

R. RADINSE.
ROTARY BRUSH.

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988,506.

Patented Apr. 4, 1911.

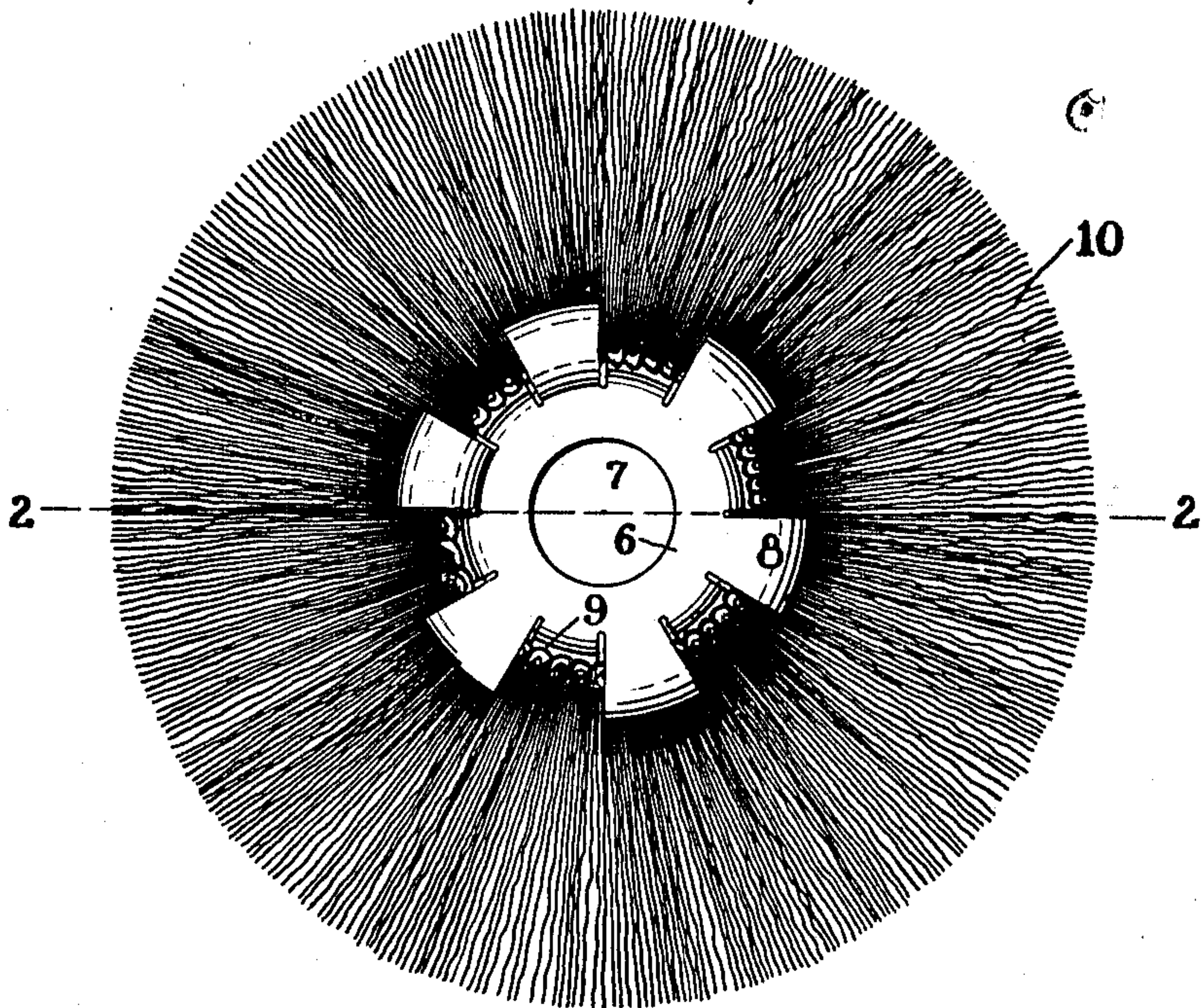


FIG. 1.

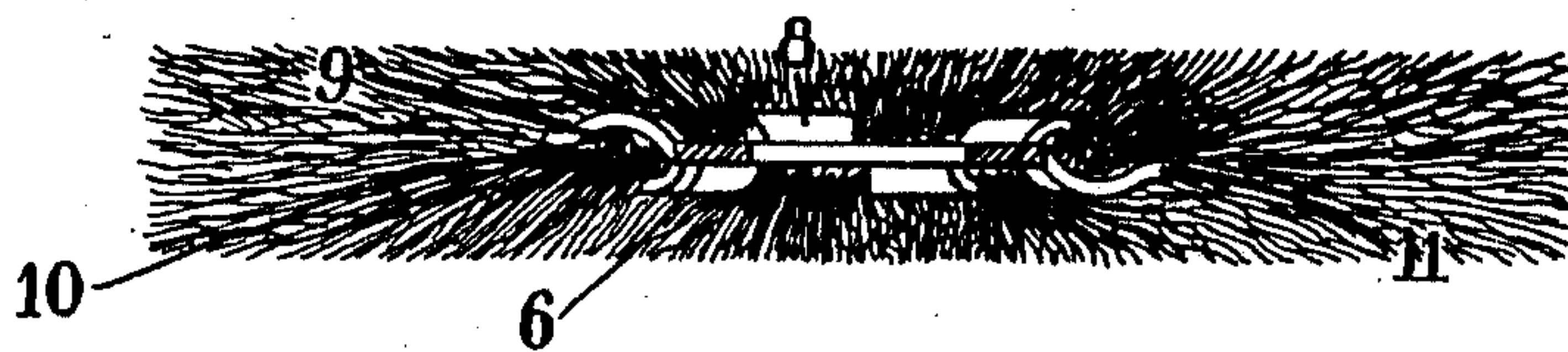


FIG. 2.

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UNITED STATES PATENT OFFICE.

RUDOLF RADINSE, OF CLEVELAND, OHIO, ASSIGNOR TO THE MANUFACTURERS' BRUSH COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

ROTARY BRUSH.

988,506.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, RUDOLF RADINSE, 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, and especially to that class of brushes in which the bristles or wires or other abrasive devices are held by a plate or collar adapted to fit on or be fastened to a rotary shaft.

The particular object of the invention is to provide improved means for holding the wires or bristles in place, this result being effected by the use of a single plate with peripheral tongues struck up at the edge thereof, these tongues serving to clamp or hold a wire around which the bristles or their equivalents are bent.

The invention has the advantage that only a single central plate is necessary to hold the other parts of the brush in place, and accordingly the parts may be very cheaply constructed and assembled.

In the accompanying drawings—Figure 1 is a plan of the brush. Fig. 2 is a section on the line 2—2 of Fig. 1.

Referring specifically to the drawings, 6 indicates a central plate having an axial hole 7 by means of which it may be fitted on a spindle or shaft and suitably attached by any appropriate means. At its outer edge this plate, which is circular in plan, is provided with a series of tongues 8 which are integral therewith, the plate and tongues being stamped from a single piece of sheet metal. The tongues are alternately bent in opposite directions, so as to clamp a retaining ring 9 made of twisted wire or the like, into the bands or twists of which ring the wires, fibers or bristles 10 are woven or inserted, and then folded over so that the ends of the wires or bristles extend outwardly or radially so as to present their free ends to the work which may be applied to the brush. The tongues are preferably flared slightly at their outer ends, as indicated at 11, to avoid a sharp edge which might tend to crystallize and fracture the wires, under pressure.

In assembling the parts the tongues are alternately sprung apart in opposite directions, or toward opposite sides of the plate, and the wire ring 9 with the bristles attached thereto is inserted between said tongues, which are then pressed together or clamped upon the wires, the tongues being bent over the ring 9 to clamp the same and thus hold the abrading wires or bristles in position. Obviously cloth strips or other materials for forming a brush face may be used instead of wires or bristles, the strips or strands being looped around the wire ring 9 as shown, before the same is clamped by the tongues of the plate. The single plate 6 with its tongues serves to hold the material of the brush in an effective manner, without the necessity for other clamping plates or devices, and it is obvious that the parts may all be cheaply constructed and easily assembled. To insert new brush material it is simply necessary to pry the tongues apart, permitting the removal of the wire 9 and the strands held thereby, and the substitution of new parts for those removed. If desired, a wide brush may be built up of a number of units constructed as above, assembled on a single spindle or shaft and clamped thereon by appropriate means.

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

1. A rotary brush comprising a plate having tongues at the outer edge thereof, a retaining ring clamped by said tongues, and fibers connected to said ring, and projecting outwardly therefrom.

2. A rotary brush comprising a plate having a series of peripheral tongues, struck up therefrom, a ring, and fibers folded around said ring, the ring being clamped by the tongues and extending around the outer edge of the plate.

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

RUDOLF RADINSE.

Witnesses:

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