

(No Model.)

C. L. JOY.
SCRATCH BRUSH.

No. 543,097.

Patented July 23, 1895.

Fig. 1.

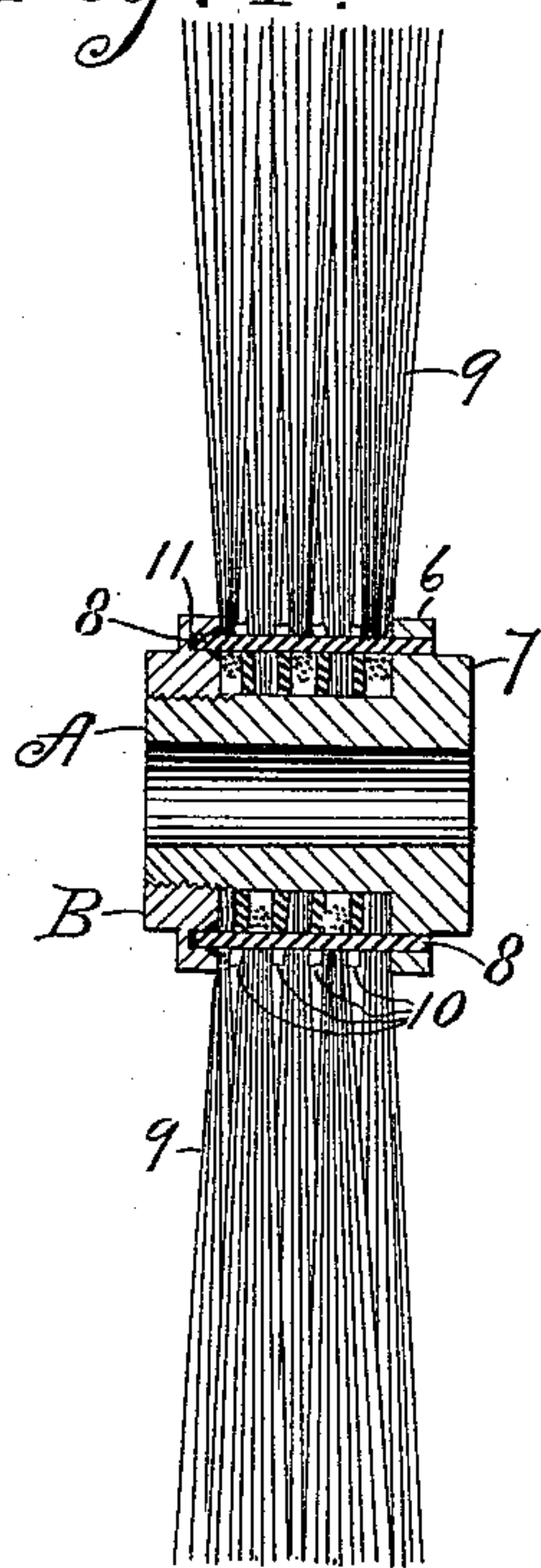


Fig. 2.

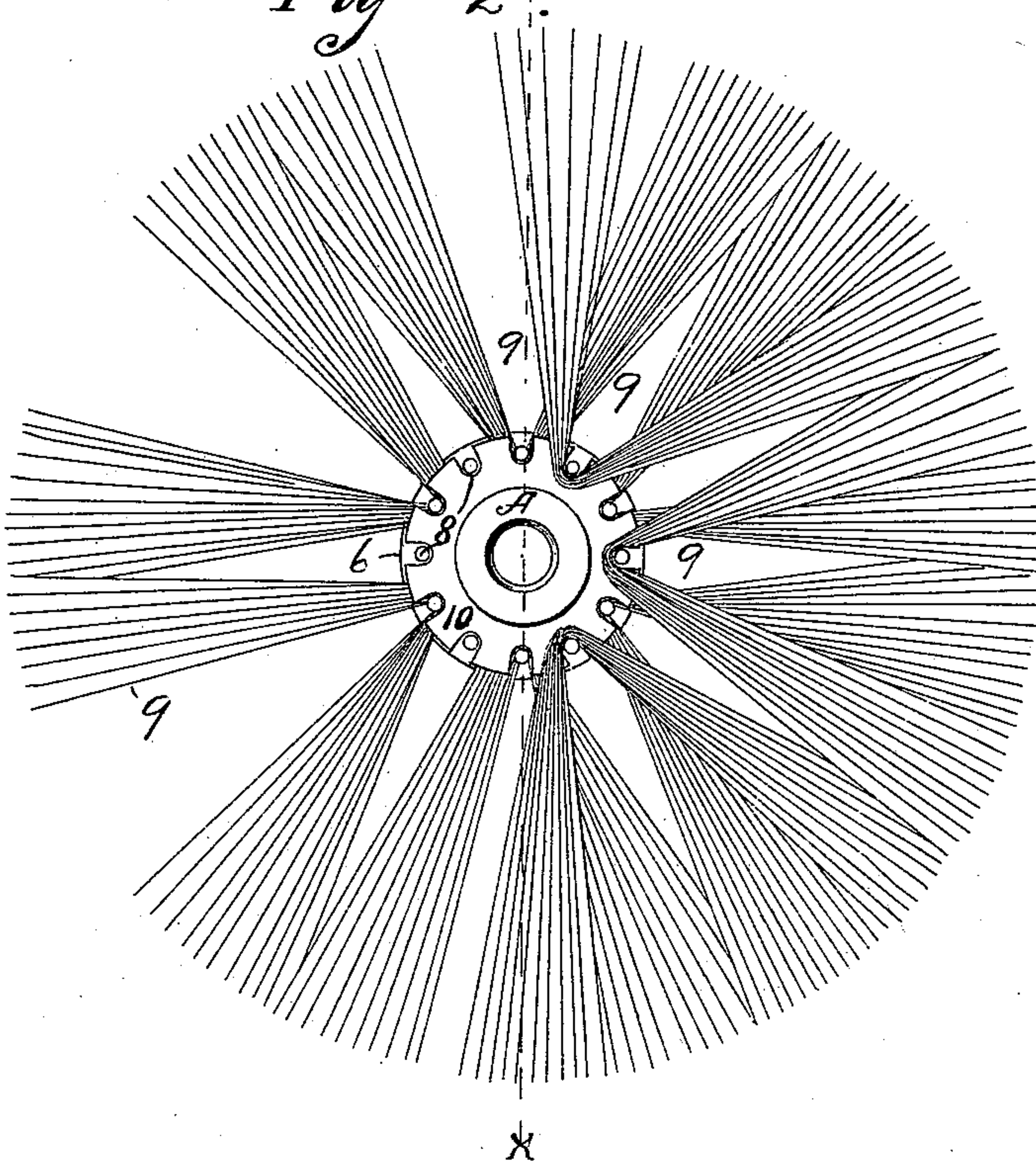


Fig. 3.

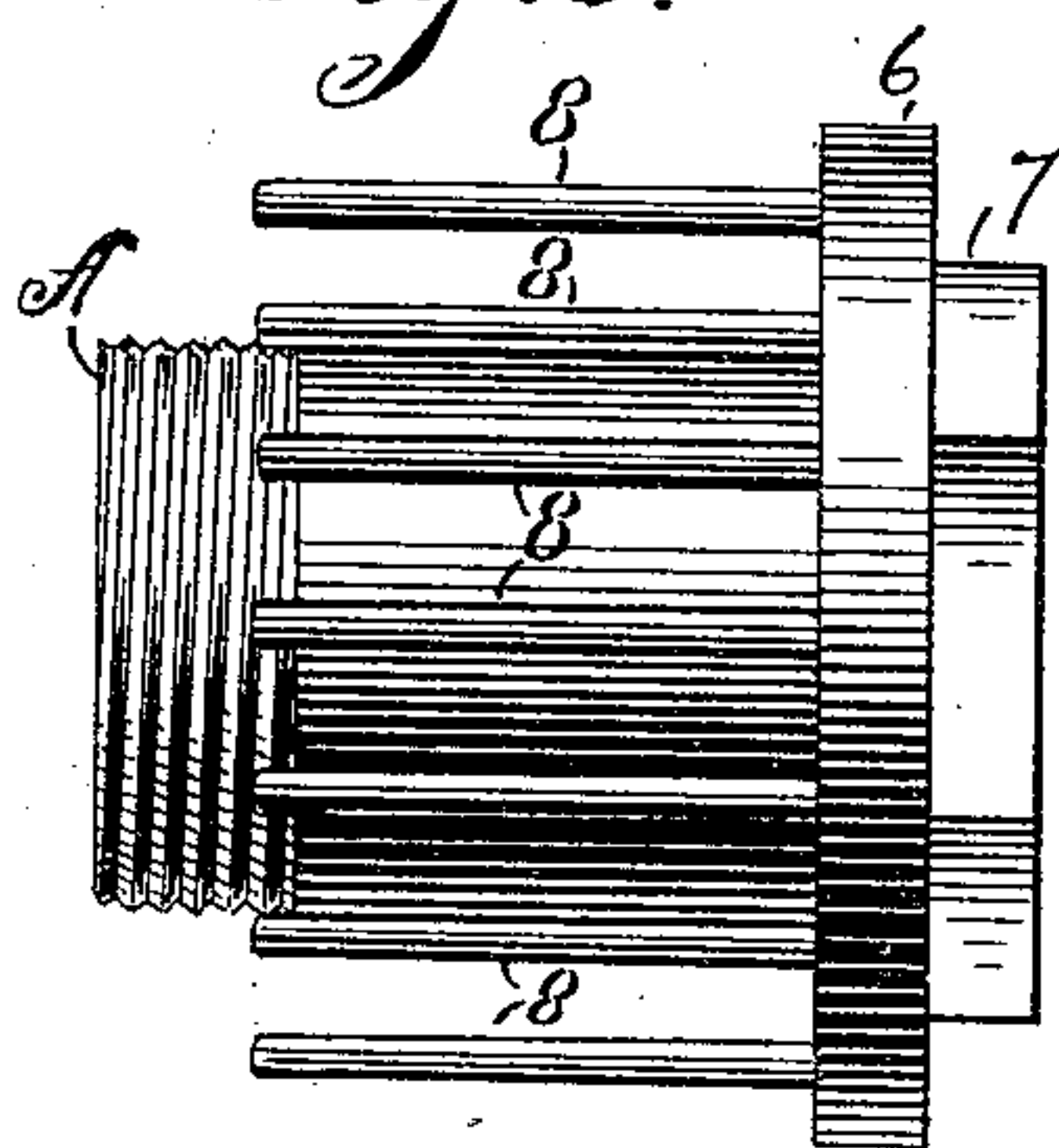


Fig. 4.

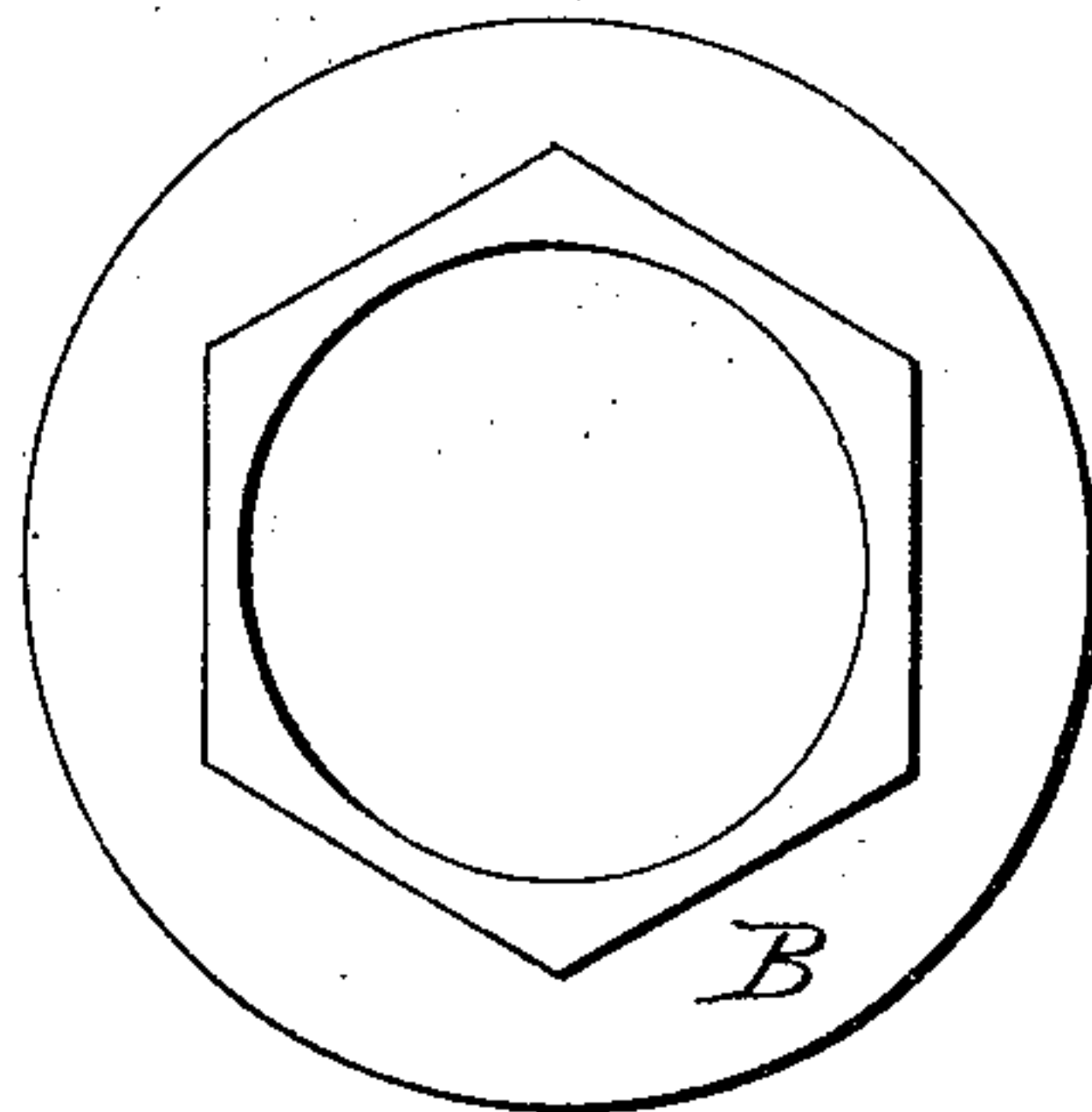
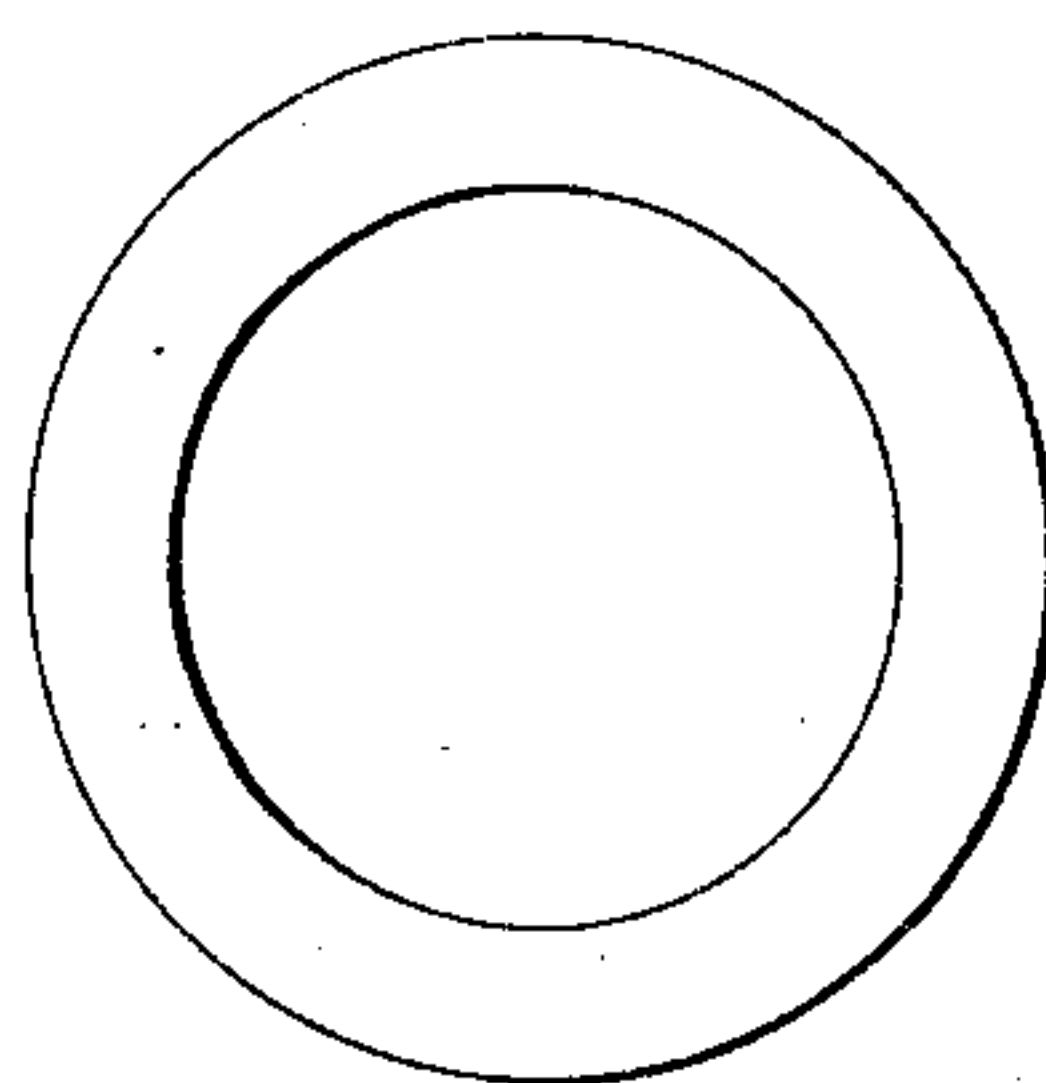


Fig. 5.



Witnesses
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CHARLES L. JOY, OF NEW HAVEN, ASSIGNOR OF ONE-HALF TO MILTON S. TRACY, OF GLASTONBURY, CONNECTICUT.

SCRATCH-BRUSH.

SPECIFICATION forming part of Letters Patent No. 543,097, dated July 23, 1895.

Application filed January 20, 1894. Renewed December 27, 1894. Serial No. 533,124. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. JOY, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Scratch-Brushes, of which the following is a specification.

My invention relates to improvements in scratch-brushes for cleaning castings and for platers' use; and the objects of my improvement are simplicity and economy in construction and general efficiency of the article.

In the accompanying drawings, Figure 1 is a central section of my brush. Fig. 2 is a side elevation of parts thereof. Fig. 3 is an elevation of the central portion of my brush-head. Fig. 4 is a face view of the holding-nut, and Fig. 5 is a view of a modified form of washer which may be used in my brush. Figs. 3, 4, and 5 are on an enlarged scale.

A designates the central hub having a screw-thread at one end for receiving the holding-nut B and at its opposite end a flange 6, the outer face of which may be provided with an angular portion 7 for the application of a wrench, if desired. In this flange 6 I place a concentric series of pins 8, the same being arranged parallel to the central hub and at some distance therefrom. The nut B is also provided with an angular portion corresponding with the angular portion 7 for the application of a wrench. The filling 9 is formed of wire which is bent into a V form and placed over the pins 8, with the pin inside of the apex of the V, as shown. I prefer in forming the first row of filling to place the filling over every alternate pin only and then place the washer 10 over the broad sides of that portion of the filling which is adjacent to the pins. I prefer to form notches in the edges of these washers, as shown in Fig. 2, so that the washer may extend diametrically beyond the circle of pins, but if desired a plain washer, as shown in Fig. 5, of a size that will just fill the space inside the pins and outside of the hub A may be employed without changing the other features of my invention. In the next row I prefer to place the filling over those pins which received no filling in the first row, so that the outwardly-projecting portions of the filling

in the second row will cross those of the first row.

In Fig. 2 I have illustrated the brush as having received one complete row of filling on every alternate pin with one washer covering the same, and I have also represented three bunches of filling as properly placed upon three of the pins at the right-hand side of the brush for the next row but without any washer over them. When the other three pins to complete this row have been supplied with filling another washer 10 is placed over them and other rows of filling added in like manner until the brush is as thick as may be desired. The nut B is then screwed upon the hub A to compress the washers and filling and hold them firmly in place. I form an annular groove 11 in the inner face of the nut, as shown in Fig. 2, to receive the ends of the pins and hold them from spreading.

While I have described a wire filling and placing the same only on every alternate pin in each row, it is evident that a filling of other material may be employed if desired and also that the filling in each row may be placed over every pin.

By my improvement I produce a rotary brush-head that is especially designed for a wire-filling and which may be conveniently refilled by the user from time to time as occasion may require.

I claim as my invention—

1. The herein described rotary brush, consisting of the hub A having a flange 6 and a circular series of pins 8, the several rows of filling, the intervening notched washers extending diametrically beyond said circle of pins, and the nut B, substantially as described and for the purpose specified.

2. The herein described brush head consisting of the hub A having a flange 6 and circular series of pins 8, and the nut B screwed upon the end of said hub and having on its inner face the annular groove to receive and hold the ends of said pins, substantially as described and for the purpose specified.

CHARLES L. JOY.

Witnesses:

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