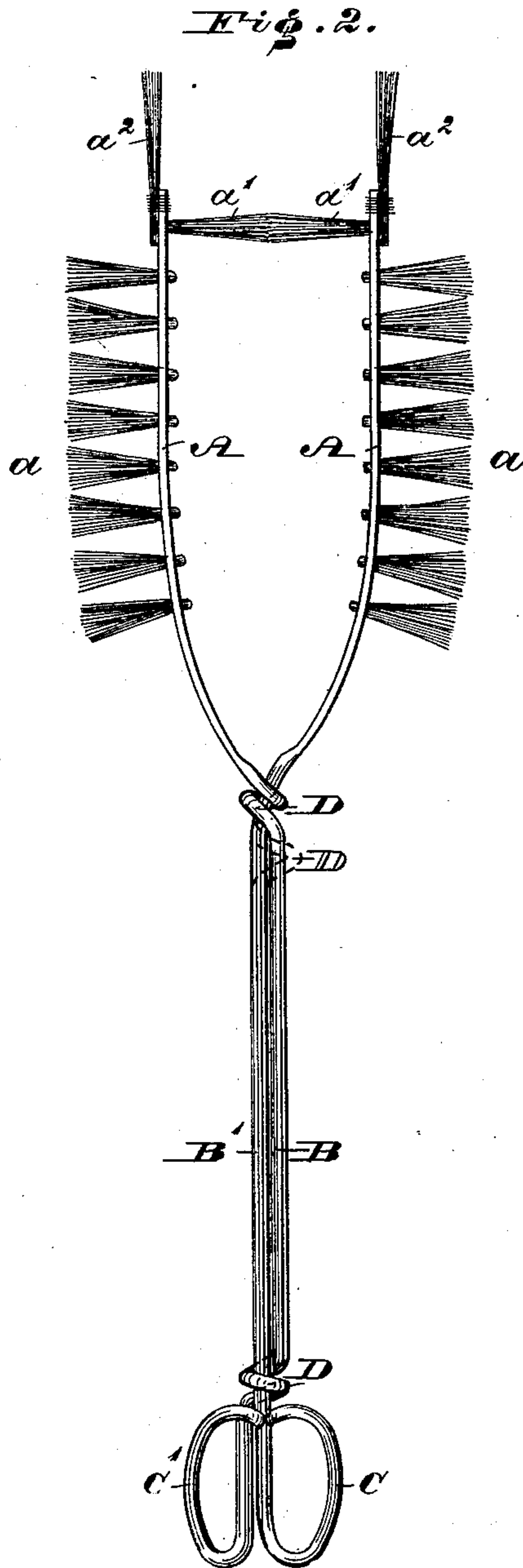
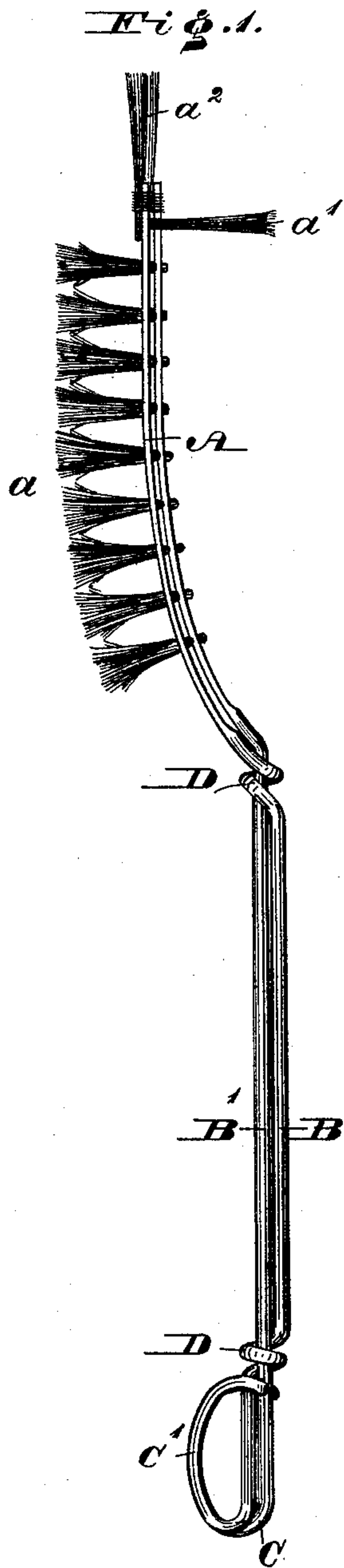


(Model.)

J. REPETTI.  
BRUSH.

No. 410,991.

Patented Sept. 10, 1889.



Witnesses

*Theo. Rolle*  
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# UNITED STATES PATENT OFFICE.

JOSEPH REPETTI, OF BUENA VISTA, ASSIGNOR OF ONE-HALF TO LOUIS COSTA, OF CAMDEN, NEW JERSEY.

## BRUSH.

SPECIFICATION forming part of Letters Patent No. 410,991, dated September 10, 1889.

Application filed August 30, 1888. Serial No. 284,143. (Model.)

### *To all whom it may concern:*

Be it known that I, JOSEPH REPETTI, a citizen of the United States, residing in Buena Vista township, in the county of Atlantic, State of New Jersey, have invented a new and useful Improvement in Brushes, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to improvements in brushes; and it consists of a brush having curved brush-heads provided with shanks having handles, one of said shanks having eyes or loops forming bearings to permit the opening and closing of the brush-heads by the turning of the handle.

It also consists in the combination of parts herein set forth and claimed.

Figure 1 represents a view of a brush embodying my invention, said brush being closed. Fig. 2 represents a view of the brush open.

Similar letters of reference indicate corresponding parts in the two figures.

Referring to the drawings, the brush is constructed of the heads or sections A of wire and carrying bristles, which heads are curved and continued to form the shanks B B' and the handles or loops C C'. The shank B is bent at or near its ends into eyes or loops D, through which passes the shank B', and said eyes thus form bearings or journals for the shanks and permit the opening and closing of the brush-heads. When the brush-heads are closed, they rest smoothly against each other, and when open the ends or terminations of the handles or loops abut and hold the heads in the proper open position, limiting the opening motion of the heads.

In using the device the brush-heads in closed condition are inserted in the bottle, lamp, or other hollow article to be cleaned, and are then operated by turning the handles, the curved shape of the heads causing the bristles  $a$  thereof to contact with the sides of the bottle or lamp-chimney, &c., thus effectually cleaning the same. The ends of the heads are provided with bristles  $a'$   $a^2$ , which project at an angle to each other, so that when a bottle or similarly-shaped article having a swell or bell in its bottom is to be cleaned or washed the bristles  $a'$   $a^2$  come in

contact with the said bottom or bell. The brush is then revolved by means of the handle, and the bristles thereof serve to clean the bottle, lamp, &c., as is evident. To remove the brush, the heads are closed by turning the handle, whereby they occupy small compass and may readily pass through the neck or contracted portion of the article into which they are inserted.

If desired, one of the eyes D may be formed on the shank B', instead of both eyes being on the shank B.

The bristles may be of usual nature, or constructed of wire or other material.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a brush, the combination of the curved heads of wire, having bristles on their sides and ends, shanks carried by said heads, and eyes on one of the shanks, forming bearings for the other shank, substantially as described.

2. In a brush, the combination of the brush-heads, the shanks, and the handles, one of said shanks having eyes integral therewith, forming bearings for the other shank as a journal, substantially as and for the purpose described.

3. In a brush, the combination of the curved brush-heads, shanks, and the handles formed on said shanks, the head carrying bristles, and handles having their ends bent so as to contract or form stops when the brush-heads are opened, substantially in the manner and for the purpose described.

4. In a brush, the combination of the curved heads having bristles on their ends at right angles to each other, shanks having handles formed with said heads, one of the shanks being bent around the other at a suitable place to form bearings for the device, substantially as described.

5. In a brush, the combination of heads of wire carrying bristles at their ends and sides, the shanks formed with handles carried by the heads, and eyes or loops on one of the shanks, forming bearings for the other, substantially as described.

6. In a brush, the combination of the heads, shanks on said heads, handles formed with



the shanks, and stops or abutments on the handles adapted to contact when the brush is open to limit the opening of the heads, substantially as described.

- 5 7. An opening and closing brush having handles provided with stops or abutments, which contact when the brush is opened and limit the opening of said brush, substantially in the manner and for the purpose described.
- 10 8. An opening and closing brush consisting

of wire heads with shanks and handles, the said heads being curved and having bristles thereon, and one of said shanks being adapted to partially rotate upon the other, said parts being combined substantially as described. 15

JOSEPH REPETTI.

Witnesses:

WM. N. MOORE,

A. P. JENNINGS.