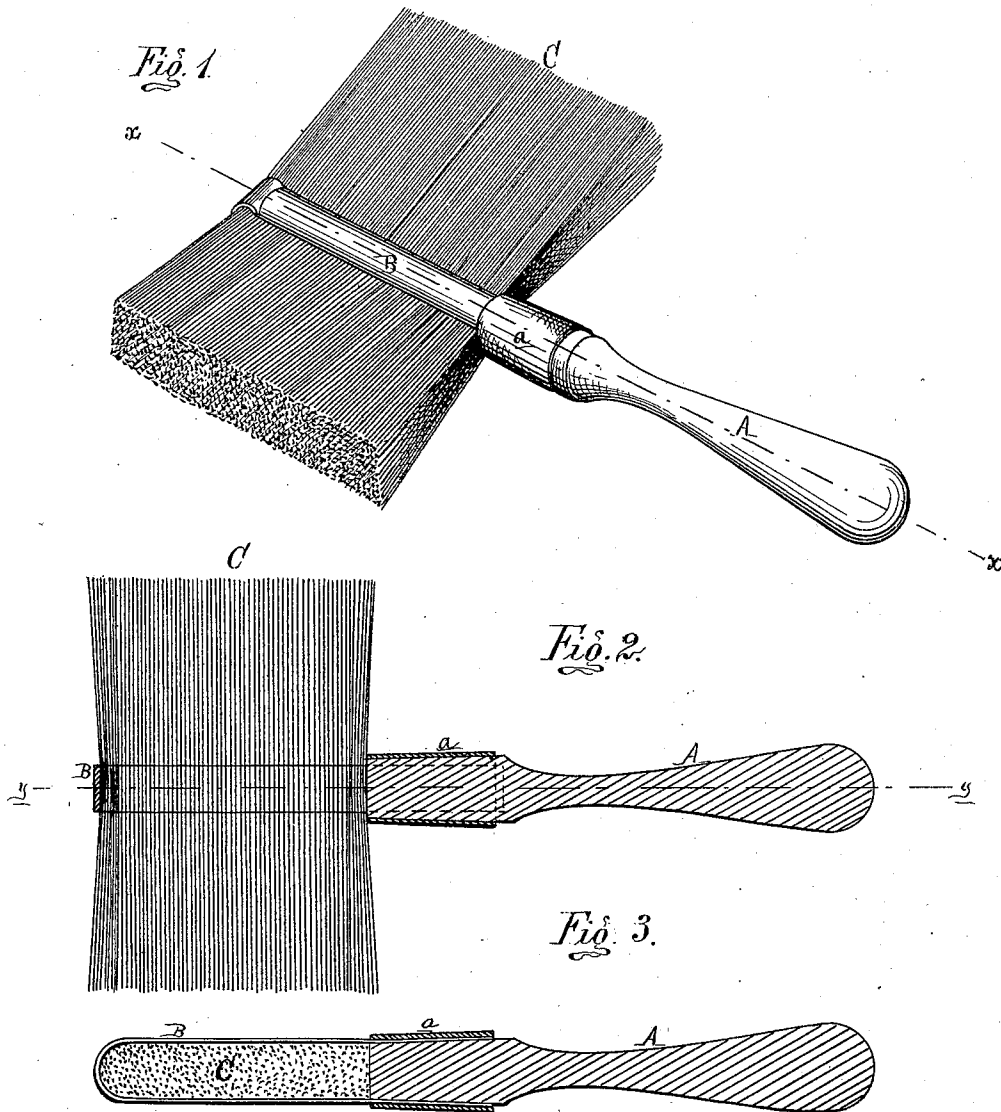


A. WATTLES.
BRUSHES.

No. 179,376.

Patented June 27, 1876.



Attest.
Edmond Barthel.
Chas. F. Hunt

Inventor:
A. Wattle
By Atty
Thos. J. Sprague

UNITED STATES PATENT OFFICE.

ALEXANDER WATTLES, OF BATTLE CREEK, MICHIGAN.

IMPROVEMENT IN BRUSHES.

Specification forming part of Letters Patent No. **179,376**, dated June 27, 1876; application filed February 21, 1876.

To all whom it may concern:

Be it known that I, ALEXANDER WATTLES, of Battle Creek, in the county of Calhoun and State of Michigan, have invented an Improved Brush, of which the following is a specification:

The nature of my invention relates to an improvement in double-faced brushes; and consists in the novel and peculiar means for securing the fibers of the brush to a handle.

Figure 1 is a perspective view. Fig. 2 is a longitudinal section of the handle and strap at *x x*. Fig. 3 is a cross-section of the strap at *y y*.

In the drawing, A represents a round wooden handle, tapered at one end to receive a sheet-metal ferrule, *a*. B is a strap of light iron, concaved throughout its length, except at the middle, where it is left flat, in order that it may be bent upon itself, after which a layer of broom-corn fiber, bristles, or other suitable material, C, is placed between the jaws of the strap,

whose extremities are then drawn together close enough to be inserted in the ferrule, thereby clamping the fibers, when the tapered end of the handle is driven home in the ferrule between the ends of the strap.

By concaving the sides of the strap, the strap is stiffened, so as to resist flexure, while the edges clamp the fibers at two points more firmly than a flat strap would.

The brush so constructed may have one very stiff, and one soft, face; and when worn out it may be renewed at the cost of new fibers.

What I claim as my invention is—

The brush described, consisting of the handle A, the concave metal strap B, brush-fibers C, and ferrule *a*, all combined substantially as described and shown.

ALEXANDER WATTLES.

Witnesses:

H. F. EBERTS,
H. S. SPRAGUE.