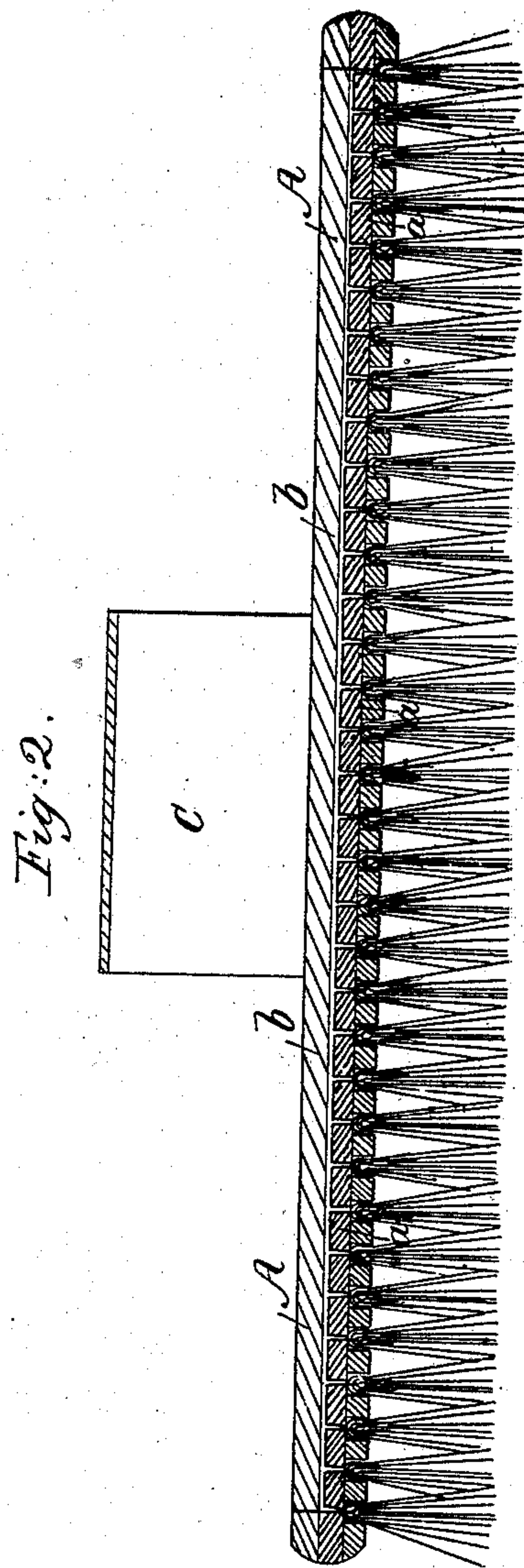
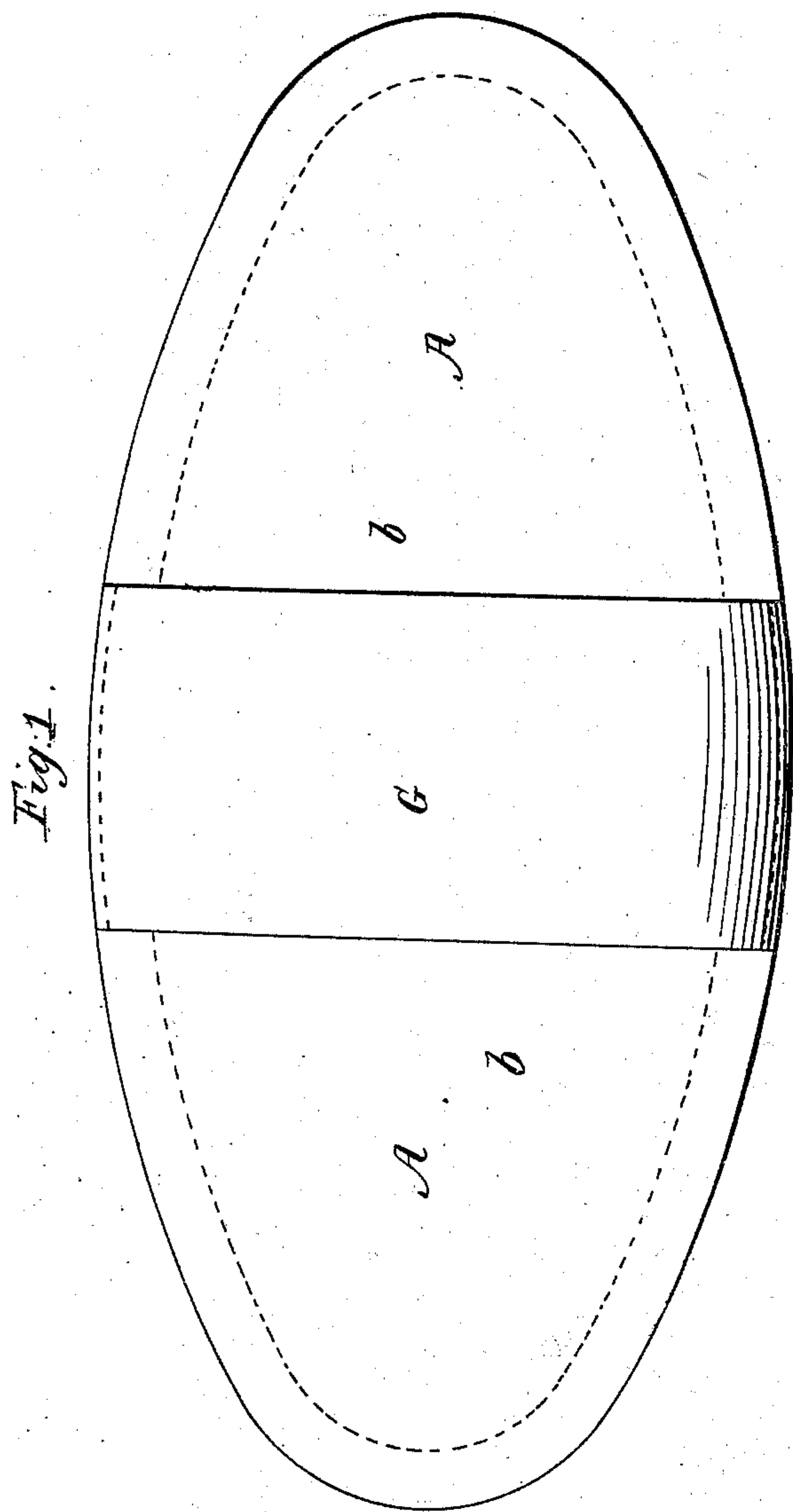


J. J. ADAMS.
MANUFACTURE OF FLEXIBLE BACK BRUSHES.
No. 32,552. Patented June 18, 1861.



Witnesses:
J. H. Rivers
H. V. Ralston

Inventor,
J. J. Adams
"

UNITED STATES PATENT OFFICE.

JOHN J. ADAMS, OF NEW YORK, N. Y.

IMPROVED FLEXIBLE-BACK BRUSH.

Specification forming part of Letters Patent No. 32,552, dated June 18, 1861.

To all whom it may concern:

Be it known that I, JOHN J. ADAMS, of the city, county, and State of New York, have invented a new and useful Improvement in Manufacturing Flexible-Back Brushes for Cleaning and Dusting Horses and other Animals; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, and Fig. 2 a longitudinal section, of my improved brush.

The nature of my invention consists in an improved flexible brush having its body made of leather and constructed in two parts, the entire series or rows of bristles, except the outer one, being drawn by means of wire into the body of the brush, the cover or top plate being next cemented to the body, and, finally, the last row of bristles 1 1 inserted and drawn into the body of the brush by means of a wire passing through the whole of the leather part of the brush. This mode of applying and fastening the last row of bristles enables me to dispense entirely with the line of stitching (required by the old method) to be made entirely around the edge of the back of the brush.

In the drawings, A denotes the back or body of the brush, the same consisting of the two portions *a b*, *a* being what may be termed the "main body" of the brush, while *b* may be called the "cover" or "hand-plate."

In constructing my said brush I usually form the body part *a* thereof of two or more plates of leather and unite them together by means of any suitable cement. In the lower surface of the said body I punch or otherwise make any required number of rows of holes for the reception of small bunches of bristles. After these bristles have been assorted and arranged they are doubled together, and next a wire having one end secured to the brush is doubled and passed from the top surface of the body of the brush down through a hole formed in such body and into the loop formed by doubling the bristles together. The bunch of bristles is next drawn up tightly into the hole or cavity formed to receive them. The wire is next carried down through another hole, and this operation is repeated until all the cavities except the outside row are filled

with bristles and properly affixed in the body of the brush. Next the cover or hand-plate is to be cemented to the body part, and a series of holes is to be made for the reception of the outer row of bristles. Finally, by means of a wire passing down through the leather portion of the brush and through the several bunches of bristles to be inserted in the said cavities successively, the said bristles will be properly drawn into their places in the body of the brush. By passing the said wire down through the series of holes and through the bristles, as before mentioned, the two parts of the brush will be firmly united by the line of wire, the same being as shown in the drawings.

C is the strap or band usually applied to a hostler's brush for the purpose of enabling him to maintain the brush in its proper position while in use. Thus it will be seen that I not only dispense with the line of sewing usually required to be made through the whole thickness of the leather back and around the edge of the brush, thereby lessening the cost of construction of the brush, but I produce a brush of greater beauty and one that is less liable to injure a person's hand while using the same.

I do not claim making a flexible brush of two or more layers of leather and securing all the rows of bristles in the body or lower portion of the brush by means of a cord or wire, then cementing the hand-plate or top to the body portion, and afterward securing the whole leather portion together by means of a line of sewing extending around the outer edge of the brush.

I claim—

My improved mode of constructing a leather flexible brush, the same consisting in securing all the rows of bristles, except the outer one, in the body of the brush, as set forth, then cementing the cover or upper plate to the body, and finally securing the outer row of bristles and the leather portion of the brush at the same time by a single line of wire, as specified.

J. J. ADAMS.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.