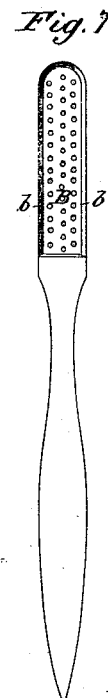
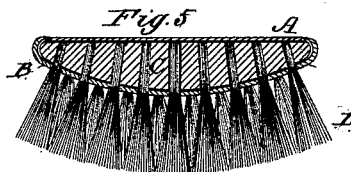
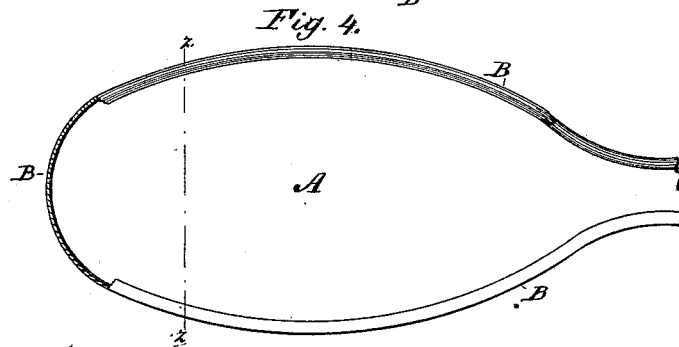
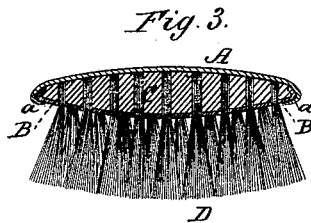
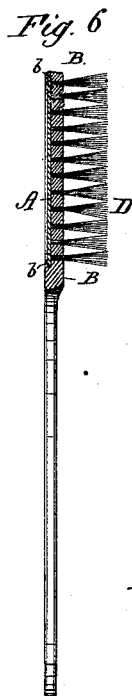
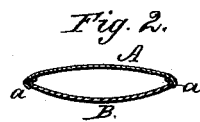
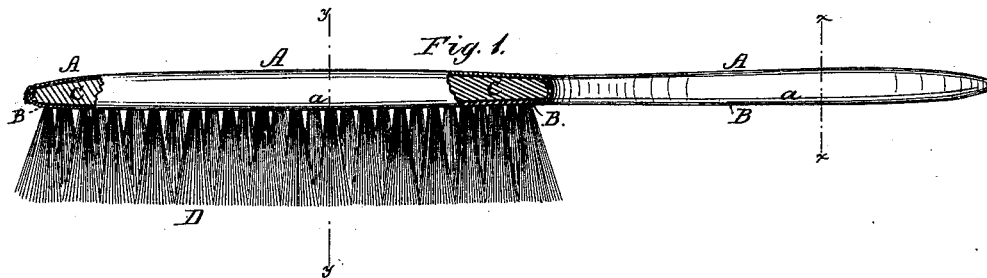


A. L. SONN.
Brush.

No. 218,587.

Patented Aug. 12, 1879.



WITNESSES:

W. W. Hollingsworth
Amos F. Hart.

INVENTOR:

Anson L. Sonn
BY *Wm. F. L.*
ATTORNEYS.

UNITED STATES PATENT OFFICE

ANSON L. SONN, OF TOLEDO, OHIO.

IMPROVEMENT IN BRUSHES.

Specification forming part of Letters Patent No. **218,587**, dated August 12, 1879; application filed April 24, 1879.

To all whom it may concern:

Be it known that I, ANSON L. SONN, of Toledo, in the county of Lucas and State of Ohio, have invented a new and Improved Brush; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention is an improvement in the class of hair and other bristle-brushes having sheet-metal back or casing; and it consists in constructing the case or frame of the brush of two metal parts, which are applied and connected as hereinafter described and claimed.

In accompanying drawings, Figure 1 is mainly a side view, and partly a sectional view, of a hair-brush, constructed or incased according to my invention. Figs. 2 and 3 are different vertical cross-sections of the brush on lines *xx* and *yy* of Fig. 1. Fig. 4 is a plan view of a fragment of a hair-brush, having a metal casing of slightly modified construction. Fig. 5 is a cross-section of the same on line *zz*. Fig. 6 is a partly sectional side view of a tooth-brush constructed according to my invention, and Fig. 7 is a plan of a part of the same.

A and B indicate the two parts which together constitute the metal case or frame of my improved brush. In Figs. 1, 2, 3, A indicates the sheet-metal back of a hair-brush, and B the lower or under plate thereof.

In the process of manufacture the plate B is first applied to the wooden block C, and its edges turned up over the edge of the latter, as shown. The holes for receiving the tufts of bristles D are then bored through both the metal B and wood C, and the bristles are next inserted and secured by means of wires in a firm and durable manner. Glue or cement may then be applied to smoothly cover the wires. This prepares the brush for application of the back plate, A, which is secured by turning or bending its edge *a* upon the previously-turned edge of the plate B, and completing the operation by burnishing or milling the edge of part A, to form a close or water-tight joint.

In Figs. 4 and 5, I show a slightly modified construction of the brush, which consists mainly in reversing the arrangement or position of the parts A B with reference to the block C. In such case the lower plate, B, is turned up over the block C, and burnished down on the edge of back plate, A.

In the construction of tooth-brushes, as illustrated in Figs. 6 and 7, substantially the same mode of construction is adopted, as shown in Figs. 4 and 5. The wooden block C is dispensed with, and the part B made of sufficient thickness to serve as a block, which may be bored in the usual way. Fig. 7 represents the same bored and ready for the insertion of the bristles.

In Fig. 6 the back A is shown let into the recess in part B, and secured by a flange or lip, *b*, of the latter, which is burnished or milled to form a close joint.

By the above-described construction, I produce a brush which, having an integral metal frame or casing, is superior in capacity to avoid and resist injury by abrasion, warping, or splitting, and the effects of heat and moisture.

What I claim is—

1. A brush having a metal case or frame composed of the parts A B, one being let into or inclosed by the overlapping edges of the other, and united to form a water-tight joint, substantially as shown and described.

2. The combination, with the perforated metal case or frame B having the bristles attached, and provided with a recess in its back, of the plate A, laid into the recess, and secured by the upset lip or flange of the other part, as specified.

The above specification of my invention signed by me this 17th day of April, 1879.

ANSON L. SONN.

Witnesses:

VARIAS P. BROWN,
A. H. McVEY.