

(Model.)

A. H. WOLCOTT.
BRUSH AND MODE OF MAKING THE SAME.

No. 450,090.

Patented Apr. 7, 1891.

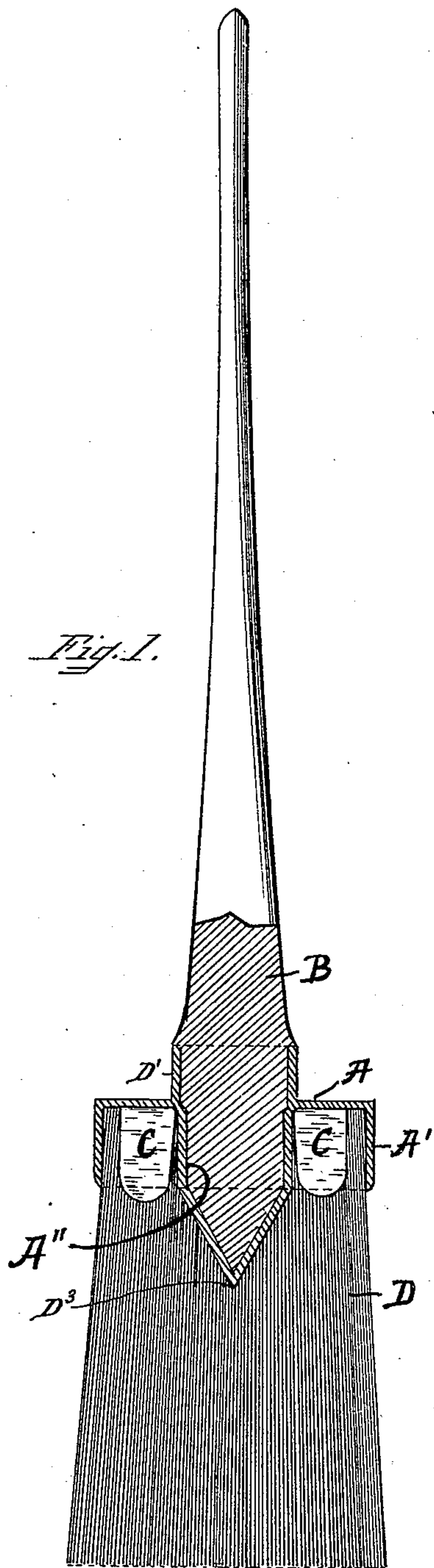


Fig. 1.

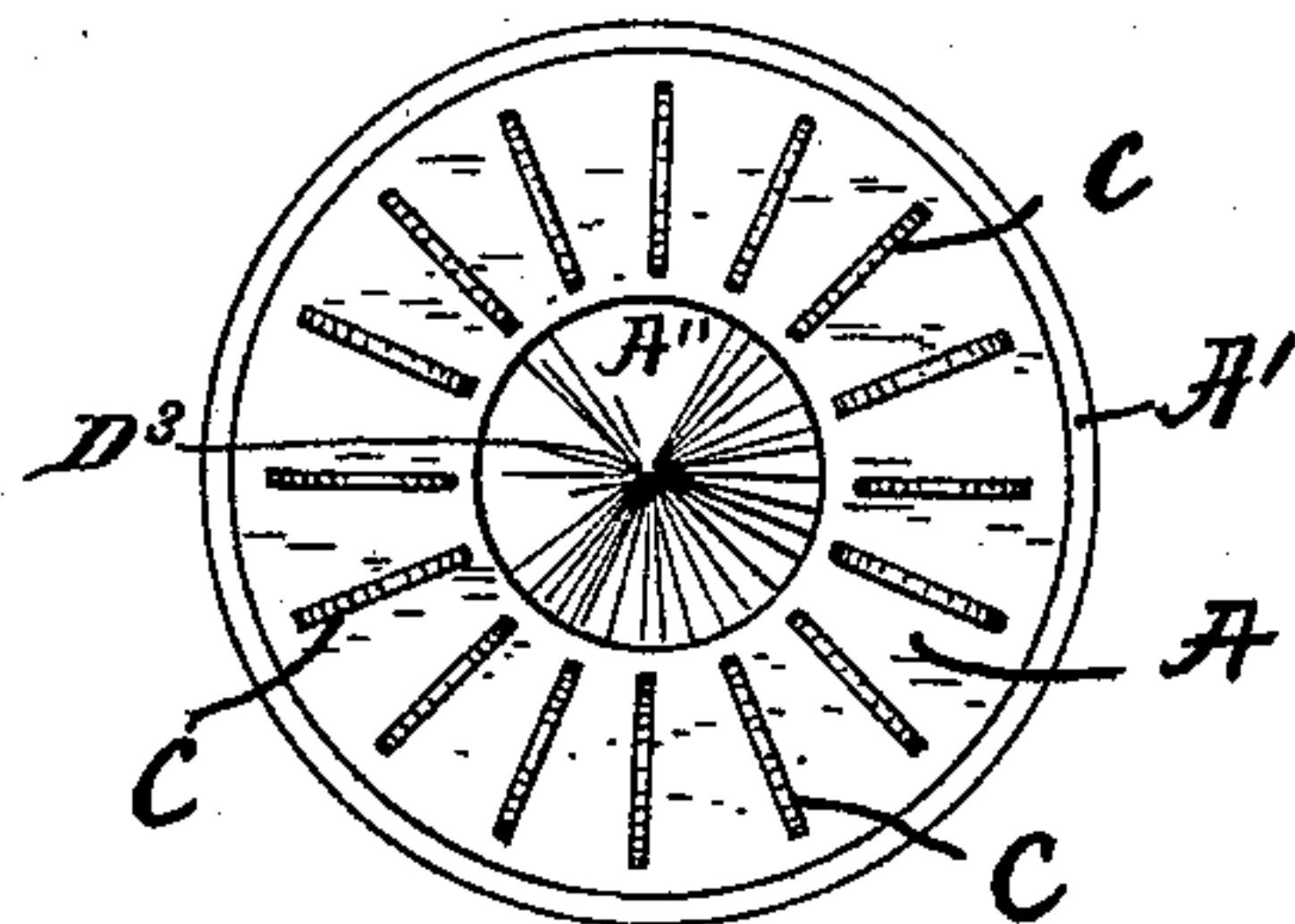


Fig. 2.

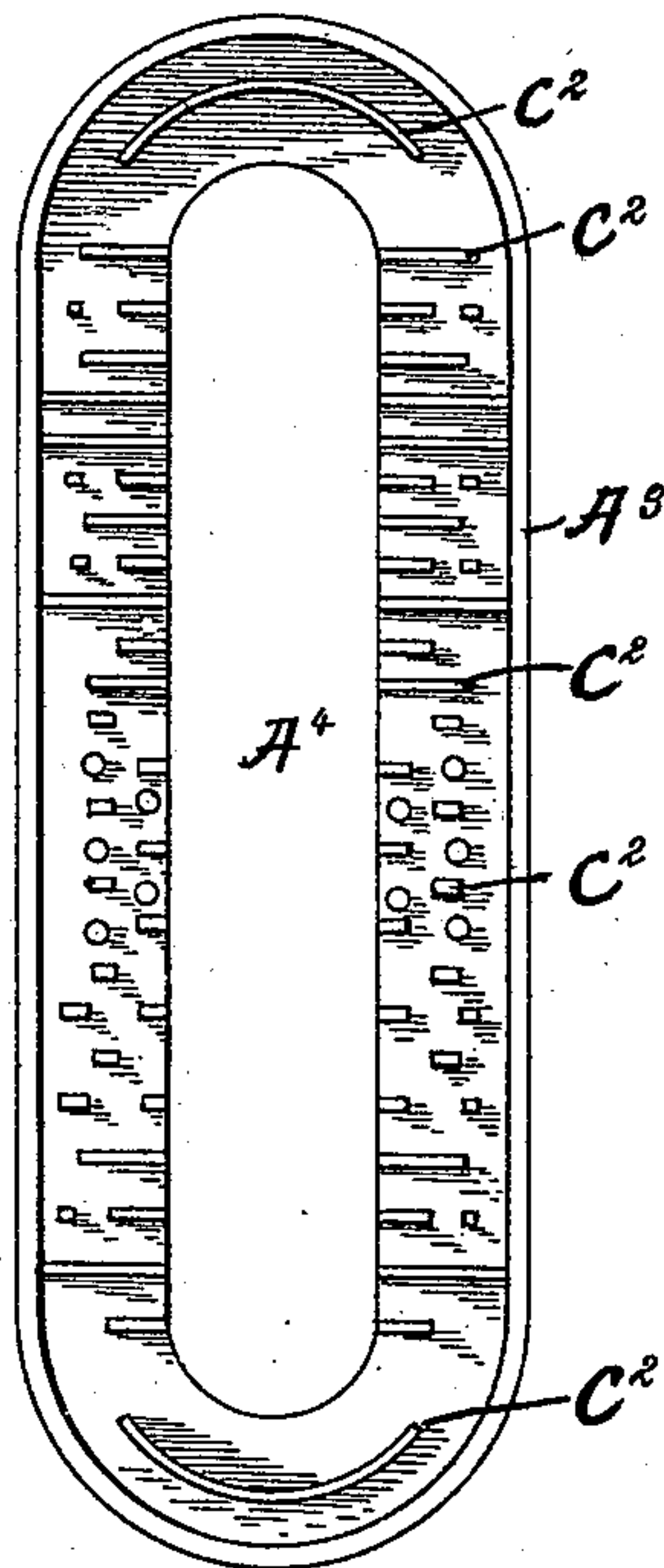


Fig. 3.

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Alice C. Perkins.
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Inventor:
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by Alban Audin his atty.

UNITED STATES PATENT OFFICE.

ARTHUR H. WOLCOTT, OF WINTHROP, ASSIGNOR TO JOHN L. WHITING & SON, OF BOSTON, MASSACHUSETTS.

BRUSH AND MODE OF MAKING THE SAME.

SPECIFICATION forming part of Letters Patent No. 450,090, dated April 7, 1891.

Application filed July 3, 1890. Serial No. 357,626. (Model.)

To all whom it may concern:

Be it known that I, ARTHUR H. WOLCOTT, a citizen of the United States, and a resident of Winthrop, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Brushes and Mode of Making the Same, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention has for its object to provide a new and improved brush; and it consists, essentially, in a brush composed of a metallic head having a pendent ferrule and formed integral with bristle-expanders, the central one of which is hollow and has its lower wall portion converged downwardly to penetrate and expand the butt-end of the bristles, and a handle passing through the metallic head and secured in the central hollow expander, all as more fully hereinafter explained, and specified in the claim.

In the accompanying drawings, Figure 1 is a longitudinal central sectional view of my improved brush. Fig. 2 is a detail bottom plan view of the metallic head, and Fig. 3 is a similar view showing a modified construction.

In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, referring to the drawings, where—

The letter A indicates the metallic head, having a central perforation for receiving the handle B and provided with a pendent ferrule A'. The metallic head is formed integral with a series of longitudinal bristle-expanders C, each of which is preferably made tapering from its base to its point for the purpose of readily penetrating the mass of bristles D. The metallic head A is also formed integral with a central hollow bristle-expander A'', the interior of which serves to receive and hold the correspondingly-shaped inner end of the handle B, as shown in Fig. 1. The bristle-expander A'' has its lower wall portion converged to a pointed end D³ for the purpose of rendering the expander susceptible of being driven or forced into the center of the body of the bristles as the ferrule A' is driven or forced downward upon

the butt-ends of the bristles. This construction of hollow expander A'' enables me to form the same integral with the metallic head A, so that the ferrule and the expander A'' can be simultaneously driven down upon the butt-ends of the bristles, as before explained, in which respect my invention differs substantially and materially from a prior construction, wherein a central expander is arranged within a ferrule and has its wall portion converged upwardly toward the metallic head of the ferrule. In such prior construction the expander must be a separate and independent piece, because it is necessary to pass such expander longitudinally through the mass of bristles from the points to the butts thereof, and then to secure such expander to the metallic head of the ferrule. On the contrary, in my invention the wall of the lower portion of the central hollow expander is converged downwardly to a point, as at D³, and consequently, although the expander is formed integral with the metallic head of the ferrule, such expander, with the ferrule, can be driven or forced upon the butt-ends of the bristles, and the expander serves to expand the central portion of the mass of bristles.

The invention is equally useful for circular and oval or flattened brushes.

In Fig. 3 I have represented a flat-brush ferrule A³ made according to my invention. In this construction the bristle-expanders C² are arranged as represented, and may be of any suitable form in cross-section—such, for instance, as circular, square, rectangular, or curved.

In Figs. 1 and 2 the central hollow expander A'' is cylindro-conoidal, while in the construction exhibited by Fig. 3 the main body portion of the expander A⁴ is oblong; but in each construction this expander is formed integral with the metallic head A.

In Fig. 1 the metallic head is shown as formed integral with an upwardly-projecting tube extension D' for bracing the handle B at a point above such metallic head.

In the manufacture of the brush the handle B is preferably first driven into the central hollow expander A'', after which the

bristles D are firmly secured between clamps, as is common in the art of making brushes, and a suitable gum or adhesive substance applied to the upper ends of the said bristles, 5 after which the ferrule A is placed above the bristles and driven around the same, causing the central expander A'' or handle end, as well as the intermediate expanders C C, to be driven into and between the mass of the bristles, as shown in Fig. 1, by which the bristles 10 D are most firmly secured to the head, ferrule, and the longitudinal expanders C C.

Having thus described my invention, what I claim is—

15 A brush consisting of the metallic head A, having the pendent ferrule A' and formed integral with the central hollow bristle-expander

A'', having its lower wall portion converged downwardly to penetrate and expand the butt-end of the bristles, said metallic head 20 also formed with the expanders C, arranged between the ferrule and the central expander, and the handle B, passing through the metallic head and secured in the central hollow expander, substantially as described. 25

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 24th day of June, A. D. 1890.

ARTHUR H. WOLCOTT.

Witnesses:

ALBAN ANDRÉN,
ALICE A. PERKINS.