G. CARLISLE.

Rotary Brushes.

No. 143,666. Patented Oct. 14, 1873.

Fig. 1

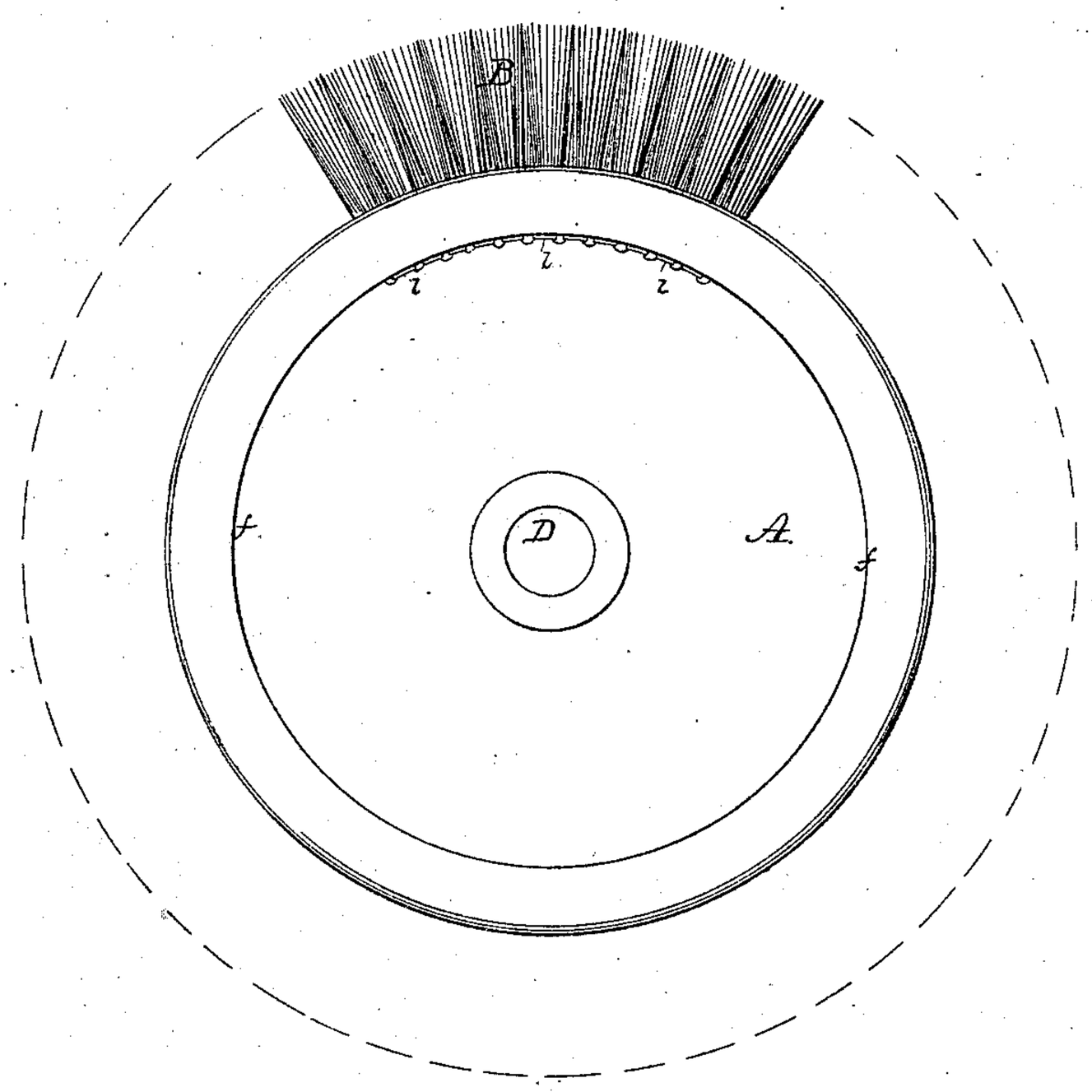

Fig. 2.

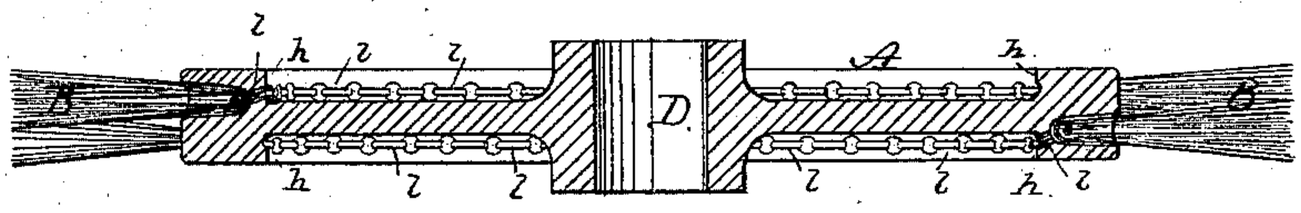

Fig. 3.

WITNESSES.

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GEORGE CARLISLE, OF ATTLEBOROUGH, MASSACHUSETTS.

IMPROVEMENT IN ROTARY BRUSHES.

Specification forming part of Letters Patent No. **143,666**, dated October 14, 1873; application filed July 3, 1873.

To all whom it may concern:

Be it known that I, GEORGE CARLISLE, of Attleborough, in the county of Bristol, State of Massachusetts, have invented an Improved Rotary Brush, of which the following is a specification:

This improved rotary brush, as to its bristle-holder or body, is made of metal, and otherwise constructed as will be hereinafter described.

In the accompanying plate of drawings, Figure 1 is a side view of my improved rotary brush; Fig. 2, a central cross-section, and Fig. 3 a plan view of a portion of the periphery of the bristle-holder or body.

A in the drawings represents the body or bristle-holder of the rotary brush, which body is made of a wheel form, and of metal; B, the bristles, arranged in bunches radially around the periphery of the body A, as ordinarily in rotary brushes, each bunch being held in a separate radial and inward-tapering hole, *a*, of the body. The several radial bristle-receiving holes *a* are arranged in a double row about the periphery of the holder or body A, the holes of one row being substantially opposite to the blank space *b* of the holder-periphery, between holes of the other row. (See Fig. 3.) The periphery of the wheel-shaped holder A for the bristles, as to its width, extends beyond the outside line of each row of bristle-holes *a*, and from the periphery toward the center for a short distance, as at *f*, Fig. 1. This width or thickness is maintained, when each face or side of the wheel-holder recedes, forming a corresponding concentric shoulder, *h*, upon each side, at and along which the inner end of the radial bristle-holes *a* open—the one row of holes through one shoulder, and the other row of holes through the other shoulder. (See Fig. 2.) *l l*, wires, one for each row of bristle-bunches. Each bunch of bristles in one row is looped about the wire *l* for such row, and thus, by properly fastening the ends of one wire, the bristle-bunches are secured in the holder A, as ordinarily in brush-making. At the center of the wheel A is a round hole, D, by which to secure the brush on a center arbor or mandrel, when desired to use it.

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

A rotary brush composed of the metallic disk A, having the concentric shoulders *h h*, and holes or openings *a a b b*, for receiving the bristles B, said bristles being confined in place by the wire *l*, substantially as described.

The above specification of my invention signed by me this 14th day of June, A. D. 1873.

GEO. CARLISLE.

Witnesses:

J. P. MCELROY,

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