

F. W. GESSWEIN.  
Brush.

No. 209,967.

Patented Nov. 19, 1878.

Fig. 1.

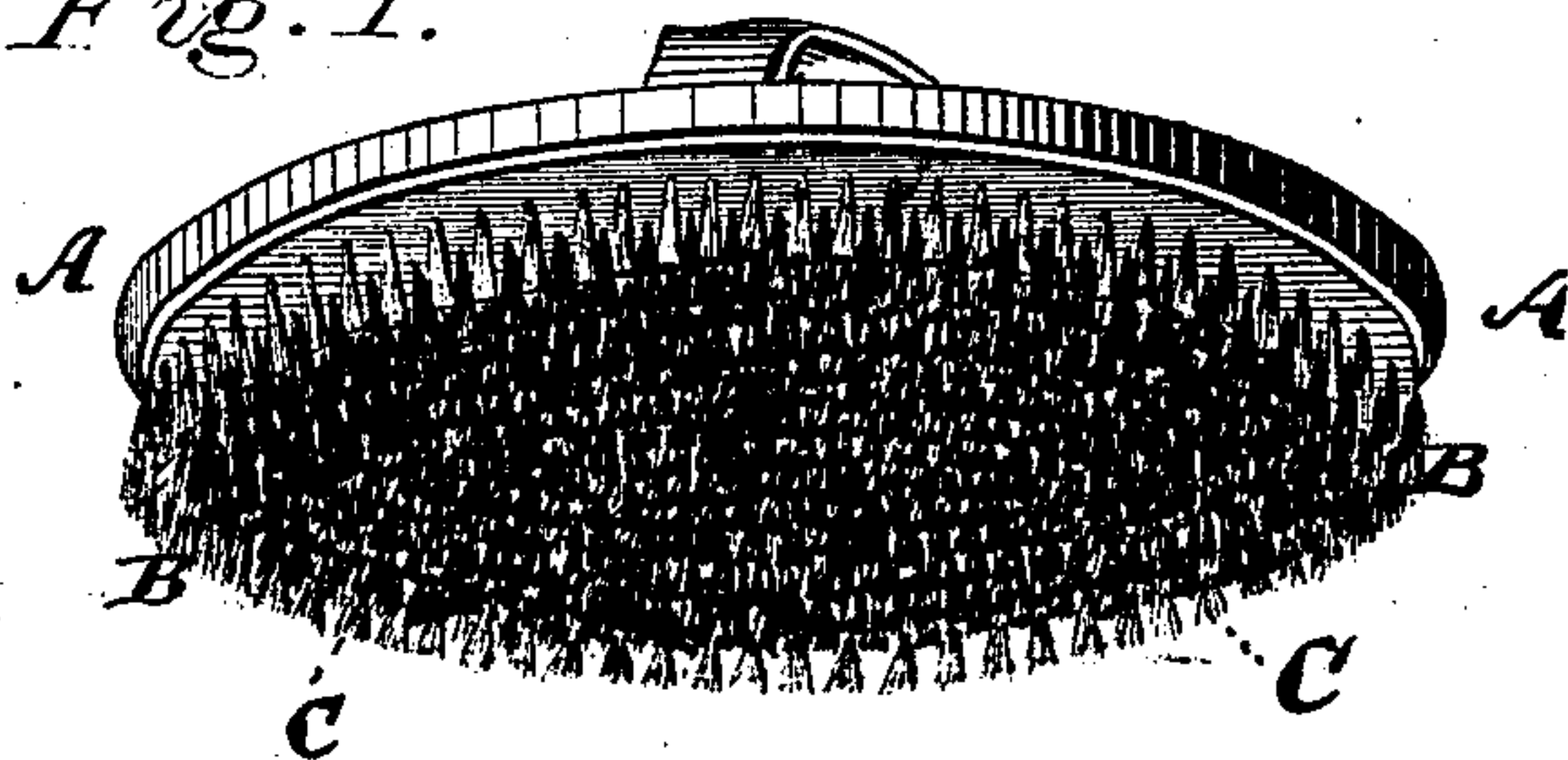


Fig. 2.

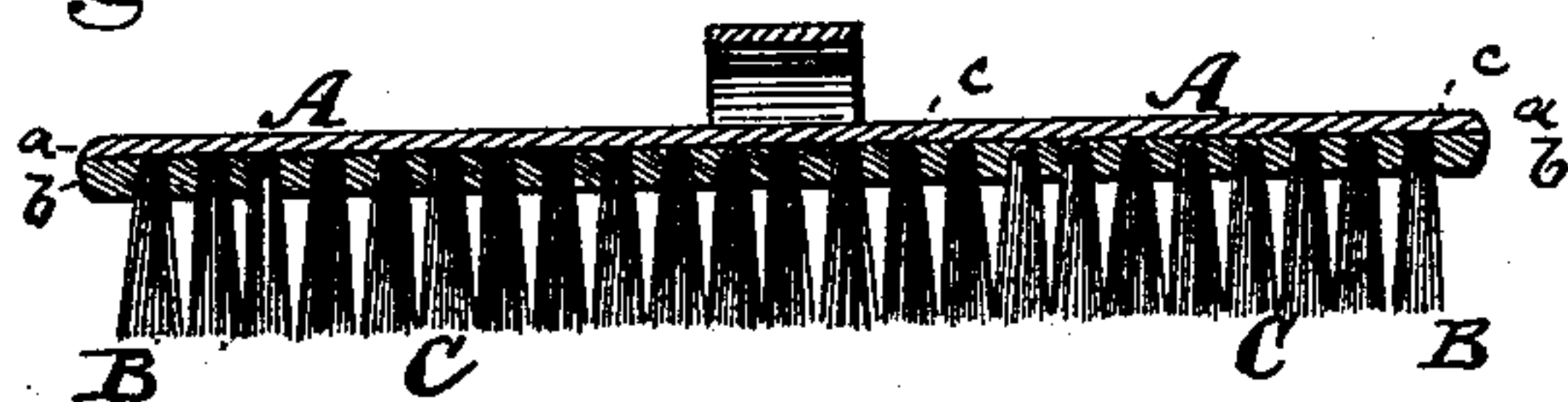
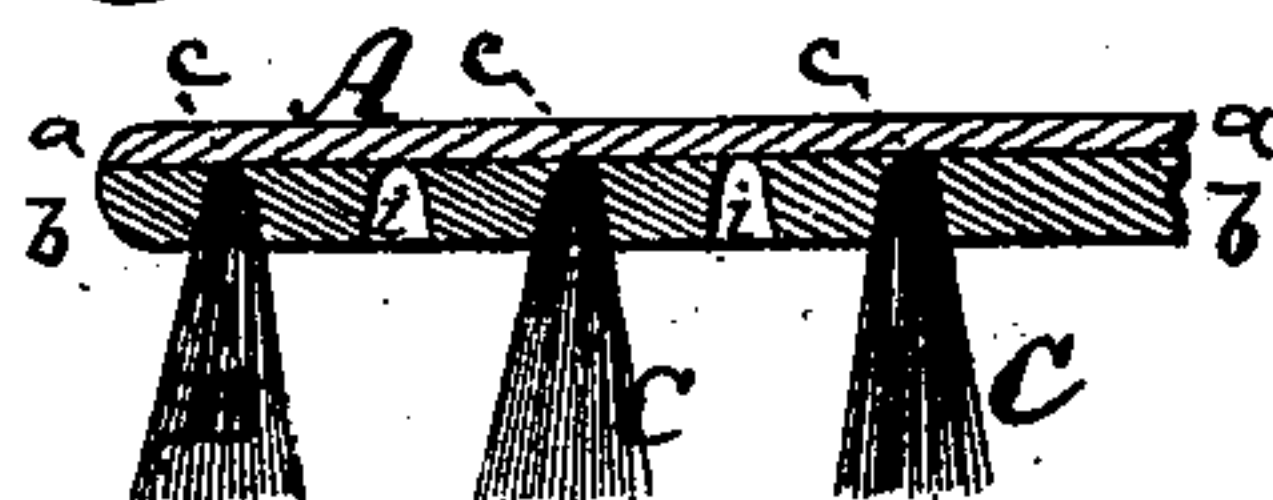


Fig. 3.



Witnesses:

Inventor:

John C. Tunbridge  
T. B. Mosher

F. W. Gesswein  
by his attorney  
A. B. Briesen

# UNITED STATES PATENT OFFICE.

FREDERICK W. GESSWEIN, OF JERSEY CITY HEIGHTS, ASSIGNOR OF ONE  
HALF HIS RIGHT TO E. AND W. DIXON, OF NEWARK, NEW JERSEY.

## IMPROVEMENT IN BRUSHES.

Specification forming part of Letters Patent No. **209,967**, dated November 19, 1878; application filed  
September 26, 1878.

*To all whom it may concern:*

Be it known that I, FREDERICK W. GESSWEIN, of Jersey City Heights, Hudson county, New Jersey, have invented an Improved Wire Horse and Hair Brush, of which the following is a specification:

The object of my invention is a brush, constructed as fully described hereinafter, to utilize wire in place of bristles in the body of the brush and overcome objections incident to wire brushes as usually made.

In the drawing, Figure 1 is a perspective view of my improved brush; Fig. 2, a longitudinal section, and Fig. 3 a detached section enlarged.

In using wire as a substitute for bristles in ordinary brushes it has been found that the wire acts most effectively and is even superior to the bristles in the center or body of the brush, where it is bent, in using the brush, to a comparatively slight extent; but at the edges of the brush the wire soon mats down and becomes useless in consequence of its limited elasticity, which prevents it from retaking its form and position after being bent outward.

In my improved brush the central portion C is of wire, or wire and bristles combined, while the border or edge B is wholly of bristles. By this combination the wires in the body of the brush are prevented from bending to such an extent that they will not return to their position, the surrounding body of bristles limiting the lateral motion, while the bristles at the edge will not be permanently displaced by any action to which the brush is submitted. Instead of securing the wires as heretofore, they are doubled and retained in sockets *i* of the strip *b* by means of tying-wire *c*.

I claim—

A brush in which the central portion C consists, in whole or in part, of wire and the surrounding border or edge B is wholly of bristles, as and for the purpose specified.

F. W. GESSWEIN.

Witnesses:

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WILLIAM DIXON.