

C. L. FRIEDEY.
 ROTARY BRUSH.
 APPLICATION FILED MAY 13, 1910.

980,091.

Patented Dec. 27, 1910.

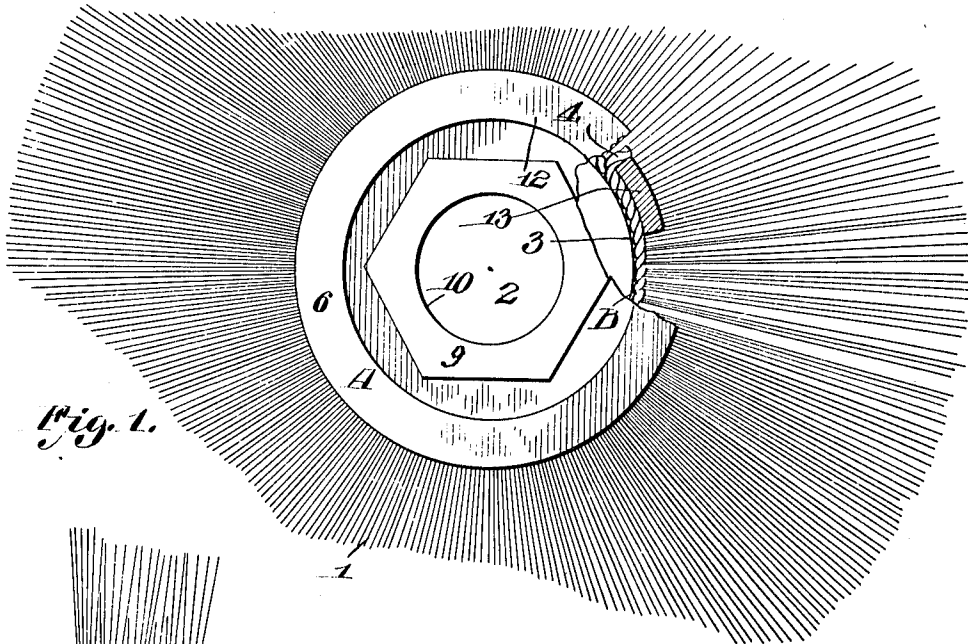


Fig. 1.

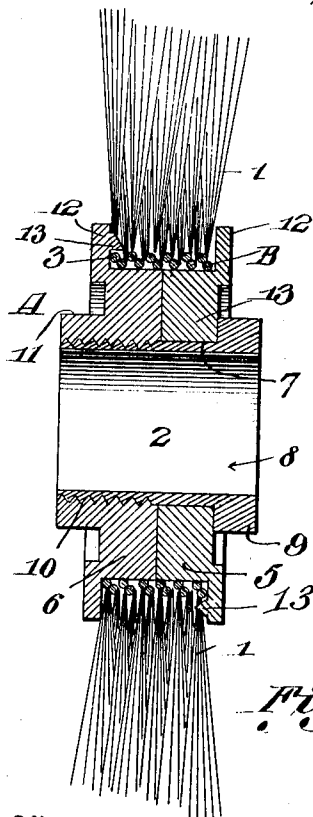


Fig. 2.

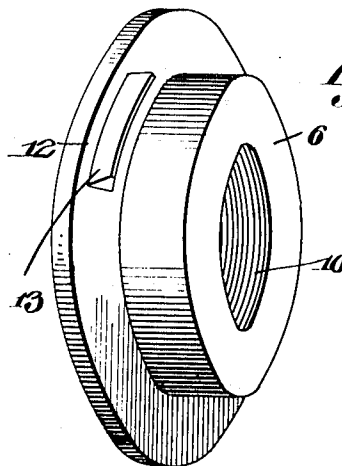


Fig. 3.

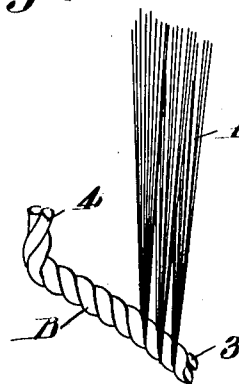


Fig. 4.

Witnesses
A. B. Ah.
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UNITED STATES PATENT OFFICE.

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ROTARY BRUSH.

980,091.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES L. FRIEDEY, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Rotary Brushes, of which the following is a specification.

This invention relates to a circular brush of that type including wire bristles.

10 The invention has for one of its objects to improve the construction of brushes of this character so as to be comparatively simple and inexpensive to manufacture, reliable and efficient in use and of durable and substantial design.

15 Another object of the invention is the provision of a brush of that type in which the bristles are fastened on a spiral base of twisted wire, the said base being clamped in a novel manner to the hub of the wheel.

20 A still further object of the invention is the provision of a novel hub structure to which the bristles are clamped in such a manner as to prevent slipping of the body of the brush on the hub.

25 With these objects in view, and others as will appear as the description proceeds, the invention comprises the various features of construction and arrangement of parts which will be more fully described hereinafter and set forth with particularity in the claims appended thereto.

30 In the accompanying drawing, which illustrates one embodiment of the invention:—Figure 1 is a side elevation of the brush with a portion of the hub broken away. Fig. 2 is a central section of the brush. Fig. 3 is a perspective view of one of the clamping members or sections of the hub. Fig. 4 is a perspective view of the terminal portion of the bristle element.

Similar reference characters are employed to designate corresponding parts throughout.

35 Referring to the drawing, A designates the hub or body of the brush which carries radial bristles 1, and the hub has a central opening 2 for receiving a shaft to which the brush is secured for rotation therewith.

40 The bristle element consists of a spirally wound base B that is made of two twisted wires 3 and to this base are secured the bristles 1 that are formed of double wires, and these bristles are anchored on the base by being held between twisted wires that constitute the latter. The convolutions of

the base are of the same diameter and they encircle the hub which clamps the convolutions together side by side. The outer extremities of the base are free from bristles and are bent outwardly into radial fingers or members 4 to serve a particular purpose to be shortly described.

The hub A consists of two clamping members 5 and 6 in the form of disks, the disk 5 has a smooth central opening 7 through which extends a hollow bolt 8 that is provided at one end with a hexagonal head 9 and is threaded at the opposite end. On this threaded end is screwed the member 6, the said member having a threaded opening 10 and is also provided with a hexagonal hub portion 11, so that a wrench can be applied to that section of the hub, while another wrench engages the hexagonal head of the bolt 8. The members 5 and 6 have peripheral flanges 12 between which the convolutions of the bristle element are clamped, and on the inner face of each flange is an arcuate abutment or stop 13 which engages the radial member 4 of the bristle element so that it is impossible to slip around on the hub.

From the foregoing description taken in connection with the accompanying drawing, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention relates, and while I have described the principle of operation of the invention, together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative and that such changes may be made when desired as are within the scope of the claims.

What I claim as new and desire to secure by Letters Patent is:—

1. A brush comprising a hub composed of separable members, an abutment on each member, a removable bristle element centrally between the sections, a member on the ends of the element engaging the said abutments to prevent slipping of the bristle element on the hub.

2. A brush comprising a two part hub each part having a flange and provided with an abutment on the flange, and a removable bristle element clamped between the flanges and including a bristle carrying base having its extremities formed into outwardly extending members arranged to engage said

abutments to prevent turning of the element on the hub.

3. A brush comprising a hub composed of flanged members, a bolt passing through one of the members and threaded on the other member, arcuate webs on the inner faces of the flanges to form abutments, and a brush element removably clamped between the flanges and prevented from rotating on the hub by the said webs.

4. A brush comprising a hub composed of separable sections clamped together, an arc-

uate web on each section, a bristle element including a spirally wound base and bristles thereon, the extremities of the base being free from bristles and bent outwardly in a radial direction to engage the ends of said webs.

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

CHARLES L. FRIEDEY.

Witnesses:

WM. FRIEDEY,

FRANK. F. FRIEDEY.