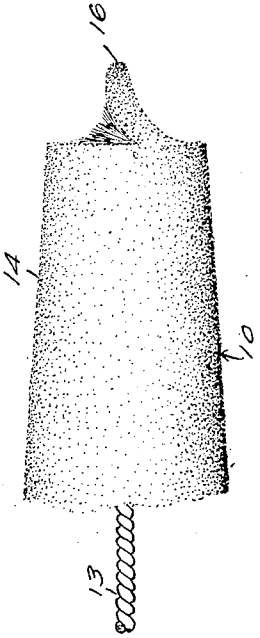


Fig. 3.

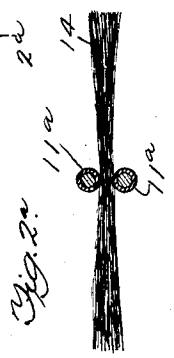


Fig. 2a.

Inventor

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2 SHEETS—SHEET 2.

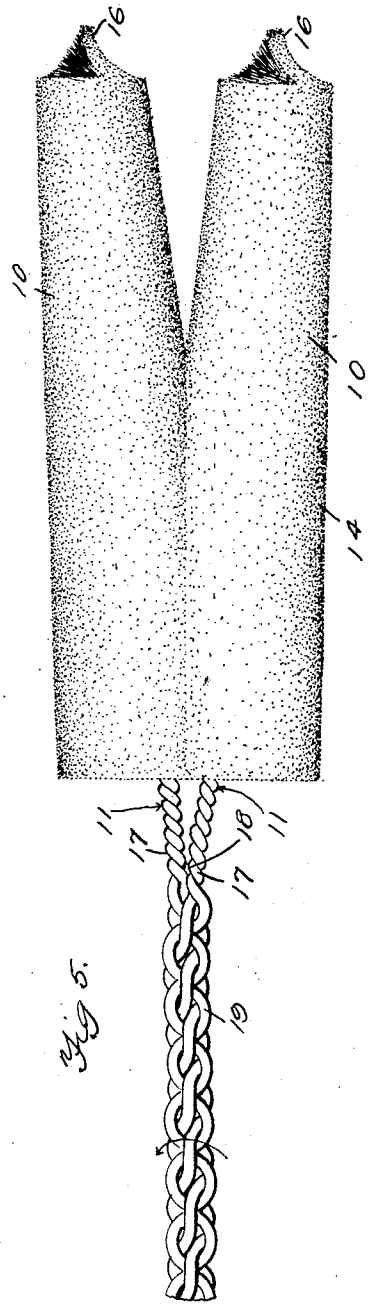


Fig. 5.

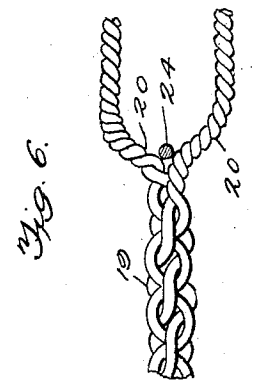


Fig. 6.

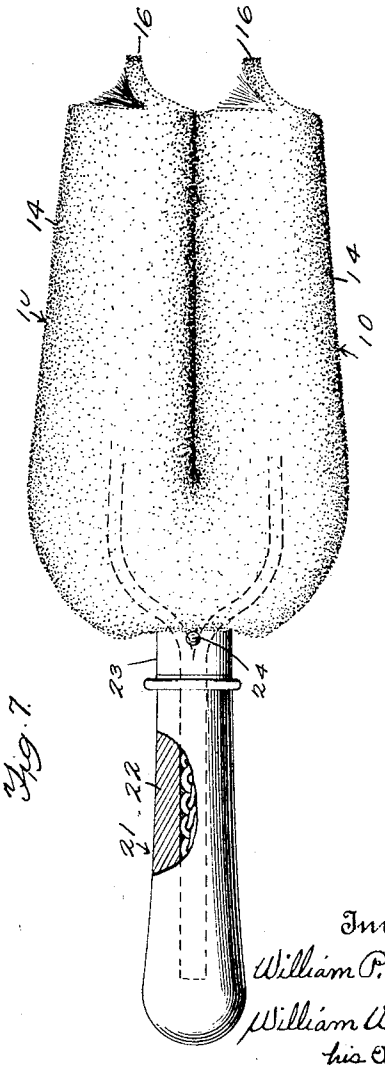


Fig. 7.

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UNITED STATES PATENT OFFICE.

WILLIAM P. BRAUN, OF BROOKLYN, NEW YORK.

BRUSH.

1,337,819. Specification of Letters Patent. Patented Apr. 20, 1920.

Application filed August 6, 1919. Serial No. 315,681.

To all whom it may concern:

Be it known that I, WILLIAM P. BRAUN, a citizen of the United States, residing at Brooklyn, in the county of Queens and State of New York, have invented certain new and useful Improvements in Brushes, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to improvements in brushes, which are adapted to be used in cleaning automobiles or the like, particularly the spokes of the wheels and other small parts of the machine, while in no sense restricted to this use.

An important object of the invention is to provide a brush of the above mentioned character, embodying a pair of brush members carried by a handle, and adapted to receive therebetween the spokes of a wheel or like parts to be cleaned, in a convenient and expeditious manner.

A further object of the invention is to provide means for forming bristle extensions at the ends of the brush members, to prevent the wire supports of the same coming in contact with painted surfaces, being cleaned, which would otherwise be liable to injury.

A further object of the invention is to provide a brush of the above mentioned character, which is simple in construction, inexpensive to manufacture, strong, durable, and convenient in use.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification, and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a perspective view showing the wire support of the brush member, prior to being twisted,

Fig. 2 is a side elevation of the brush member, after the twisting process,

Fig. 2ª is a transverse section taken on line 2ª—2ª of Fig. 1.

Fig. 3 is a fragmentary side elevation of the brush member, having the end extension formed by bending over the forward end of the wire support,

Fig. 4 is a side elevation of the forward end of the wire support, showing such ends bent over to form the brush extension,

Fig. 5 is a side elevation of a pair of assembled brush members, with the shanks of the supports twisted together,

Fig. 6 is a side elevation of the shanks, showing the forward portions thereof bent laterally, and,

Fig. 7 is a side elevation of the completed brush.

In the drawings, wherein for the purpose of illustration is shown a preferred embodiment of my invention, the numeral 10 designates a pair of brush members, each of which embodies a wire support 11. This wire support, as clearly shown in Fig. 1, is formed of a section of wire which is bent upon itself between its ends, at 12, forming oppositely arranged upper and lower wire sections 13. This section of wire may be provided with a covering 11ª, of fiber, rubber or the like, while the covering may be omitted, if desired, the invention being in no sense restricted to the employment of the covering. In constructing the brush member, the wire sections 13 are next preferably clamped near the point 12, and then suitably spread to receive therebetween the brush strands 14, which may be formed of bristles, hair, fibers, wool or any other suitable material, the terms brush strands being intended to cover each and all of them. The wire sections 13 are now brought suitably close together and the free ends of these wire sections suitably clamped, and the wire sections are twisted, either to the right or left. Fig. 2 shows these wire sections as twisted to the right, the brush strands 14 being securely held between the twisted portions of the wire sections. The brush strands 14 may now be cut or trimmed to the desired shape, Fig. 2 showing the brush member as conical, while the same may of course be cylindrical.

After the trimming process, the forward end portion 15 of the wire support may be bent rearwardly upon itself, as indicated in Fig. 4, which provides a forwardly projecting extension 16 of the brush strands. The function of this extension is to cover the forward end of the wire support and prevent the same from contacting with the surfaces to be cleaned. While I prefer to bend the forward end portion 15 rearwardly, as stated, yet it is to be understood that such bending may be dispensed with.

I next preferably assemble two of the brush members 10 in close relation, as shown

in Fig. 5 and clamp the shanks 17 of the supports 11, at or near the point 18, the rear ends of these shanks being suitably clamped, and the portions of the shanks between these points being twisted by turning such portions to the left, or in an opposite direction to that employed in twisting the wire sections 13. As a result of this, the twisted shanks are partly untwisted or opened, and these opened portions twisted together, providing a unitary shank 19, having relatively large openings or voids therein. This shank 19 will be found to be very stiff. The forward ends of the shanks 17 may now be bent laterally and outwardly, forming transverse portions 20, and suitably spacing the supports 11 of the brush members. After this operation, the brush members 10 may be suitably spaced or spread, by bending them away from each other, if desired.

The numeral 21 designates a handle, which may be formed of wood, or any other suitable material, having a longitudinal opening 22 to receive the shank 19. This opening may also receive cement or glue to anchor the shank 19 therein, such material passing into and through the voids in the shank 19.

A ferrule or sleeve 23 is preferably fitted upon the forward end of the handle 21, and is retained in place by a nail or element 24, passing transversely through the handle and its opening 22 and located in advance of the shank 19, thus serving as means to prevent the shank being withdrawn from the opening 22.

If desired, the wooden handle 21 may be dispensed with, and the unitary twisted shank 19 used as a handle, which shank is suitably large in diameter, and also suitably stiff.

The space between the supports 11 of the brush members 10 is open throughout the entire length of these brush members and extends through the forward end of the device, so that the forward end of this space may be said to be open. By this means, the brush may be brought into proximity to a spoke or the like which may be passed within the forward end of this space, and between the brush members, thus enabling the same to be thoroughly and conveniently cleaned.

It is obvious that my improved brush may be used for practically any purpose for which the ordinary brush is employed, and the invention is in no sense restricted to the use in cleaning wheel spokes, such use being stated solely for the purpose of illustrating a particular use of the brush.

It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same, and that various changes in the shape, size, and arrangement of parts may be resorted to without departing from the spirit of my invention, or the scope of the subjoined claims.

Having thus described my invention, I claim:—

1. A brush of the character described, comprising a pair of brush members embodying spaced twisted wire supports forming a longitudinal passage open at its forward end, the rear portions of the twisted wire supports being twisted together in an opposite direction to the twisting of said wire supports, whereby the twisted portions of the wire supports are partly opened for forming a shank having voids therein, a handle having a longitudinal opening for the reception of said shank, cement material within the opening and passing through the voids, a ferrule secured to the forward end of the handle, and a retaining element holding the ferrule in place upon the handle and passing between the supports in advance of said shank.

2. A brush of the character described, comprising a pair of brush members embodying twisted wire supports forming a longitudinal passage therebetween open at its forward end, the rear portions of the twisted wire supports being twisted together in an opposite direction to the twisting of said wire supports, whereby the twisted portions of the wire supports are partly open for forming a shank having an increased diameter and having voids therein, said shank serving as a handle.

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

WILLIAM P. BRAUN.

Witnesses:
ALBERT BRAUN,
ROBERT MCENTEE.