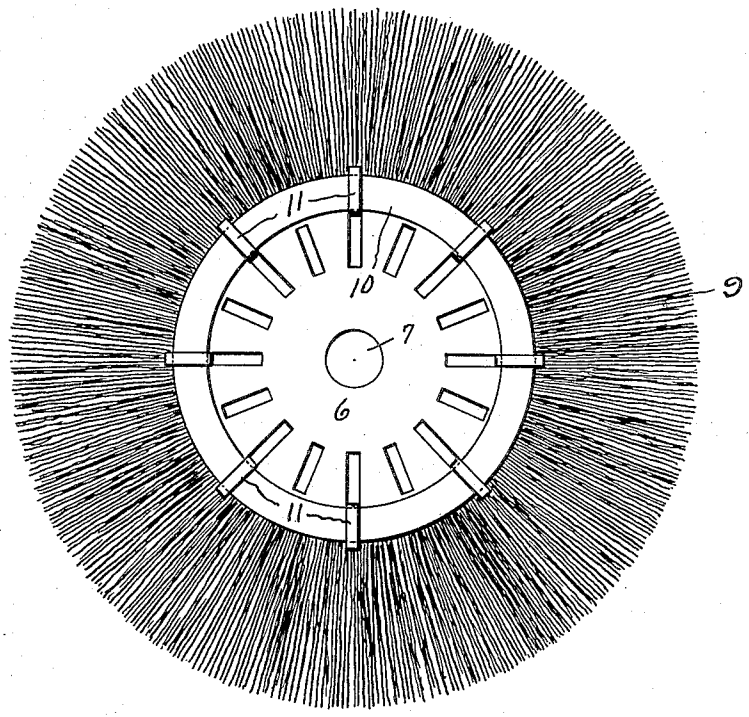
R. C. HEROLD.

ROTARY BRUSH.

APPLICATION FILED AUG. 20, 1920.

1,380,381. Patented June 7, 1921.

Fig. 1



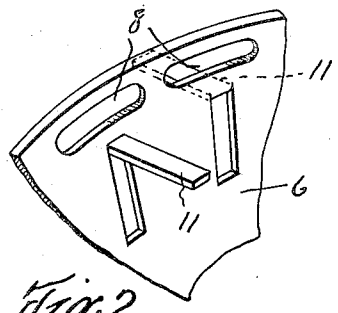


Fig. 2

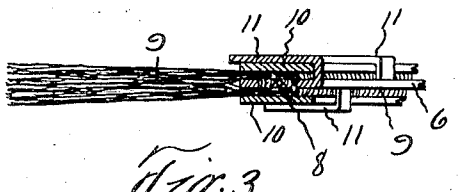


Fig. 3

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UNITED STATES PATENT OFFICE.

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ROTARY BRUSH.

1,380,381. Specification of Letters Patent. Patented June 7, 1921.

Application filed August 20, 1920. Serial No. 404,873.

To all whom it may concern:

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

This invention relates to rotary brushes of that type in which the bristles or wires are held by a plate or the like adapted to be mounted on a rotary shaft, and the object of the invention is to provide simple and improved means for fastening the bristles or wires in place, said means consisting particularly of tongues struck up from the body of the sheet metal plate or disk on which the wires are mounted, the tongues serving to clamp the rings against opposite sides of the mass of bristles mounted on the plate. The construction is such that the parts can be cheaply constructed, and the bristles can be easily renewed when desired.

One form of the invention is illustrated in the accompanying drawings in which Figure 1 is a plan of the brush. Fig. 2 is a detail in perspective of part of the middle disk or plate. Fig. 3 is a partial section of the brush.

Referring specifically to the drawings, 6 indicates a sheet metal plate or disk having a central hole 7 to receive a shaft on which it may be mounted. Near its outer edge this disk is provided with a series of slots 8, the number of which may be varied as desired, and which extend in a circular line around the edge of the disk. Wires 9 or other brush materials are inserted through these slots and then folded over outwardly to present their ends as the working surface of the brush.

The bristles, wires or other materials are clamped in position on the disk by means of two flat metal rings 10 located respectively at opposite sides of the plate and lying against the opposite sides of the brush material. These rings are held in place by means of tongues 11 which are struck up from the body of the disk 6 on opposite sides thereof alternately and then bent over outwardly against the outer sides of the rings 10.

The brush material is thereby clamped against opposite sides of the middle disk, and the rings 10 are preferably located so as to cover the bends or folds of the bristles or wires where they pass through the slots 8.

No fastening is necessary other than the tongues 11 and the parts of the brush can be quickly assembled by inserting the bristles or wires and bending them as shown, and then slipping the rings in place and bending and pressing the tongues down upon the rings. To renew the bristles or wires it is only necessary to bend the tongues back and slip the rings off, insert new bristles or wires and replace the parts. The whole brush is therefore mounted on a single disk or plate, and it is unnecessary to mount the bristles or wires on a separate ring before being placed on the disk, as has been proposed in former constructions.

I claim:

1. A rotary brush comprising a plate having slots around the outer edge thereof, brush material inserted through said slots, rings placed against opposite sides of said material, and tongues struck up from the plate and folded over upon the rings.

2. A rotary brush comprising a plate having slots near the outer edge thereof, brush material inserted through the slots and folded outwardly against opposite sides of the plate, outer rings placed against opposite sides of the brush material, and tongues struck from the body of the plate inside of the rings and folded over outwardly against the outer sides of the rings, to hold the same clamped against the brush material.

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

RAYMOND C. HEROLD.

Witnesses:

JOHN A. BOMMHARDT,

EUGENE A. CANNING.