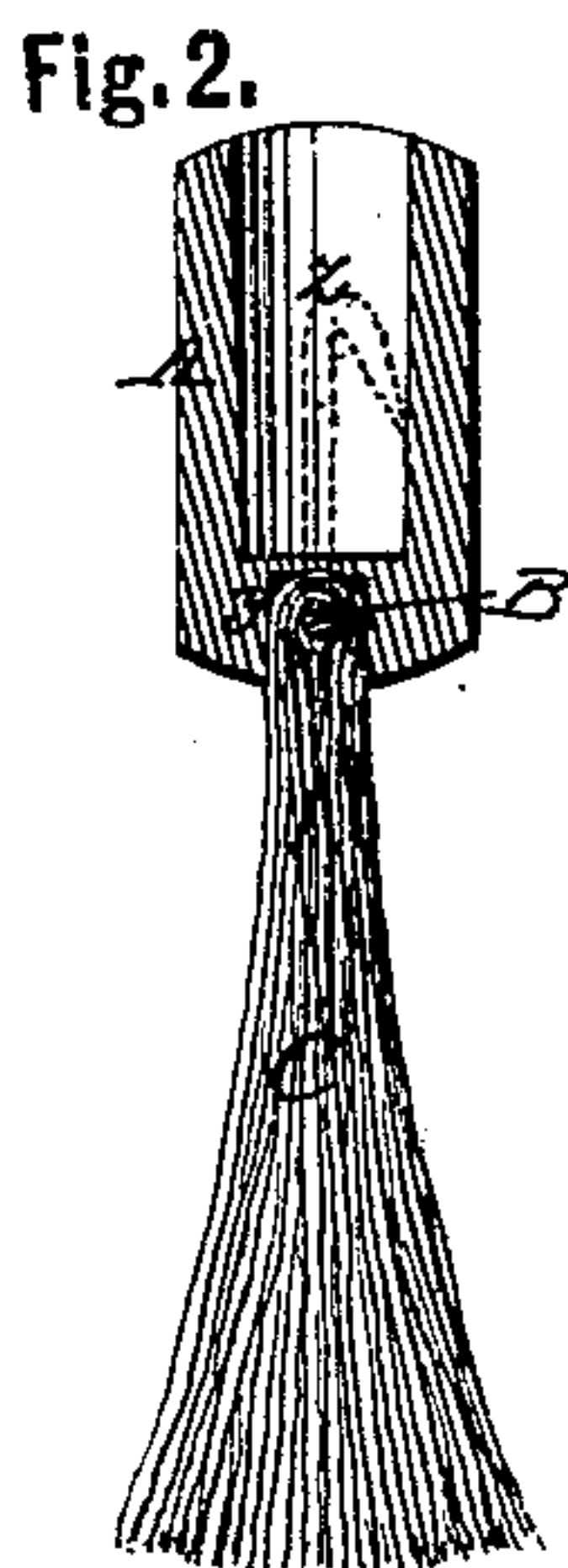
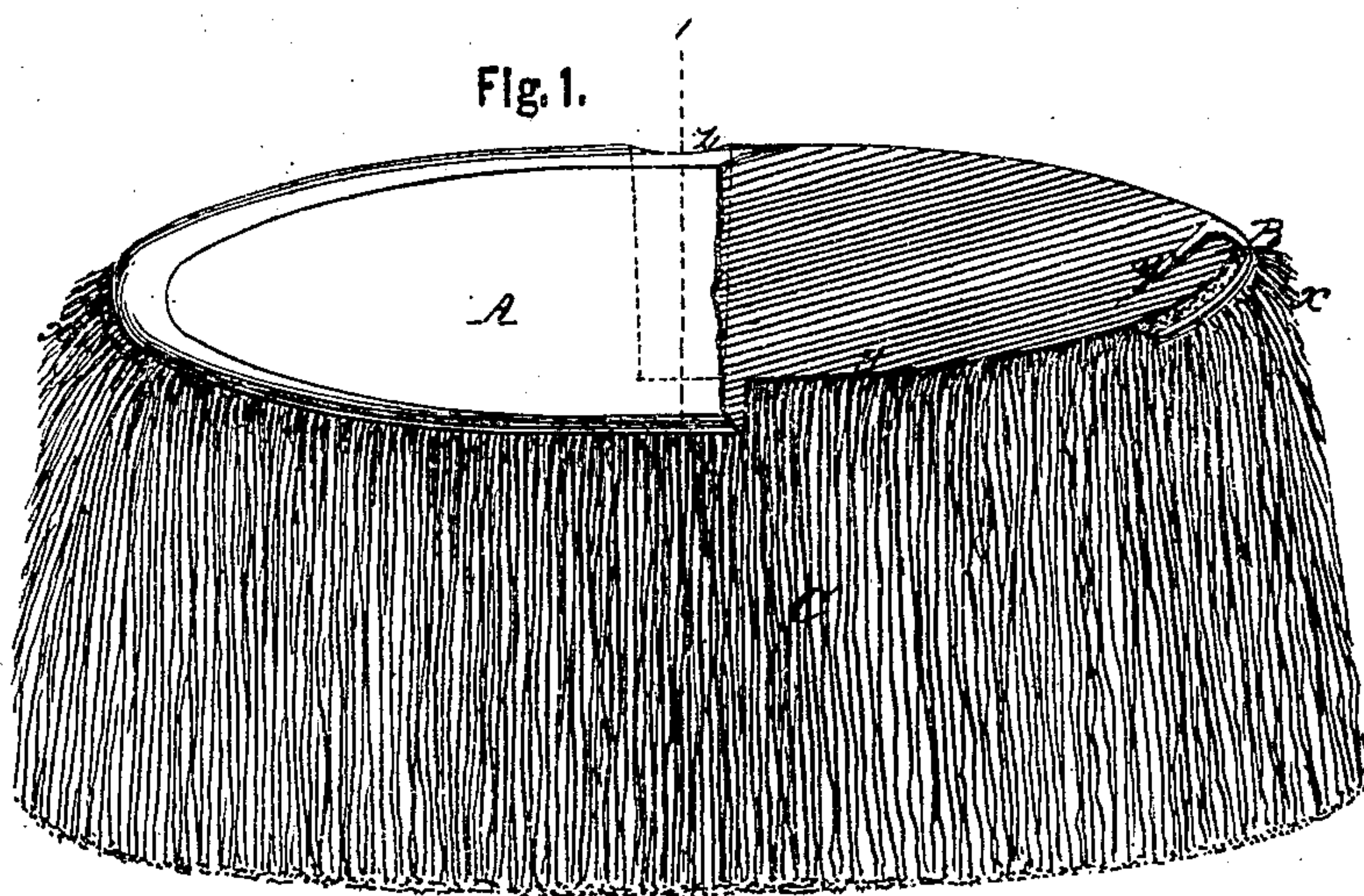


D. A. McDONEL & P. Z. KLOCK.

Improvement in Brushes.

No. 132,479.

Patented Oct. 22, 1872.



WITNESSES.

Jas. L. Ewin

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UNITED STATES PATENT OFFICE.

DANIEL A. McDONEL AND PETER Z. KLOCK, OF ASHLAND, PENN.

IMPROVEMENT IN BRUSHES.

Specification forming part of Letters Patent No. 132,479, dated October 22, 1872.

To all whom it may concern:

Be it known that we, DANIEL A. McDONEL and PETER Z. KLOCK, both of Ashland, in the county of Schuylkill, State of Pennsylvania, have invented an Improvement in Brushes, of which the following is a specification:

The invention relates, primarily, to a cheap long-handled brush for use intermediate to hair-brushes and brooms for house-sweeping purposes.

The material adopted for these brushes is "vegetable bristles." A superior, light, and cheap article is thus produced combining the elasticity of the hair-brush with the stiffness of the broom. The head is an oval wooden block with a socket to receive the handle and a groove in one edge to receive the "bristles," which are secured by a single stiff wire clinched at the ends of the head, without further fastening. The bristles, properly trimmed, project at the ends of the head to form guards.

In the drawing, Figure 1 is a face view, partly in elevation and partly in section, of a brush illustrating the invention; and Fig. 2 is a transverse section of the same on the line 1 1, Fig. 1.

In carrying out our invention we employ flat oval heads or blocks A, with rounded corners, and with handle-sockets *z* and longitudinal grooves *y* in their opposite edges, stiff iron wires B, and "vegetable bristles," splint, or other suitable stock C. The heads A are cut from suitable wood by machinery. The wires B may be simply cut of proper length and straightened, or they may, for additional security, be pointed, as represented. The "bristles" or other stock is simply sorted as usual.

For sweeping-brushes for house use we prefer, as before stated, to employ the cheap material known as "vegetable bristles." For

scrubbing-brushes a shorter grade of the same may be used or common bristles. For sweeping streets and stables "hickory splint" or metal may be used; and brushes for other purposes may be made from these same or other common materials.

To make a brush a head, A, is supported in inverted position and a proper quantity of "bristles," C, for instance, placed across the groove *y* in the same, and forced tightly into the same by a wire, B, the ends of "bristles" and wire projecting equally. The "bristles" are then arranged at the end of the block so as to project outward and form end-guards *x*, as represented in Fig. 1, and the ends *w* of the wire bent down over the ends of the head and clinched into the back of the same. The "bristles" are then trimmed and the head stained or varnished and, if desired, fitted with a handle, when the brush is ready for the market.

The end-guards *x* prevent abrasion of furniture and washboards by the ends of the head, and their formation is permitted by the oval shape of the head. This form also serves to give the wire the most advantageous contour of surface—an arch—on which to clamp the "bristles."

Claim.

What we claim as new herein is—

The improved house-brush, composed of wooden head A, with handle-socket *z* and "vegetable bristles" C, forming end-guards *x*, combined substantially as shown and described, for the purposes set forth.

DANIEL A. McDONEL.
PETER Z. KLOCK.

Witnesses:

M. M. MOCK,
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