(No Model.)

O. PEDERSON.

ROTARY BRUSH.

No. 462,156. Patented Oct. 27, 1891.

Fig. 1.

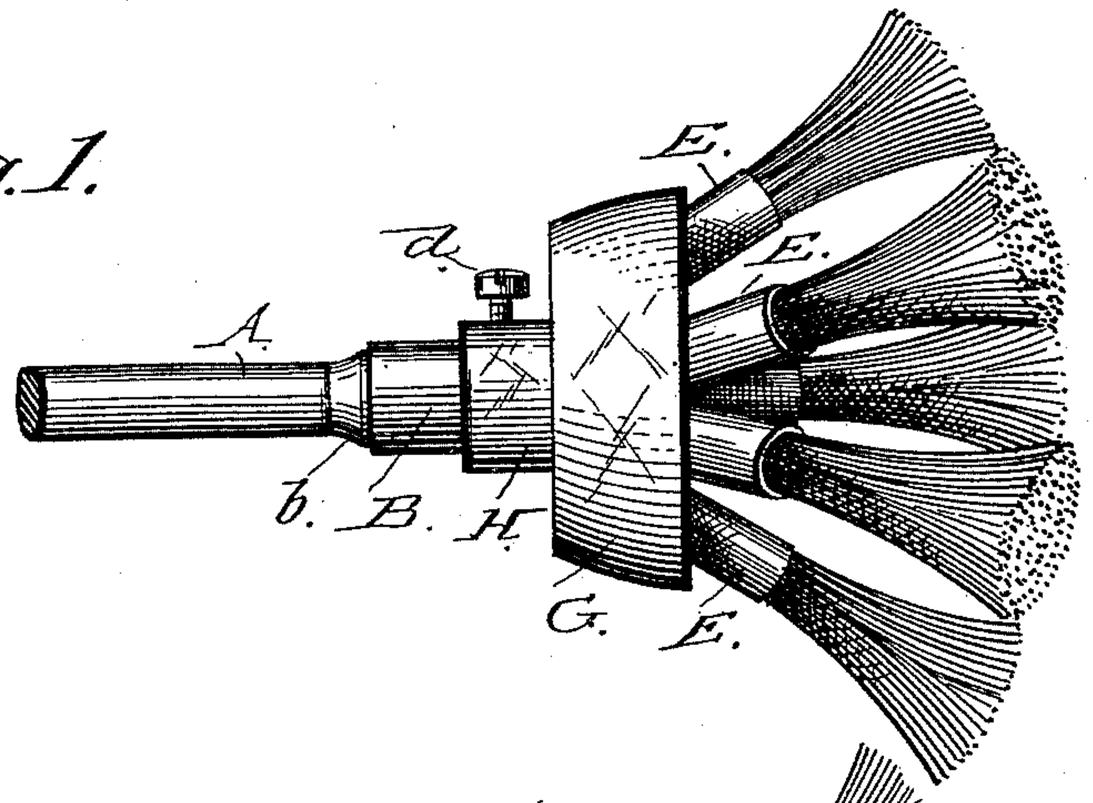


Fig. 2.

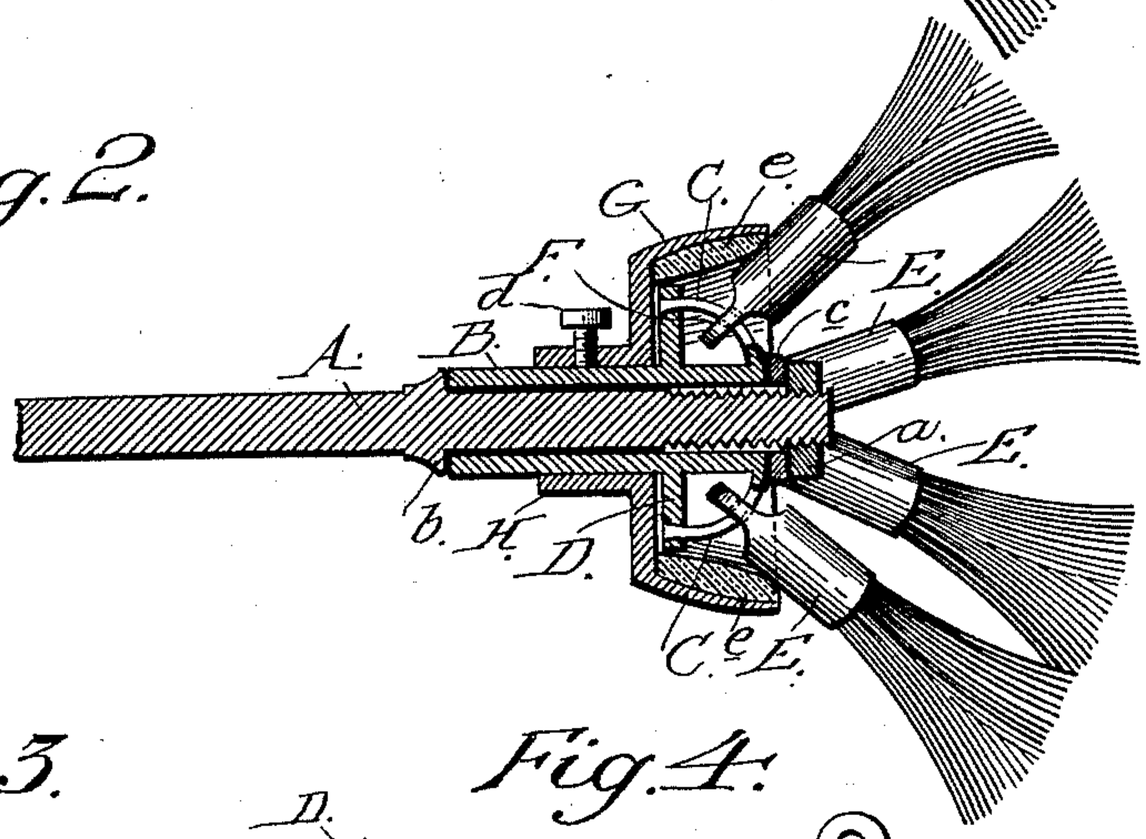


Fig. 3.

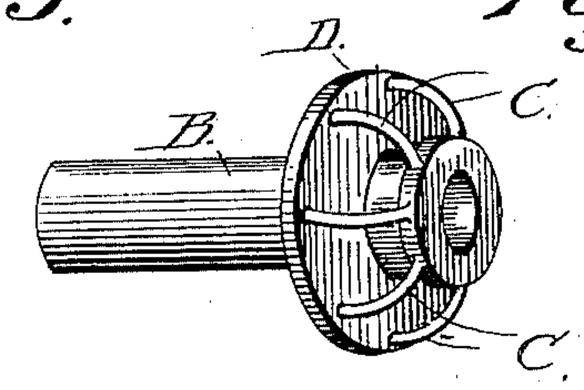
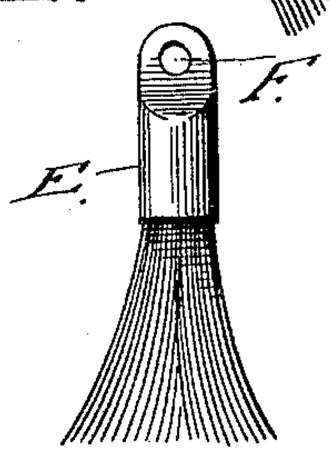


Fig. 4.



WITNESSES

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ROTARY BRUSH.

SPECIFICATION forming part of Letters Patent No. 462,156, dated October 27, 1891.

Application filed January 27, 1891. Serial No. 379,250. (No model.)

To all whom it may concern:

Be it known that I, OLE PEDERSON, a citizen of the United States, residing at Moline, in the county of Rock Island, Illinois, have invented certain new and useful Improvements in Rotary Brushes, as set forth in the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a side elevation of a rotary brush embodying my invention. Fig. 2 is a sectional view of the same. Figs. 3 and 4 represent details to be referred to.

My invention relates to rotary brushes generally, and particularly to that kind employed in cleaning or abrading metal, stone, &c.; and my invention consists of the constructions and combinations of devices which I shall hereinafter fully describe and claim.

To enable others skilled in the art to which my invention appertains to make and use the same, I will now describe its construction and indicate the manner in which the same is carried out.

In the accompanying drawings, A represents an arbor or shaft, the outer end of which is threaded to receive a nut *a*, for a purpose to be hereinafter stated. Upon the arbor is fitted a sleeve B, which bears against a shoulder *b* on the arbor, and is held in place by the nut *a* bearing against the outer end of the sleeve or against an interposed washer *c*, as shown in Fig. 2. Around the outer end of the sleeve are the radially-disposed rods C, convexly curved, as shown, and each having one end fixed to the sleeve and the other end adapted to pass through openings in a disk D, fixed to the sleeve and to which said ends are riveted, headed down or otherwise secured, these rods forming links, staples, or pivots about which the holders of the abrading-brushes have a free swinging movement.

These holders consist of sleeves or sockets E, into which is firmly secured the wire or other abrading material which forms the brushes proper, and the inner ends of said sleeves or sockets are formed with eyes F, through which the curved rods C loosely pass, whereby said holders have a free movement in all directions about said rods.

To hold the brushes in proper position and to adjust them so that the distance between their outer ends may be varied to correspond with the size of the material or space operated upon, I employ a dished collar G, having a hub or sleeve H adapted to be mounted upon the sleeve B and adjustably held thereto by means of a set-screw *d* or analogous device. The outer end of this collar is dished or cup-shaped, and its inner periphery at *e* is faced with wood, leather, or similar material to act as a cushion and prevent unnecessary wear of the sleeves which carry the tufts of abrading material. From this description it will be seen that the brush revolves in a plane substantially parallel with the arbor upon which it is fitted, and that when in operation the centrifugal force throws the independent brushes outward, so that they have a bearing against the wood-faced inner surface of the collar G.

A brush constructed as herein described is especially adapted for cleaning those parts of metal castings impossible to reach with a brush whose abrading material is not substantially parallel with the shaft which carries it. In other words, if the inside of a cast pulley and the arms and hub of the same are to be cleaned, it can only be done by hand or by a brush substantially like the one herein shown and described. Again, by making the collar G adjustable on its sleeve I am permitted to move it forward or backward, and thereby adjust the independent brushes so that they may, when in operation, describe larger or smaller circles, according to the adjustment and the size of the space to be cleaned.

This brush is also adapted for operating upon stone, wood, or any other substance whose surface is to be cleaned or abraded.

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

1. The combination, with an arbor, of a sleeve thereon carrying a series of independent brushes loosely mounted and adapted to be thrown outward by centrifugal force, and a collar adjustably mounted on said sleeve and adjusting the brushes, substantially as herein described.

2. In a rotary brush and in combination with its arbor, a series of independent loosely-

mounted brushes carried by the arbor, and a sliding piece for limiting the outward throw of the brushes, substantially as herein described.

3. In a rotary brush, the arbor and a sleeve mounted thereon, in combination with independent brushes loosely mounted on the sleeve in a plane substantially parallel with the arbor, and a collar adjustably secured to said sleeve and having its outer end dish-shaped, so as to confine the independent brushes and limit their outward movement, substantially as herein described.

4. In a rotary brush, the combination of the arbor, the sleeve thereon provided with the radially-disposed rods, the independent brushes loosely mounted upon said rods, and the dished collar surrounding the brushes and limiting their outward movement, said collar being adjustably secured to the sleeve and having its inner surface faced with wood or analogous material, substantially as herein described.

5. In a rotary brush, the combination of the arbor, the sleeve thereon provided with the disk and radially-disposed curved rods, the independent brushes having sockets loosely mounted on the rods, and the adjustably-secured dished collar for adjusting the brushes, substantially as herein described.

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Witnesses:
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