

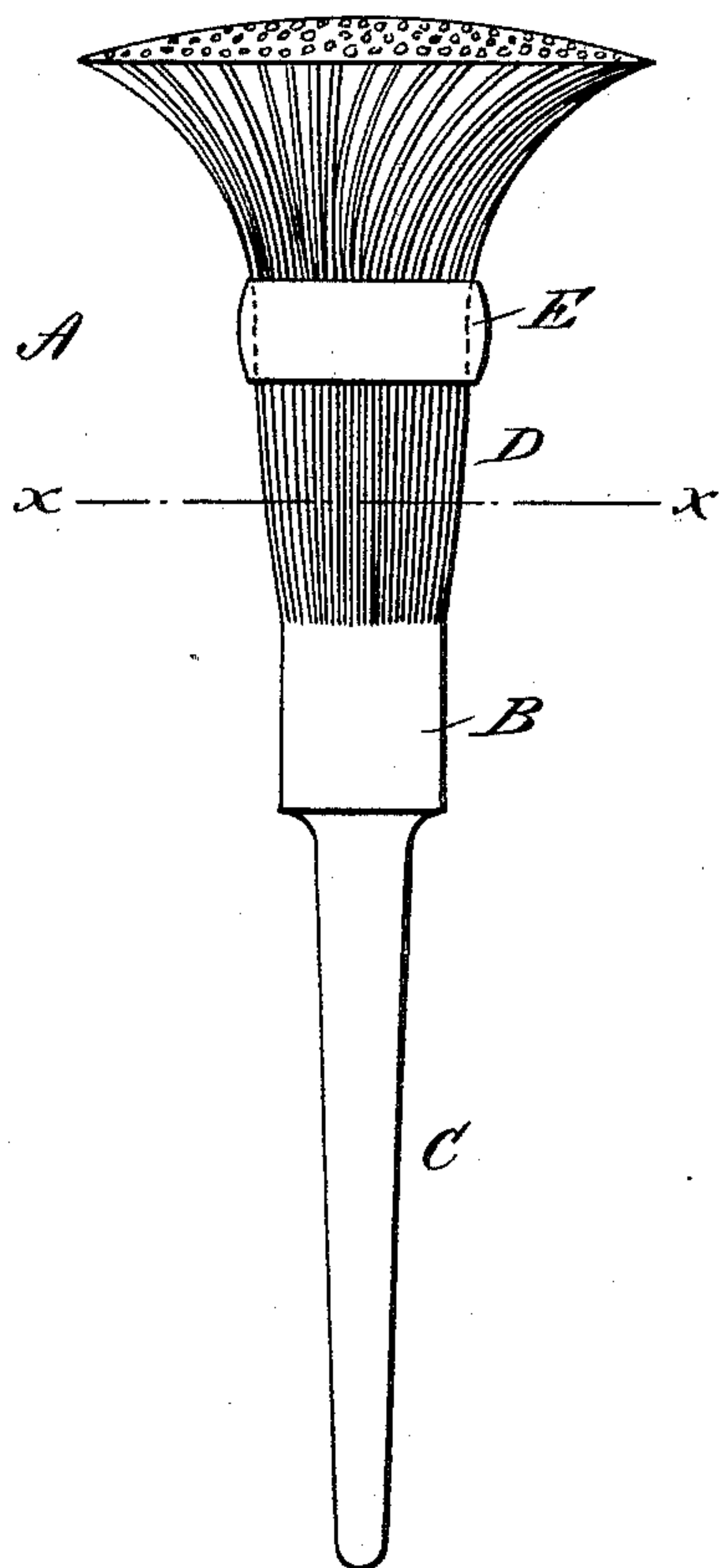
(No Model.)

C. D. HUGHES.  
BRUSH.

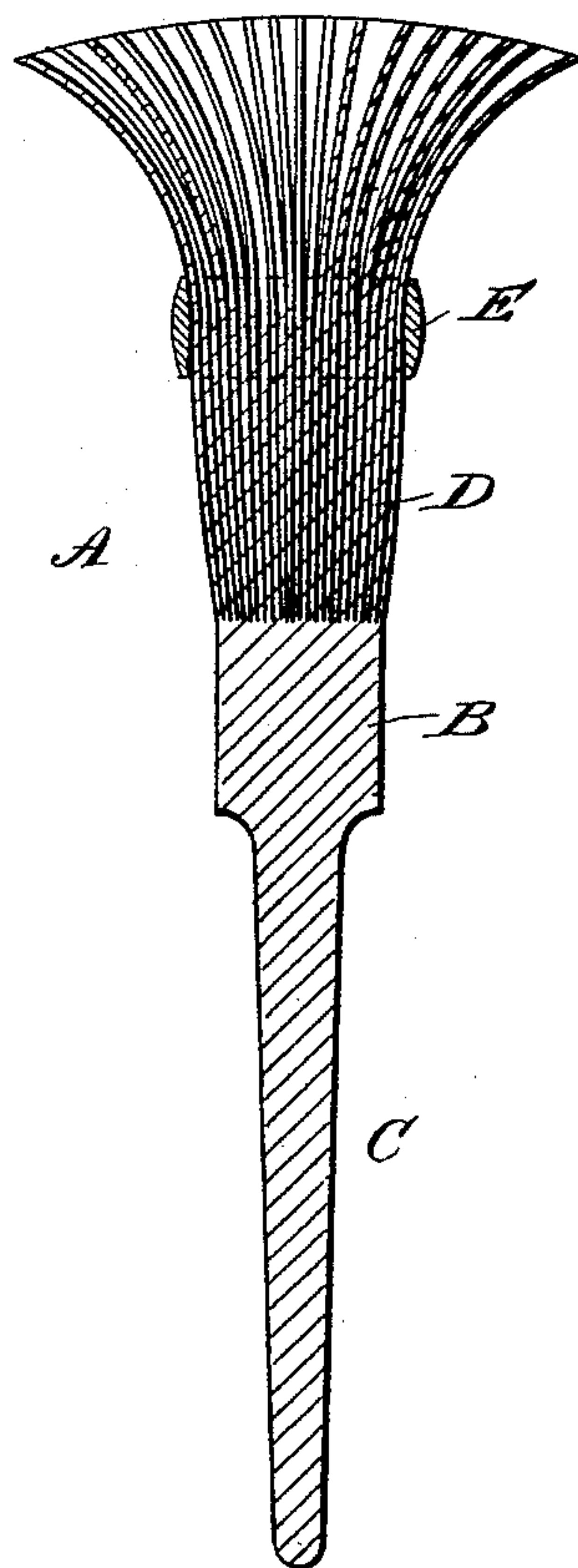
No. 435,838.

Patented Sept. 2, 1890.

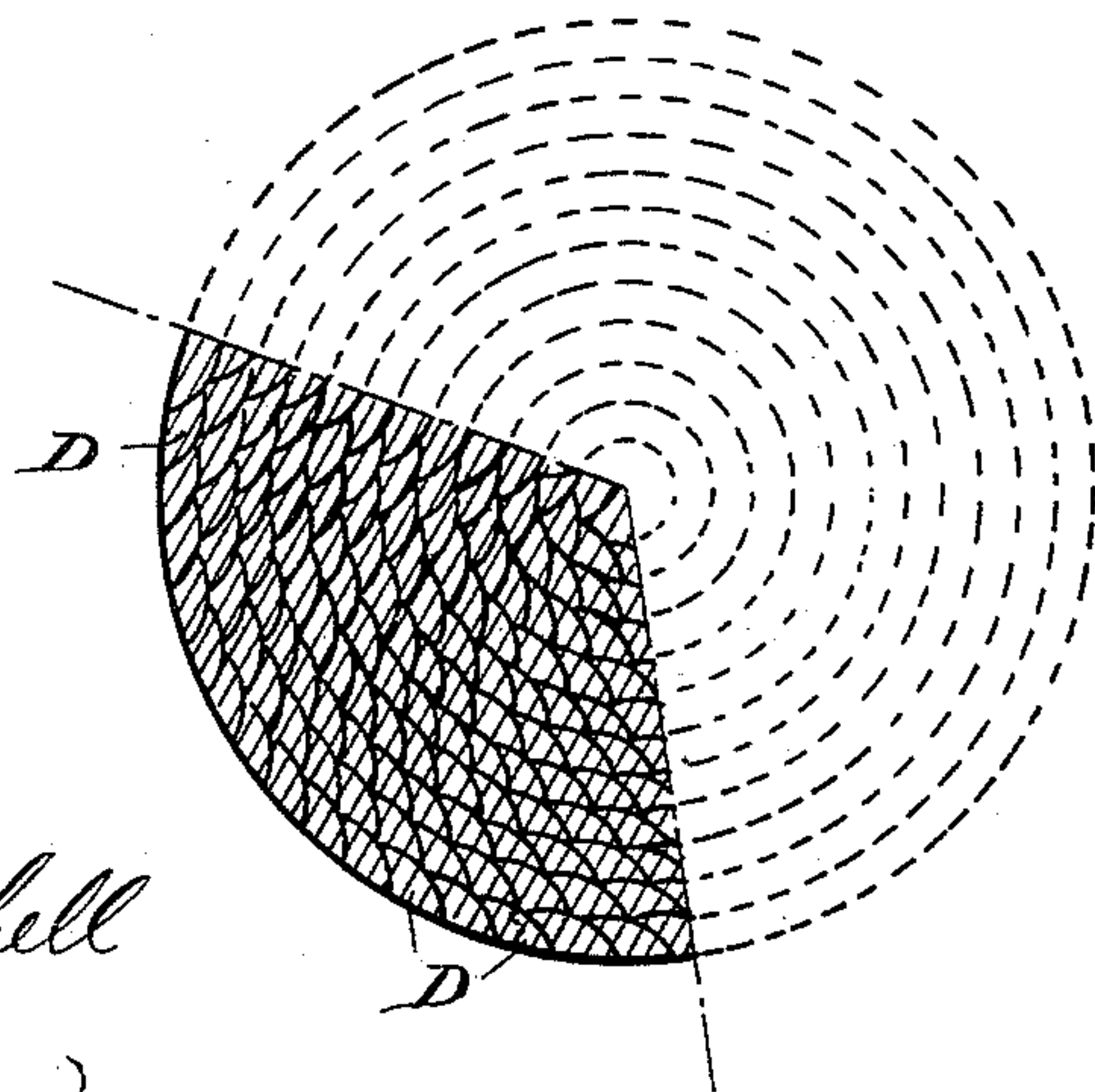
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

*Donn Twitchell*  
*W. Sedgwick*

INVENTOR:

*C. D. Hughes*

BY

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ATTORNEYS

# UNITED STATES PATENT OFFICE.

CHARLES D. HUGHES, OF BROOKLYN, NEW YORK, ASSIGNOR TO ARTHUR S. FRENCH, OF SAME PLACE.

## BRUSH.

SPECIFICATION forming part of Letters Patent No. 435,838, dated September 2, 1890.

Application filed November 20, 1889. Serial No. 331,012. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES D. HUGHES, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Brush, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved brush for use in sinks, &c., and having its bristles formed integral with a block of wood, from which the bristles are cut by suitable machinery, preferably such as shown and described in the application for Letters Patent of the United States, filed of even date herewith and bearing Serial No. 330,986.

The invention consists of bristles or splints cut on the block and arranged in concentric rows.

The invention also consists in certain parts and details and combinations of the same, as will be described hereinafter, and then pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improvement. Fig. 2 is a sectional side elevation of the same. Fig. 3 is an enlarged sectional plan view of part of the same on the lines  $xx$  of Fig. 1.

The improved brush A is made wholly from one block of wood, and comprises the head B, the handle C, formed on one end of the head

B, and the splints or bristles D, formed on the other end of the said head.

The bristles or splints D are cut by suitable machinery, preferably such as above referred to, the bristles being of a regular shape in cross-section, preferably triangular and slightly rounded on the inner sides, as shown in Fig. 3. The bristles are arranged in concentric circles and are slightly curved from the head B outward, as shown. The bristles spread at their outer free ends, and to prevent the same from spreading too far a ring E is slipped over the handle C and head B onto the bristles about half-way up, as shown in Figs. 1 and 2. A brush formed in this manner is very serviceable, as the bristles will not easily wear, and as the same are regularly shaped in cross-section are not liable to split or break, as the bristles of that class of brushes in which the bristles are irregularly and crudely cut by hand.

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

As a new article of manufacture, a brush having its bristles integral with the head, the bristles being arranged in concentric circles and each triangular, with rounded inner side in cross-section, as specified.

CHARLES D. HUGHES.

Witnesses:

THEODORE A. HUGHES,  
C. SEDGWICK.