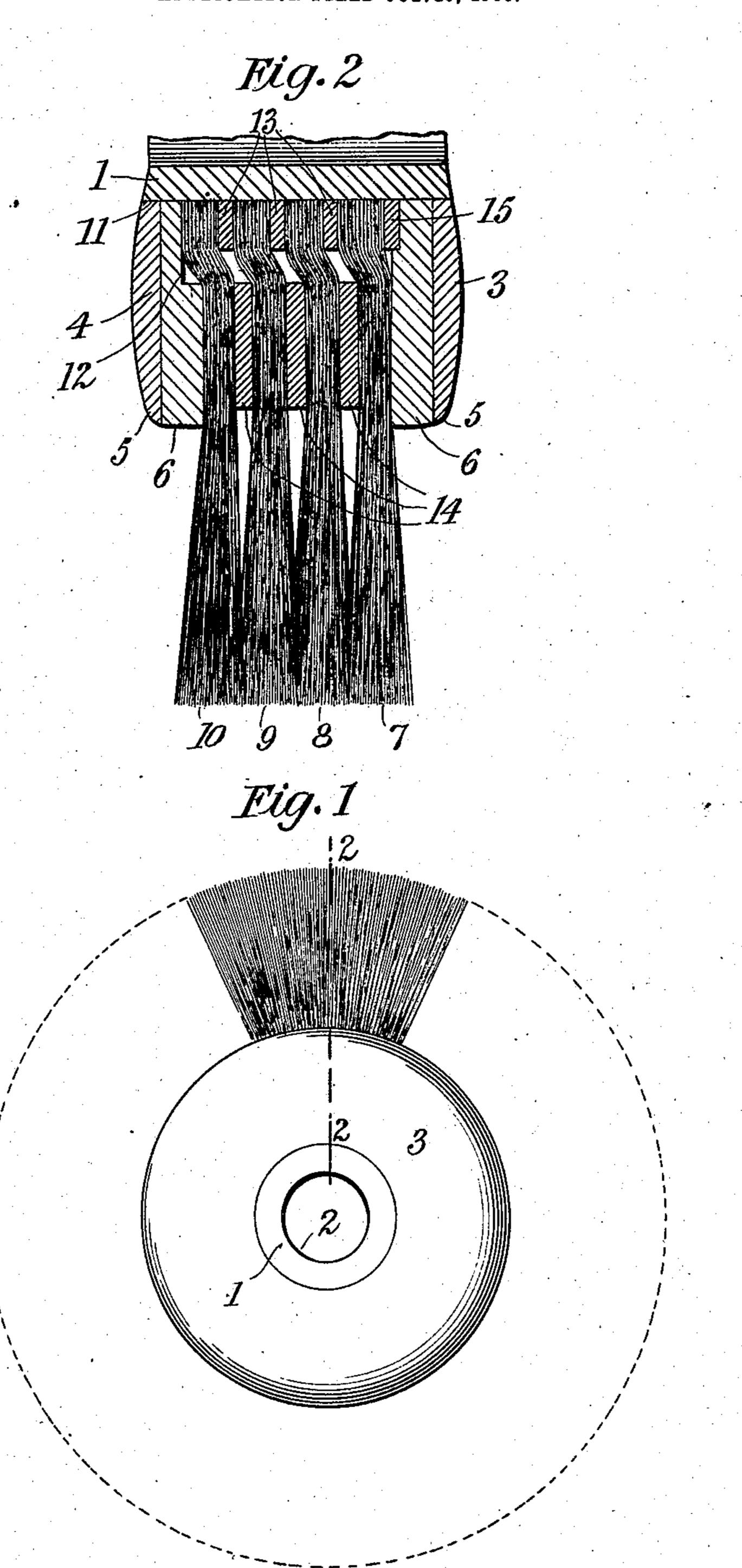
P. B. BLEIMEYER.
BRUSH.
APPLICATION FILED OCT. 15, 1908.



Thos. J. Maquire

Peter 13. 13 leinneyer By his Ottorney's Betts Shelfill Statly Atta

## UNITED STATES PATENT OFFICE.

PETER B. BLEIMEYER, OF NEW YORK, N. Y., ASSIGNOR TO ZUCKER & LEVETT & LOEB COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

## BRUSH.

No. 855,040.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed October 15, 1906. Serial No. 338,901.

To all whom it may concern:

Be it known that I, Peter B. Bleimeyer, a citizen of the United States and of the State of New York, and a resident of the borough 5 of Brooklyn, city of New York, have invented certain new and useful Improvements in Brushes, of which the following is a specification.

My invention relates more especially to 10 brushes used for polishing and buffing, in the form of wheels, comprising bristles or fibers held in place in the manner hereinafter described. It is desirable in brushes of this kind to have as many fibers in a given space 15 as may be safely secured and to have a compact outer periphery or brushing surface, and to so secure the fibers in place that the brush will not be affected by moisture. The latter is an especially desirable feature in polishing 20 brushes, since they are frequently run at very high speeds and used with wet or moist polishing compositions.

The objects of my invention are to produce a brush which will embody the above desir-25 able features, and which will be compact,

cheap to manufacture, and durable. . .

Referring to the drawings accompanying and forming a part of this specification, Figure 1 is a side view of a polishing wheel em-30 bodying my invention and Fig. 2 is a section on the line 2, 2 of Fig. 1, and shows the means by which the fibers are held in position.

1 designates the center of the brush, which is provided with an opening 2 adapted to re-35 ceive an arbor for the purpose of rotating the same. The side members 3 and 4 are mounted on the center piece 1. The parts 3 and 4 are each made of two pieces, 5 and 6, secured together in any suitable way. When the 40 construction is of wood, of course the parts 5 and 6 should be disposed with the grain of the two parts crosswise. It is to be understood, however, that the body of the brush formed by the parts 1, 3 and 4, may be of any 45 suitable material.

The fibers are assembled in layers 7, 8, 9 and 10, which are clamped on one side by the member 3 and on the other side by the member 4; and have their inner ends resting on 50 the surface 11 of the part 1. The member 6 is provided on its inner side with an annular recess 12 into which the lower part of the layer 10 is forced when the device is assembled. The layers of fiber are slightly

separated from each other at their inner ends 55 by the rings 13 resting on the center 1. A second set of rings 14, larger in diameter than the first, are also placed between the layers. The ring 15 is placed at the inner end and on the outside of the fibers forming layer 7. 60 The layers and rings are tightly clamped between the side members so that the lower ends of the fibers are forced out of line in the direction of the recess 4 in part 6. This arrangement firmly secures the fibers in place, 65 and while I may employ glue or cement to assist in securing the fibers in place, these substances are not essential in the practice of my invention. The rings may be formed of any suitable material, such as wood, hard 70 fiber, rubber or canvas, or metal, and the brushing surface may be formed of bristles, tampico, horse hair, or any of the well known materials in use for such purposes.

While I have illustrated and described a 75 brush having only four layers of fiber, it is obvious that my invention is not dependent on the number of layers, which may be varied as desired; and while I have described and shown only a circular brush, it is obvious 80 that my improvements may be applied to

brushes having other forms.

Having now fully described my invention, what I claim is:

1. In a brush of the kind described, a cy- 85 lindrical body for holding the fiber, comprising side clamping members, a plurality of separate layers of fibers between said clamping members and a plurality of separate rings of different sizes disposed between ad- 90 · jacent layers of fiber substantially as described.

2. In a brush of the kind described, a cylindrical body for holding the fibers, comprising side clamping members, a plurality of 95 layers of fibers between said clamping members, each layer being separated from the adjacent layers by a plurality of rings, the rings between adjacent layers being staggered with regard to each other, substan- 100 tially as described.

3. In a brush of the kind described, a cylindrical body for holding the fibers, comprising side clamping members, a plurality of layers of fiber between said clamping mem- 105 bers, each layer being separated from the adjacent layers by a plurality of rings, the rings being staggered with regard to each other,

and the inner ends of the fibers being forced out of line by the side clamping members and the rings, substantially as described.

4. In a brush of the kind described, a side clamping member, 3, and a side clamping member, 4, containing a recess, 12, a plurality of layers of fiber secured between said side clamping members, concentric rings, 13

and 14, disposed between said layers of fiber, the inner ends of the fibers being forced out 10 of line in the direction of the recess, 12, substantially as described.

PETER B. BLEIMEYER.

Witnesses:

Chas. Loeb, J. C. Rosenblum.