

No. 808,006.

PATENTED DEC. 19, 1905.

C. H. BUTLER.

ROTARY BRUSH FOR STREET SWEEPERS AND THE LIKE.

APPLICATION FILED OCT. 20, 1904.

Fig. 1.

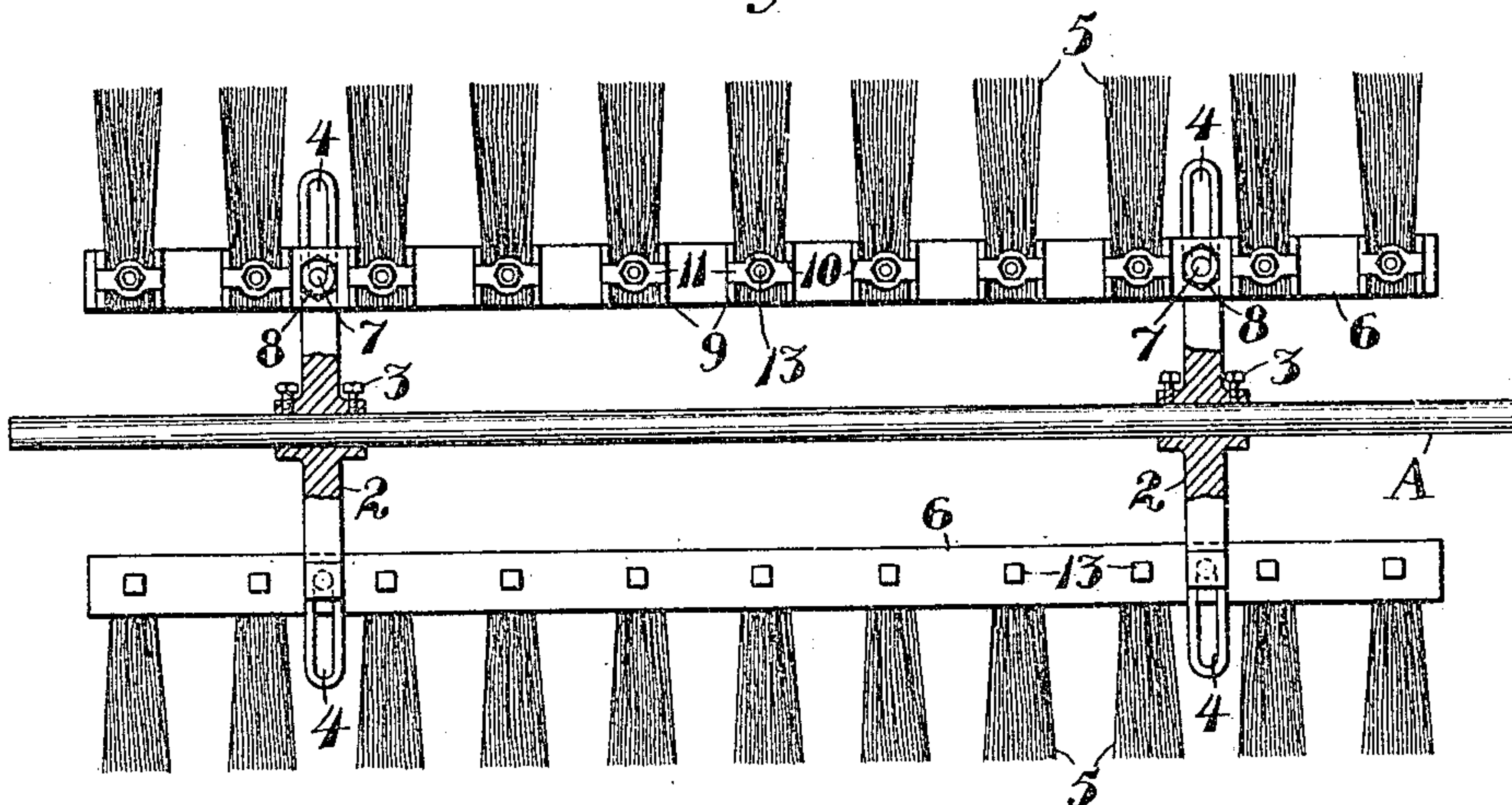


Fig. 2.

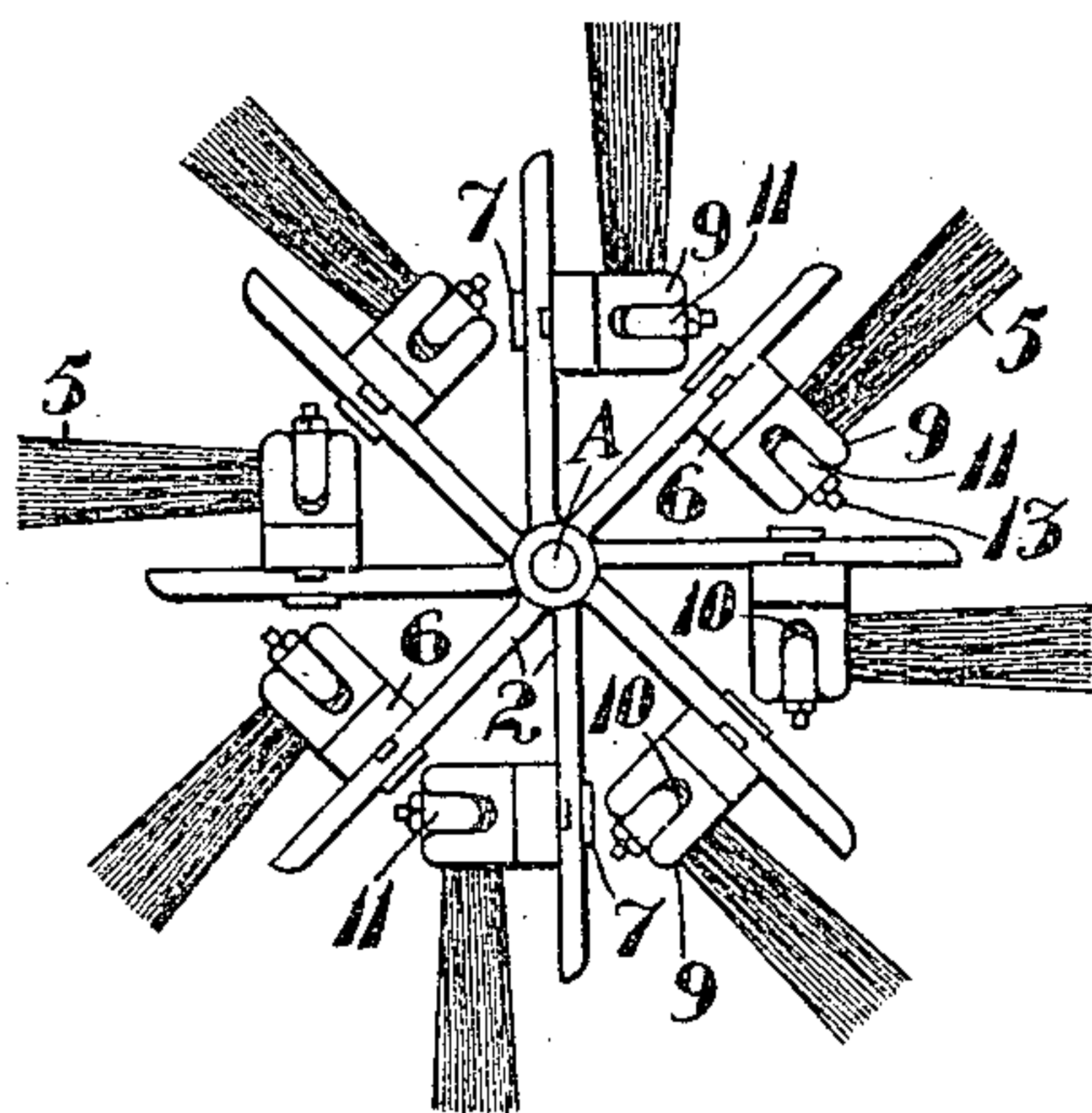


Fig. 3.

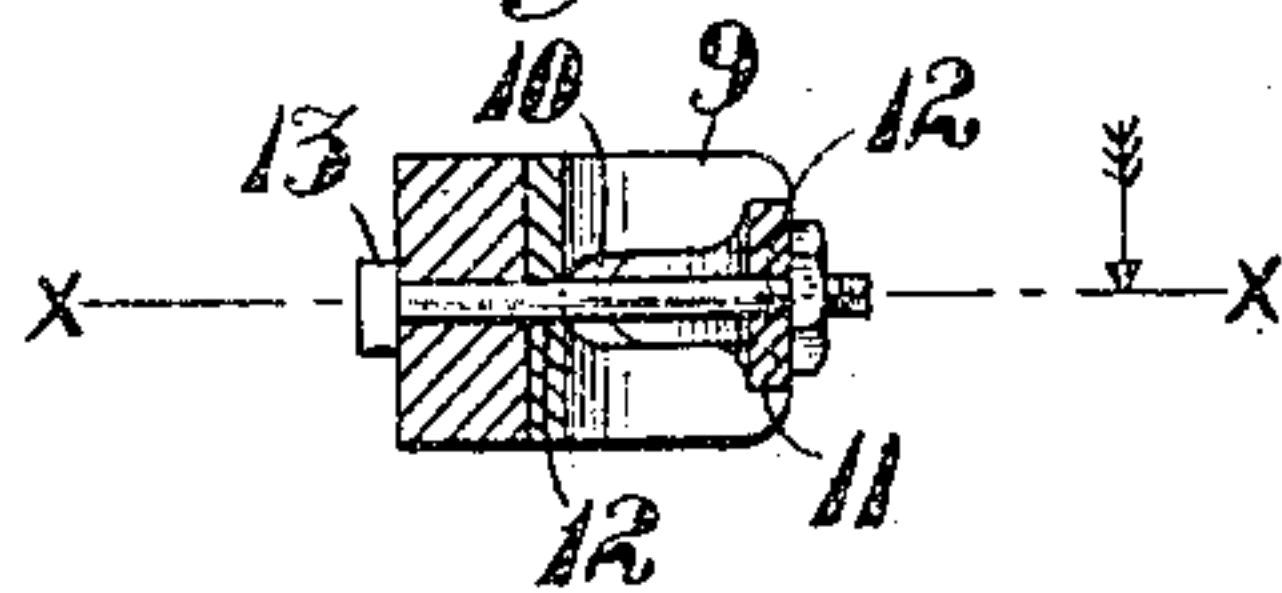
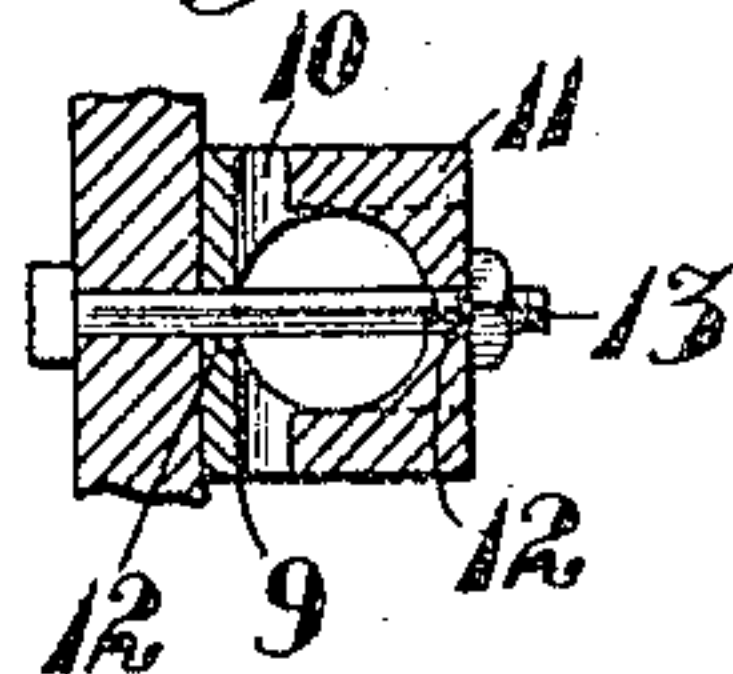


Fig. 4.



Witnesses:-

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UNITED STATES PATENT OFFICE.

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ROTARY BRUSH FOR STREET-SWEEPERS AND THE LIKE.

No. 808,006.

Specification of Letters Patent.

Patented Dec. 19, 1905.

Application filed October 20, 1904. Serial No. 229,265.

To all whom it may concern:

Be it known that I, CHARLES H. BUTLER, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented new and useful Improvements in Rotary Brushes for Street-Sweepers and the Like, of which the following is a specification.

My invention relates to an improved rotary brush for street-sweeping machines and the like.

The invention consists of the parts and the construction and combination of parts, as hereinafter more fully described and claimed, having reference to the accompanying drawings, in which—

Figure 1 is a longitudinal sectional view of my rotary brush. Fig. 2 is an end view of same. Fig. 3 is a detail in partial section of a bristles-holder. Fig. 4 is a section on line *xx* of Fig. 3.

In carrying out my invention I take an axle, as A, of any suitable length, size, or material, and fasten to it at suitable points along its length the spiders 2. The latter are shown as having hubs carrying the set-screws 3, by which the spiders are clamped to the axle. These spiders have radial arms provided with longitudinal slots 4, lying in planes at right angles to the axle.

The bristles 5 (and by bristles I mean generally any suitable material for making brushes) are removably secured to bars 6, which latter are arranged in cylindrical series parallel with the central support A and are adjustable radially of the spiders in the slots 4 by suitable means, as the bolts 7 and nuts 8.

The bristle-holding means comprises a broad substantially U-shaped member or clip 9, having radial slots 10 in its sides to receive a complementary member 11. The latter and clip 9 are centrally perforated, as at 12, and one member fits so into the other that when a bolt, as 13, is inserted through the perforations 12 in both members and a corresponding perforation in a bar 6 and drawn up the two members will grip a bunch of bristles interposed between them and hold it fast.

A worn bunch is removed or a new one put

in by simply loosening bolt 13 to release the old, inserting a new bunch between the members 9 to 11, and tightening bolt 13 again.

By reason of this construction an unskilled person can quickly renew an entire brush at very little expense other than the cost of the material constituting the bristles.

When new bunches are put in, the bolts 7 are slacked up and the brush-bars 6 moved in close to the axle A. As the bristles wear down the bars are moved outward to maintain a uniform diameter of the brush at all times, even with the bristles worn to the shortest stubs. Thus practically the entire material of the bristles may be used with little waste and the brush will always operate effectually on the surface to be cleaned, however short the stubs.

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

1. A rotary brush comprising a central support and bristle-supports adjustable radially thereof, said bristle-supports each including a pair of U-shaped clips relatively reversed and with the arms of one clip engaging with those of the other clip, said clips receiving the bristles between them, and means for forcing the clips together to grip the bristles.

2. In a brush, the combination of a bunch of bristles and a pair of relatively reversed substantially U-shaped clips, one of said clips having its arms slotted and the other clip having its arms fitted within the slots of the first-named clip, and means for forcing the clips together to grip the bristles.

3. A rotary brush comprising a cylindrical series of suitably-supported radially-adjustable bars, bristle-supporting means on said bars, means for effecting the radial adjustment of the bars, said brush-supporting means including a substantially U-shaped clip having slotted arms and a member fitting within the clip and having arms fitting the slots in said clip and cooperating with the latter to grip the bristles.

4. In a brush, the combination with a suitable radially-adjustable support, of a bunch of bristles, and a bristle-support comprising a pair of relatively reversed, U-shaped clips,

one of said clips having its arms slotted and
the other clip having its arms fitted within
the slots of the first-named clip, said clips
having registering perforations, and a bolt
5 passing through said perforations and pro-
vided with means for forcing the clips to-
gether to grip the bristles.

In testimony whereof I have hereunto set
my hand in presence of two subscribing wit-
nesses.

CHARLES H. BUTLER.

Witnesses:

WILLIAM DUNSTAN,
JOHN E. GUSTAFSON.